WERNER KEYM





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Chess

is an international language.

(Edward Lasker)

Chess thinking is good. Chess lateral thinking is better.

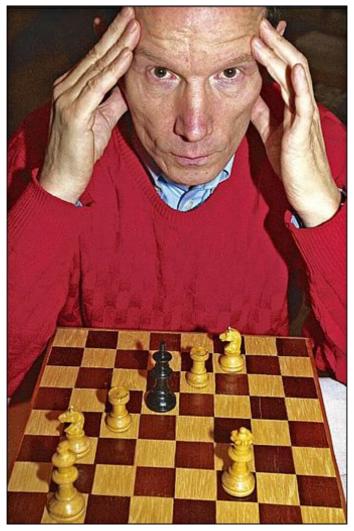


Photo: Gabi Novak-Oster

In 2002 this chess problem (= no. 271) and this photo were published in the German daily newspaper *Rhein-Zeitung Koblenz*. That was a great success: most of the 'solvers' were wrong!

Werner Keym

Chess Problems Out of the Box

Nightrider Unlimited

The content of this book differs in some ways from the German edition *Eigenartige Schachprobleme* (Curious Chess Problems) which was published in 2010 and meanwhile is out of print.

The complete text of *Eigenartige Schachprobleme* (errata included) is freely available for download from the publisher's site, see http://www.nightrider-unlimited.de/angebot/keym 1st ed.pdf.

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Preface

This is a very personal book about exotic regions of the fascinating world of chess composition. They are not about fairy pieces and conditions, but rather about castlings, en-passant captures, pawn promotions, tasks, unconventional first moves, retro puzzles, text problems (with mathematical aspects), retractors, proof games, records, special stipulations and more. Such problems are entertaining, exciting, stimulating, witty, funny – and often even computer-defying. Ideally, they are 'beautiful', that is perfect in idea and form (such as no. 9 and 345).

'Chess problems demand from the composer the same virtues that characterize all worthwhile art: originality, invention, conciseness, harmony, complexity and splendid insincerity'. (Excerpt from *Poems and problems* by *Vladimir Nabokov*).

It was not easy for me to make a final selection from thousands of problems. In so doing, the beneficial *Problem Database* provided valuable support (see p. 171). On the one hand, I found suitable examples in the *PDB*. On the other hand, I could point out relevant problems in the *PDB* and thus give additional information whilst saving space. Of course, the early classics including *Sam Loyd*, *Niels Høeg*, *Thomas R. Dawson*, *Luigi Ceriani* and *Karl Fabel* are represented as well as today's *Andrey Frolkin* and *Michel Caillaud*.

From my earlier book *Eigenartige Schachprobleme* (see p. iv for the online version), I have taken on 375 chess problems and added 125 new ones. In about half of the 500 problems, retrograde analysis plays a minor or major role. There are two reasons for this approach. For one thing, I prefer to solve and compose retros. On the other hand, my proposal led to a change in rules on the mutual dependency of castlings and en-passant captures, thus ending a decades-long controversy. Such problems (as no. 360) are a very interesting specialty of chess composition and an enrichment compared to the chess game in which only one of these possibilities can be realized.

In order to enable enjoyable reading and solving, both the diagram and the solution are on the same page. Comments that are not mine are in quotation marks. References to predecessors, cooks etc. are welcome. – I would like to thank all those who supported me and made *Chess Problems Out of the Box* possible, especially *Ralf Binnewirtz*, *Godehard Murkisch*, *Alfred Pfeiffer* and *Günther Weeth*.

Werner Keym

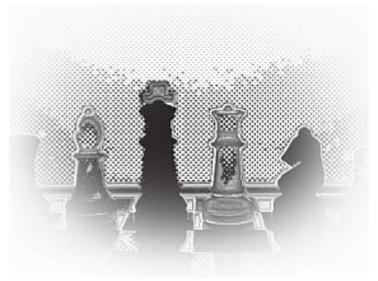
'Inspiration of a quasi-musical, quasi-poetical or to be quite exact poetico-mathematical type, attends the process of thinking up a chess composition'.

(Vladimir Nabokov)

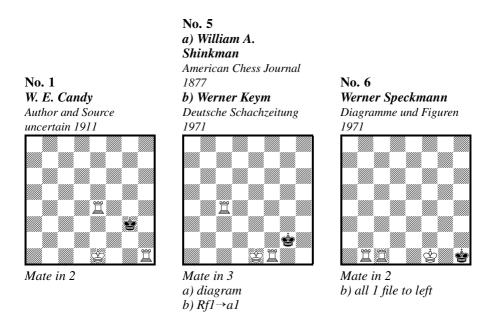
Chess composition



of chess



Castling gala



I selected some out of countless castling problems, you will find other ones (with retro content) in other chapters. Very easy is the symmetrical **no. 1**: 1.0-0! zugzwang. A symmetrical pendant (1.0-0-0) with five pieces is P1146398.

Here are three further examples with two white rooks only. **No. 2:** *Hanspeter Suwe*, *Nürnberger Zeitung 1969, wKe1 Ra1 Re4 bKc3, #3*; 1.0-0-0!. – **No. 3:** *Hilmar Ebert*, *feenschach Sonderdruck 1979, wKe1 Rh1 Rh3 bKg5, #4*; 1.0-0!. – **No. 4:** *Werner Keym*, *Allgemeine Zeitung Mainz 1987, wKe1 Ra1 Rd6 bKc5, #4*; 1.0-0-0!.

No. 5 contains two problems, which are here shown as a twin. **No.** 5a is rich in substance: 1.Rh1! (active sacrifice of the rook) Kxh1/Kg3/Kf3 2.Kf2/Kf1/Rg1 Kh2/Kf3/Ke3 3.Rh4/Rh3/Rg3#. No. 5a is a mirrored position of the original version wKh4 Re6 Rh3 sKg2. In **no.** 5b the solution is 1.Rc3! Kg1/Kh1 2.Rc2 \sim 3.0-0-0# (castling in the 3rd move) or 1...Kh2 2.Kf1 Kh1 3.Rh3#. Tries are 1.Ra3? Kg1!, 1.Rg4+? Kh3!, 1.Ke2? Kg3!. In a) the rook moves to its starting square h1, in b) it is put on the starting square for castling a1. Both versions are attractive.

No. 6: a) 1.Kf2+! Kh2 2.Rh1#, b) 1.Rb2! Kh1 2.0-0-0#. Nice!

No. 7 Sam Loyd

New York Albion 1857



Mate in 3

No. 8 Bengt Giöbel Polis-Tidningen 1945



Mate in 2

No. 9 Ado Kraemer



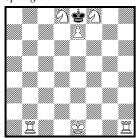
Mate in 3

In **no.** 7 there is a passive sacrifice of the rook: 1.Rf4! K×h1 2.Kf2 Kh2 3.Rh4# or with castling in the 2nd move: 1... K×g3 2.0-0 Kh3 3.R1f3#. Immortal!

In **no. 8** White even sacrifices its strongest officer, but not 1.0f3? $B \times f3!$ and castling is not permitted, yet just so with 1.Qe4! B×e4 and now 2.0-0-0 works alright; after 1...Bf3? simply follows 2.Kd2#. The rook is allowed to jump over a guarded square, but not the king - how 'unjust'!

In **no. 9** you may admire perfect economy and use of space: 1.0-0-0! Ke7 2.Rhf1 b6/Ke6 3.Qe4/Qe8#, 1...Kg7 2.Rdf1 b6/Kg6 3.Qg2/Qg8#, 1...Ke6/Kg6 2.Qf8 ~ 3.Rhe1/Rdg1#, 1... Kf6 2.Of8+ Ke5/Kg5 3.Rhe1/Rdg1#. Letztform à la Kraemer! This problem with the key 1.0-0-0 was published as the 1000th problem in the daily newspaper Die Welt.

No. 10 Jan Knöppel Springaren 1950



Mate in 3

The symmetrical **no.** 10 has the asymmetrical solution 1.0-0! K×e7 2.Sb7 Ke8 3.Rbe1#. Ke1 und Rb1 are not allowed to castle.

No. 11 Viktor N. Pilipenko Deutsche Schachzeitung 1969



Mate in 2

Werner Keym Stuttgarter Zeitung 2002 For Karin

No. 15



No. 16
Werner Keym
Allgemeine Zeitung Mainz
1972



Mate in 3 Mate in 3

No. 11 is one of the very rare miniatures showing two real black castlings. Therefore you must accept the coarse key: 1.Ke6! [thr. $2.R \times a8/Q \times h8\#$] 0-0-0/0-0 2.Qb7/Qg7#. You will find similar problems with Partial Retrograde Analysis on page 106.

Miniatures with real white-black castlings are rare, too. Here three early examples: **No. 12:** *Boris Pustowoj, Molodojsibirjak 1962, wKe1 Qg7 Rh1 Bh2 bKe8 Ra8 Sa1, #2*; 1.0-0!. – **No. 13:** *Boris Pustowoj, Omskaja Prawda 1969, wKe1 Qd6 Rh1 a6 bKe8 Ra8 Bd7, #3*; 1.0-0!. This author composed about 250 castling miniatures. – **No. 14:** *Werner Keym, Die Schwalbe 1969, wKe1 Qc7 Ra1 bKe8 Rh8 a6 h7, #3*; 1.0-0-0!. – An aristocratic miniature is **no. 15**: 1.0-0-0! 0-0 2.Rg1+ Rg7 3.Se7#. All men move except the queen. Pin model mate – dedicated to my wife Karin.

No. 16 shows both real white castlings. After 1.Se2! [thr. $2.\text{Rh4} \sim 3.\text{Qf2\#}$] three dualfree variations follow: 1...Bc8 2.Ra4 [thr. 3.Qf2#] Kg2 3.Qc6#, 1...Kg4 2.Qg6+ Kf3 3.Rh3#, 1...Ke4 2.Qe6+ Kd3/Kf3 3.0-0-0/0-0#. Strongest try is 1.Sd3? Ke4! 2.Rh4+ Kf5!. 'The thematic play consists of both long and short castling as an echo and is rich in tries – for a pawnless miniature certainly a rarity.' – A predecessor in two moves is **no. 17**: *Emanuel Lasker*, *Schweizerische Schachzeitung 1900*, *wKe1 Qc8 Ra1 Rh1 Se2 bKe4*, #2; 1.Qe6+!.

Gino von Moellwitz once compared the chess problem with a tree: 'the root is the riddle, the trunk the idea, the flower the art'.

No. 18 Wolfgang Pauly Deutsches Wochenschach



No. 19 Erich Zepler Die Schwalbe 1929

Mate in 4



No. 20 Nenad Petrovic problem 1959 1st Prize



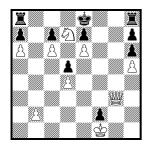
Mate in 8

Mate in 4

In no. 18-21 Black is allowed to castle. He seems to defend himself successfully by moving his king or his rook from and to the starting square. So the initial position is reached, it is true, but the right to castle is lost. **No. 18** shows this idea in a miniature: 1.Qe5? 0-0!; 1.Qb5+! Kf8 2.Qf5+ Ke8 3.Qe5! Bg3/Bc3 4.Qxh8/Qb8#. *Pauly!*

In **no. 19** the white king even provokes a check of the black rook. 1.Qd6? 0-0-0!; 1.Kd4! [thr. 2.Qe5+ Kd8/Kf8 3.Rh8/Qh8#] Ra4+ 2.Ke5 Ra8 3.Qd6! ~/Kd8 4.Qe7/Rh8#; 2...Rc4 3.Qb8+; 2...d6+ 3.Qxd6; 1...Kf8 2.Qf4+,Qd6+; 1...f1Q 2.Qe5+. *Zepler!*

In **no. 20** the two rooks move and return to their original squares. 1.Qc3? 0-0! and 1.Bd3? Rh1+ 2.Bb1 0-0-0!. Therefore 1.Qb7! Rd8 2.Qb3 Ra8 3.Bd3 [thr. 4.Qf7+ Kd8 5.Qf6+ Kc8 6.Bxa6+ Kb8 7.Qxh8#] Rh1+ 4.Bb1 Rh8 5.Qc3 Rh7 6.Qf6 [thr. 7.Sxh7 8.Qf8#] Rf7 7.Qxf7+ Kd8 8.Qf8,Qg8#. Three times the 'same' position, yet this results in forfeit of one castling right. *Petrovic!*



No. 21 Zdravko Maslar & Nenad Petrovic

Politika 1961 Mate in 6

The same idea as in no. 20, but in six moves only! 1.Qg7? 0-0-0!. 1.Sf6+!? $e7\times f6$ 2.Qxc7 0-0!. 1.Se5! (zugzwang) Rf8 2.Sd7 (zugzwang) Rh8 3.Sf6+ Kf8 (3... $e7\times f6$ 4.Q×c7!) 4.Sd7+ Ke8 5.Qg7 R \sim 6.Q×R#. With no good reason at all this superb problem has for a long time stood in the shadow of no. 20.

No. 22 Thomas R. Dawson Chess Amateur 1923



Mate in 3

No. 23 Andreas Thoma König & Turm 2003



Mate in 4

No. 24 Peter Hoffmann

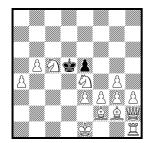


Mate in 4

In **no. 22** two squares (e1 and h1) are simultaneously vacated for the white queen by the key move 1.0-0!. Therefore after 1...b3/c5 follows 2.Qe1/Qh1 \sim 3.Qa5/Qa8#. Such a manoeuvre can work out just only by castling.

No. 23 was the sample to show the double rendering of the clearance of two squares by two castlings. 1.Ba4! d5 2.0-0 d5×c4/a5 3.Qh1/Qe1 \sim 4.Q×c6/Q×a5#, 1...a5 2.0-0-0 d5/Sf7 3.Qe1/Sa1 \sim 4.Q×a5/Sb3#. A great construction.

No. 24: $1.B \times e5$? d6!. 1.Sd5! [thr. $2.Sf6+ K \times f4 \ 3.Be3\#$] $e6 \times d5 \ 2.0-0 \ g3 \times h2+ 3.Kh1 \sim 4.Rae1\#$. $1...e6 \times f5 \ 2.0-0-0 \ a1Q,R+ 3.B \times a1 \ f5 \times g4/c3 \ 4.Bg6/Rhe1\#$, $2...f5 \times g4 \ 3.Rhe1+ Kf5 \ 4.R \times e5\#$. Here the vacated squares a1 and e1 are occupied by B and Rh as well as the squares e1 and h1 by Ra and K. So the free square e1 is used differently according to either long or short castling. In this respect no. 24 surpasses no. 23.

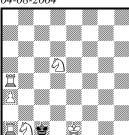


No. 25 Thomas R. Dawson

Chess Amateur 1923 Mate in 4

No. 25 shows double vacation in an entirely different manner: 1.0-0! Kc4 2.Be1 Kd5 3.Bh1 Kc4 and now 4.Qa2#! King and rook vacate their squares for the bishops, then the bishops vacate their squares for the queen. TRD was the one to do the impossible.

No. 26 Thomas Beumann Open Chess Diary 04-08-2004



Mate in 3

No. 27 *Klaus Wenda Schach 1966 1st Prize*



Mate in 6

No. 28
Alois Johandl
FIDE Tourney 1959



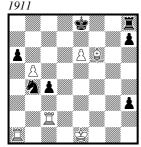
Mate in 4

In the miniature **no. 26** wSb1 and bKc1 prove to be an obstacle for executing 0-0-0. Here the job is done by zugzwang: 1.Rb4! Kc2 2.Sbc3 Kd3 3.0-0-0#.

The same aim is reached by a complex logical procedure in **no. 27** (FIDE-Album). $1.\text{Ra} \times \text{d}1?$ b3! and 1.Bd7+? Kd8 2.Bg4+ Ke8 3.Sh5 f5!, therefore 1.Sh5! B×h5 2.Bd7+ Kd8 3.Bg4+ Ke8 4.0-0-0! c6 5.Rd8+ B×d8 6.Bd7#.

No. 28 (FIDE-Album) has got the bishop's complete retreat from a8 to h1 for a key, a queen sacrifice and castling by both sides. 1.Bh1! Sa7 $(1...0-0? Qa8 Sa7 3.Qg2#) 2.Qc6 d7 \times c6 3.0-0-0 0-0 4.Rg1#.$

No. 29 Wolfgang Pauly Deutsches Wochenschach



Mate in 3 b) mirrored $(a1 \leftrightarrow h1)$

Again castling by both sides in **no. 29**:

- a) 1.0-0-0! Sa2+ 2.R×a2 0-0 3.Rg1#; 1...Sd3+ 2.R×d3 c4×d3/0-0 3.Rc8/Rg3#; 1...Sd5 2.R×d5 0-0 3.Rg5#; 1...Sc6 2.b5×c6 0-0 3.Rg1#.
- b) (mirrored): not 1.Re1? $S\times f2+!$, but $1.R\times h6!$ $S\times f2+/Se3+$ 2.Kc2/Kc1 \sim 3.Rh8#; $1...S\times h6$ 2.Re2 \sim 3.Re8#. Subtle modification by mirroring. Cp. no. 38 and 217.

No. 30 Gerald F. Anderson Westminster Gazette 1917



Mate in 4

No. 31 Vladimir Savchenko Shakmatny Moscow 1970 1st Prize



Mate in 8

No. 32 *Hilmar Ebert Deutsche Schachblätter*1987 4th HM



Mate in 9

Castling is the only non-capturing move by an officer that cannot be retracted in one move. At least three moves are necessary to reach the initial position. With perfect elegance this is shown in the most famous switchback of castling (**no. 30**): 1.0-0! Kh4 2.Kf2 g3+ 3.Ke1 g4 4.Rh1#.

In **no.** 31 (FIDE-Album) we admire a very brave white king. Not 1.Rd1? Sd2!, but 1.0-0-0! a3xb2+ (1...Sd2? 2.Re1+ Se4 3.Sd7#) 2.Kc2 (2.K×b2? Qb8! 3.B×b8 g6×h5) b1Q+ (2...Se3+? 3.Kd3 b1Q+ 4.R×b1 Bf1+ 5.R×f1 and 6.Bd4/Sd7#) 3.Kc3!! and 7 possible checks, but none is successful (3...Qc2+/Qd3+/Qa1+,Qc1+/Qb4+ 4.B×Q/K,R×Q/R×Q/Kd3) 3...Qb2+ 4.Kd3!! now 8 possible checks 4...Qe2+! 5.K×e2 f3+ 6.Ke1 (this seems to be the position after 1.Rd1? Sd2!) 6...Sd2 7.Sd7+ Ke4 8.Bc2# since the square f3 is now blocked (which makes the difference). A monument in the problem chess history. The provoking key reminds us of famous problems composed by *Sam Loyd* (P1031114), *Ado Kraemer* (P1032516) and *Lev Loshinsky* (P1026036).

There are numerous skittles problems. **No. 32** (FIDE-Album) is one of the best showing castling as a key move in a white homebase position. 1.Rh2/Rf1/Qb1? f2+/d2+/f2+!; 1.0-0! e2! 2.Qd2 f2+! $3.R\times f2$ f3! 4.Rh2! f4 5.Rh5! f2+ $6.K\times f2$ f3 7.Rg5! e1Q+ $8.Q\times e1+$ Kf4 $9.Q\times e5\#$; 4... f2+ $5.K\times f2$ f4! 6.Rh5! f3 7.Rg5! etc.; 4... e1Q $5.Q\times e1$ Kf4 6.Qd2+! Ke4! (6... Kg4 7.Qh6 f2+ $8.K\times f2$ f4 9.Qg6#) 7.Rh5! f2+ $8.K\times f2$ f4 9.Qe1#. *Hilmar Ebert* also composed a pendant with wQf1 and wRa1 (no. 33), *Schach-Report* 1987, #9; 1.0-0-0!.

Even longer, but much easier to solve are **no. 34** *Jan Mortensen*, *Thema Danicum* 1983, *wKe1 Rh1 sKg6*, #11; 1.0-0! and **no. 35** *wKe1 Ra1 bKc5/6*, #13; 1.0-0-0!. These are the length records for castling problems with three pieces (duals included).

No. 36 Hermann Albertz Karl Henke

Die Schwalbe 1948

1st Prize



Helpmate in 2*

No. 37 Frederick Hawes Frank Ravenscroft The Problemist 1958



Selfmate in 4

No. 38
Klaus Wenda
problem 1976 1st Prize

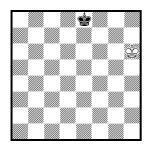


Black retracts 1 move, then helpmate in 1 b) mirrored $(a1 \leftrightarrow h1)$

In **No. 36** (FIDE-Album) the two castlings take a major role in the play. In the solution it is white castling 1.Rh7! 0-0 2.Re7 2.Qc8#, in the set play (with White to play) black castling $1...Q \times h4$ 2.0-0 Qh7#. A little jewel.

No. 37 (FIDE-Album): 1.Qh8! Bh7 2.0-0-0+ Sf1 3.Bd6 a3 4.b2×a3 b2#. Selfmate problems with castling are rare (except in Valladao problems).

No. 38: a) Backward Re8×Qh8, forward Kc8 Q×e8#; White must have castled. b) Backward Ke8-e7, forward 0-0-0 a8Q#; White must have castled as well, but his queen was captured before; backward Rd8×Qa8? is illegal because of 8 wPs. Cp. no. 217.



No. 39

a) Frederick Baird Morning Post 1910 b) Julio Sunyer Chess Amateur 1923 White and Black retract 1 move each, then helpmate in 1. b) wK→h5

Hilmar Ebert presented this classic as a twin 1983 for the first time: a) backward Kg7×Rh6 Rd6×Qh6, forward Rd6-d8 Qh6-e6# (original position: Kf5/Kh2), b) backward Kg6×Rh5 Rh8×Qh5, forward 0-0 Qh5-h7#. The super classic!!

No. 40 Alexey Selezniev Tidskrift för Schack 1921



Win

Werner Keym Allgemeine Zeitung Mainz 1963 (v)

No. 41

Win



No. 42 Noam Elkies Shahmat 1987 1st Prize



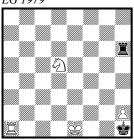
Win

No. 40: This peppy study presents a typical double effect of castling. After 0-0-0 the white king attacks the rook and the white rook guards the pawn or attacks the king. Not 1.0-0-0? Ra2 2.d7/Kb1 Ra1+/Ra8! =, but **1.d7! Kc7 2.d8Q+/R K** \times **d8 3.0-0-0+! K** \sim **4.K** \times **b2** 1:0. Later on this was called the Selezniev motif. Many later studies show this motive with bRb2 or bRh2 or wRb7 or wRh7. According to the endgame tablebases the position of no. 40 is a draw, as they do not take into account the castling rule (cp. no. 43).

In **no.** 41 the Selezniev motif is supplemented by sacrifices of knight and rook. 1.Sd4! K×d4 (2...Rh2? 3.Ra4 and mate in 48 moves) 2.0-0-0+ Kc3 3.Rd3+! K×d3 4.K×b2 Kd4 5.Ka3 Kc5 6.Ka4 Kb6 7.Kb4 opposition and win. The version of 1963 (*wKe1 Ra1 Sc1 b3 bKe4 Rb2 d3*) had the coarse key move 1.S×d3.

No. 42 (FIDE-Album) is a marvellous study: self blocks of bR, forks of S, Selezniev motive on g2 and h2, mate by castling. **1.g7!** (1.Sg5? g2 2.Sf3+ Kg3 3.g7 Rb8 4.Sg1 Rg8 5.Ra7 Kg4 and wPg7 will be conquered.) **1...g2 2.g8Q** (2.g8R/0-0-0? Rb8 =) **2...Rc2!** (2...g1Q+? 3.Q×g1+ K×g1 4.0-0-0! 1:0) **3.Sf6** (3.Ra2 R×a2 4.Q×a2 Kh1 =) **g1Q+ 4.Q×g1+ K×g1 5.Sg4!** with an unexpected reciprocal zugzwang: all moves of bR, bK and bPc4 result in the loss of the R or in mate. 5...Rb2 6.0-0-0+; 5...Rc3 6.Kd2+; 5...Rc4 6.Kd2+/Ke2+ Kg2 7.Se3+; 5...Rg2 6.0-0-0#; 5...Kg2 6.Se3+; 5...Kh1 6.Se3 Rh2 7.0-0-0#, 5...c4 6.Se3 Rf2/Rh2 7.0-0-0+ Kh2/Kf2 8.Sg4+.

No. 43 Ernest Pogosjanz EG 1979

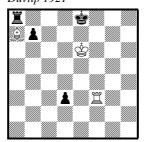


Win Incorrect

No. 44

Josef Moravec

Duvtip 1921



Win

No. 45 Réti – Tartakower



Position after $7...Q \times e5$?

No. 43: The author's solution is short: **1.Se3!** $\mathbf{R} \times \mathbf{h2}$ (1...Re6 2.Kf2+ Kxh2 3.Sg4+ Kh3 4.Kf3 Kh4 5.Kf4 Kh5 6.Kf5) **2.0-0-0#!** But now the endgame tablebases become involved with a surprising double aspect. On the one hand they judge the position after 1.Se3 $\mathbf{R} \times \mathbf{h2}$ (with subsequent mate by 2.0-0-0#) as a draw since they do not account for the castling rule. On the other hand they present a win by 1.h4! with mate in 33 moves. *Tim Krabbé* gave this comment: 'So this is a study with two solutions. A human solution that is beyond the grasp of the tablebase, and a tablebase solution that is beyond the grasp of humans.' *Stephen Rothwell* points out that the 'cook' 1.h4 is eliminated by putting the knight on d1 or g2. After 1.Se3! Re6 the dual 2.Kf2+ or 2.h4 however remains.

No. 44: 1.Lb8! (1.Rh3? 0-0-0 =) **d2** (1...Rxb8/Ra6+ 2.Rh3/Bd6 1:0) **2.Bd6! 0-0-0 3.Rc3#**. Cunningly designed.

'Réti's Mate' – under this name the following combination (**no. 45**) entered into the history of chess: **1.e4 c6 2.d4 d5** (Caro-Kann) **3.Sc3 d5×e4 4.S×e4 Sf6 5.Qd3 e5?** Mistakes may stimulate the game of chess, yet they will kill the chess problem! **6.d4×e5 Qa5+ 7.Bd2 Qxe5!?** (pins and threatens the wS) **8.0-0-0!** (thereby the wK gets away from the pinning and seems to give up the S) **S×e4??** Now not 9.Re1? Be7 10.R×e4 Qc7, but a mate in 3 moves: **9.Qd8+!!** (sacrifice of the Q) **K×d8 10.Bg5+ Kc7** (Ke8? 11.Rd8#) **11.Bd8#!** 'An ordinary move in a problem will never be fascinating, a problem move in the game will do so anyway.'

Four real castlings in directmate problems and endgame studies

In a chess game two castlings at most can be executed, four, however, in a chess composition.

No. 46 Knud Hannemann Skakbladet 1921



Mate in 4

No. 47 Juan Rosetti

Chess Correspondent 1947



Mate in 4

As to directmate problems the classic **no. 46** (FIDE-Album) is the first rendering of four real castlings as to be seen with the combinations b0-0-0/w0-0-0 und b0-0/w0-0. Black castles for the sake of defending and checking, White castles to avoid checking. After 1.Qd5! [thr. $2.Q \times d7 + /Q \times f7 + 3.Q \times f7/Q \times d7\#$] there are four variants: two are thematic (1...0-0-0 and 1...0-0), two are side lines (1...Rh7 and 1... $f7 \times g6$). 1.Qd5! 0-0-0 2.0-0-0 (2.0-0? $R \times h4$ 3.~ Rh1+) $b7 \times a6$ 3.Be5 ~ 4.Qa8#, 2...f5 3.Bf3 $Rd \times 4.Q \times d7\#$; 1...0-0 2.0-0 (2.0-0-0? Rac8 3.~ $R \times c5+$) $R \times a6$ 3.Qh5; 1...Rh7 2. $g6 \times h7$ 0-0-0 3. $Q \times d7+R \times d7$ 4.h8Q,R# (dual); 1... $f7 \times g6$ 2. $Sc7+Q \times d7+Qe5+$ (dual).

No. 47 (FIDE-Album), the second classic, has got a similar structure. It is all about Black's threatening of check. 1.Qc3! [thr. $2.Q \times f6$ 3.Qe7, $Q \times h8\#$] 0-0-0 2.0-0-0 [thr. 3.Qa5 4.Qc7#] (2.0-0? Rhg8 3.Qa5 $R \times g3+$) Kb8 3.Qa5,Qb2+ (dual); 1...0-0 2.0-0 [thr. 3.Qxf6 4.Qg7#] (2.0-0-0? Rb8 3.Q $\times f6$ Rb1+) Rfb8 3.Q $\times f6$ Kf8 4.Qh8#; 1...Rb8 2.Q $\times f6$ Rb1+ 3.R $\times b1$ 0-0 4.Qg7#; 1...Kf8 2.B $\times a8$ [thr. 3.Q $\times f6$ 4.Qd8,Q $\times h8\#$] Rg8 3.Q $\times f6$,Qb2,Rb1 (dual). With a supplementary bBa2 all duals will disappear (*Werner Keym, Die Schwalbe 2006*).

No. 48 Werner Keym Die Zeit 2006



Mate in 3

No. 49
Werner Keym
Hannoversche Allgen

Hannoversche Allgemeine Zeitung 2007



Mate in 5

No. 48 (FIDE-Album) is the first dual-free directmate problem with four real castlings. 1.Bb5+! Kd8 2.0-0-0+ Kc8 3.Q×h8#; 1...Kf8 2.0-0+ Kg8 3.Qg3#; 1...B×b5 2.R×a5 [threatens 3.R×a8,Q×h8#] Kd8/0-0-0/Kf8/0-0 3.R×a8/Ra8/Q×h8/Rg1#. The thematic try 1.Bh5+? (1...Kd8? 2.0-0-0+ Bd3 3.Q×h8#) Kf8! only fails because the white king is not allowed to jump across the square f1 guarded by bBa6. [Werner Keym, Die Schwalbe 2006, wBb5 (instead of wBe2), #2; thus a correct two-mover (with Black on the move) is obtained (= **no. 48a**)]. There is no combination of two castlings as in no. 150 and 151, but one castling in each of the four variants. However, a stronger difference between the mating moves 3.R×a8# and 3.Ra8# would be desirable.

This desire led to the question of whether a chess problem can be realized whose thematic variants (with castling) are of full length and whose non thematic variants (without castling) are of short length in such way that Black's best and longest defense requires castling? After more than 400 tries of construction (motto: '10% inspiration, 90% transpiration') I succeeded in composing such a problem, the dualfree five-mover **no. 49** (FIDE-Album): 1.Bb5+! Kd8 2.0-0-0+ Kc8 3.Q×h8+ Sg8 4.Q×g8+ Kb7 5.Rd7#; 1... Kf8 2.0-0+ Kg8 3.Qg3+ Sg4 4.Q×g4+ Kh7 5.Qg6#; 1... S×b5 2.R×a5 [thr. 3.R×a8# and 3.Q×h8+ Sg8 4.Q×g8#] 0-0-0 3.Ra8+ Kb7 4.Qf3+ Rd5 5.Q×d5#; 2...0-0 3.Rg1+ Sg4 4.R×g4+ Kh7 5.Qg7#. If after 2.R×a5 Black does neither play 2...0-0-0 nor 2...0-0, then there will be a short mate in 3 or 4 moves. Therefore all four castlings are necessary and real – this has been unique up to now. No. 48 and 49 are my best chess problems without any retrograde aspect.

No. 50 Werner Keym Die Schwalbe 2006



Win

No. 51 Oleg Pervakov Die Schwalbe 2008 200th TT Prize



Draw

No. 52 Martin Minski (after Oleg Pervakov) Die Schwalbe 2017



Who wins?

No. 50 seems to be the first endgame study with four real castlings: 1.Bb5+ Kd8 2.0-0-0+ Kc8 3.Qxh8+ and mate or 1...Kf8 2.0-0+ Kg8 3.Qf3 (3.b4/Qh3? Q×c5+ =) Se5 (3...Q×c5+ 4.Kh1 Sd6/Se5 5.Rg1+; 3...Kg7 4.Qg4+ Kh6 5.Rf3) 4.Qg3+ Sg6 5.Q×c7 1:0, e.g. 5...B×b5 6.Q×b7 B×f1/Rd,e8 7.Q×a8+/c4. After 1...B×b5 follows 2.R×a5 0-0 (2...Qg3+ 3.Q×g3 1:0, e.g. 3...S×a5 4.R×h7 Rf8 5.Qc7) 3.Rg1+ and mate or 2...0-0-0 3.Ra8+ Qb8 4.R×b8+ 1:0, e.g. 4...K×b8 5.b3×c4 Ba6 6.c5×b6 Ka8/Rc8/h5 7.Qg7/c5/Qg7. White captures the black queen on d8, c7, b8 and g3.

No. 51 (FIDE-Album): $1.B \times e7!$ Qh7! $2.B \times g5$ (2.Bd6? Bd4 3.Qg2 Bc3+ 4.Kf1 Qf5+ 5.Qf2 Qe4 6.Qe2 Q×e2+ 7.K×e2 B×a1 8.R×a1 R×h4 9.B×c5 0-0-0! 0:1) $2...B \times g5$ 3.h4×g5 0-0 (3...0-0-0 4.0-0! Q×h3 5.Qg2! Qe3+ 6.Rf2! =) 4.0-0-0! Rab8 5.Qc2! Qg7 6.Rd6! Qa1+ 7.Kd2 Q×a5+ 8.Kd1! Qa1+ 9.Kd2 Qa5+ 10.Kd1 Rbd8 (otherwise positional draw) 11.Qg6+ with perpetual check. In an ideal draw study, however, white castling is necessary to avoid losing and black castling to avoid losing, too. A slight flaw: in no. 51 (after $3.h4 \times g5$) there is a draw by 3...0-0 as well as by 3...0+04+.

In **no. 52** this challenge is mastered. 1.Qa2? 0-0-0! 2.0-0! Rd3! 3.Qg2 Qa7+ 4.Rf2 Qc5 5.a6 Qc3 6.Raf1 Rg3 0:1; 1.Q×b4? 0-0-0 2.0-0 Q×h3,Qd3 0:1. **1.Qb2! 0-0-0! 2.0-0! Rd3** (2...Q×h3 3.Qg2 Qe3+ 4.Rf2 Rh3 5.Q×c6+ =) **3.Qf6 Q×h3** (3...Rg3+ 4.Kf2 Rg2+ 5.K×g2 Q×h3+ 6.Kf2 =) **4.Q×c6+** =; **1...0-0! 2.0-0-0! R×a5 3.Qd4!** = (e.g. 3...Qh6+ 4.Kb1 Rfa8 5.Qc4+ Kh8 6.Qd4+ Kg8 7.Qc4+ with perpetual check). Conclusion: In this study all four castlings are necessary – and nobody wins!

Four real castlings in helpmate two-movers

No. 53 is probably the first problem with two solutions, no. 54 perhaps the second? In no. 53-55 there are the combinations 0-0/0-0 and 0-0-0/0-0-0, in no. 57 0-0/0-0-0 and 0-0-0/0-0. In no. 57 w. castling unpins the Rc3. In no. 58 the same piece is put on three different squares of a diagonal.

No. 53 *Karl Kubbel Magyar Sakkvilág 1929*



Helpmate in 2 2 solutions

1.0-0-0 0-0-0 2.Qc3 B×a6# 1.0-0 0-0 2.Q×g3 g6×h7#

No. 56 Hanspeter Suwe '0-0' 1981 TT 3rd HM



Helpmate in 2 2 solutions b) mirrored $(a1 \leftrightarrow h1)$

- a) 1.0-0-0+ Bd6 2.Rd7 Ra8#
- a) 1.0-0 Bb2 2.Rf7 Rh8#
- b) 1.Rc8 0-0-0 2.Re8 R×d7#
- b) 1.Ke8 0-0 2.Rd8 Rae1#

No. 54 Werner Keym Die Schwalbe 2006



Helpmate in 2 2 solutions

1.0-0-0 0-0-0 2.Sf5 Qc2# 1.0-0 0-0 2.Sfe8 Q×f8#

No. 57 *Werner Keym Die Schwalbe 2006*



Helpmate in 2 b) Ra1→h1

- a) 1.0-0 0-0-0 2.e2 R×g3#
- b) 1.0-0-0 0-0 2.Sa3 R×c5#

No. 55 Iwan I. Soroka Schach-Echo 1981



Helpmate in 2 b) $Sf7 \rightarrow d7$

- a) 1.0-0 0-0 2.Bg7 h7#
- b) 1.0-0-0 0-0-0 2.Bc7 Ba6#

No. 58 Werner Keym Die Schwalbe 2006



Helpmate in 2 b)–d) Bh3→a2/c4/f7

- a) 1.Rf8 0-0-0 2.Sb1 Rhe1#
- b) 1.Sb3 0-0 2.Rd8 Rae1#
- c) 1.Bb5 a4×b5 2.0-0-0 Ra8#
- d) 1.0-0 g×f7+ 2.Kh8 R×h5#

No. 59 Werner Keym

Die Schwalbe 2006 (c)



Helpmate in 2

1.0-0 0-0 2.Se8 Q×f8# or 1.0-0-0 0-0-0 2.d3×c2 Qc5#

No. 60 Werner Keym Die Schwalbe 2006



Helpmate in 2

1.Qc5 0-0-0 2.0-0 Rdg1# or 1.0-0-0 0-0 2.c4×b3 Q×c6#

No. 61 Werner Keym (after A. Hazebrouck)

Die Schwalbe 2006



Helpmate in 2 Duplex

1.b0-0-0 Qa2 2.Kb8 Qa8# or 1.b0-0 S×g6 2.Rf7 Rh8# or 1.wQa2 R×a2 2.0-0-0 Ra1# or 1.w0-0 S×h4 2.Kh2 S×f3#

In no. 59 and 60 for the first time a realization of four real castlings in a helpmate two-mover is achieved without the condition of two solutions (no. 53-54) or a twin version (no. 55-58) – by means of Partial Retrograde Analysis (see p. 106). In **no. 59** the bPs captured 10 pieces, among them the promoted officer(s) X. Genesis of the position: either a) wPh \times Qg \rightarrow g8X, wPa2 \rightarrow a8X (b0-0-0 not permitted) or b) wPa \times Qb, wPh2 \rightarrow h8X (b0-0 not permitted). Solution: a) 1.0-0!, b) 1.0-0-0!.

In **no. 60** the bPP captured 6 times; besides bOfficer \times Pd and wPe/g \times Sf. Genesis: either wPa2 \rightarrow a8X (then 1.Qc5!) or wPh2 \rightarrow h8X (then 1.0-0-0!).

As to **no. 61** you should give the matter considerable thought. Let us begin with the initial array of the game and try to reach the position of the diagram. Whichever way you will go, only one of the four castlings will be permitted (Partial Retrograde Analysis): a four-part problem for indefatigable retro fans. The related problem by *A. Hazebrouck* is P0001291.

No. 64 is an extraordinary helpmate two-mover presenting 1 or 2 or 3 or 4 solutions and castlings.

Four real castlings in helpmate three-movers (cp. P0525390 and P0004532) turn out to be easier for the composer than in two-movers.

Curious castling tasks

No. 62 Ralf Krätschmer Die Schwalbe 2010 (v)



Mate in how many moves?
a) 0-0-0 & 0-0 permitted
b) only 0-0-0 permitted
c) only 0-0 permitted
d) 0-0-0 & 0-0 not permitted

No. 63 Werner Keym

König & Turm 2007 (v) 3rd Prize



Mate in how many moves, if a) w0-0 is executed, if b) w0-0-0 is executed, if c) b0-0-0 is executed, if d) b0-0 is executed?

No. 64 Werner Keym Die Schwalbe 2006



Helpmate in 2 How many solutions?

- *b) Pe4→f4*
- c) Pe4→g4
- *d) Pe4→h4*

No. 62: The number of the castling rights decreases, the length of the solutions increases. a) #2 1.Qe5+! Kd3/Kf3 2.0-0-0/0-0#; b) #3 1...Kf3 (Kd3? 0-0-0#) 2.Qe2+ K \times f4 3.Rf1# (3.0-0#?); c) #4 1...Kd3 (Kf3? 2.0-0#) 2.Ra3 Kc2 3.Qe2+ Kb1 4.0-0#; d) #5 1...Kd3 2.Qe2+ Kxd4 3.Qe5+ Kd3 4.Rd1+ Kc2 5.Q \times c3#. A pendant with black castlings is P1256196 by *Ralf Krätschmer*, too.

No. 63: With w0-0 the solution works in 3 moves, with w0-0-0 in 4, with b0-0-0 in 5, with b0-0 in 6. a) 1.Bb5+! Kf8 2.0-0+ Kg8 3.Q×g3#; b) 1... Kd8 2.0-0-0+ Kc8 3.Q×h8+ Kb7 4.Rd7#; c) 1... S×b5 2.R×a5 [thr. R×a8#/Q×h8+#] 0-0-0 3.Ra8+ Kb7 4.Qf3+ Rd5 5.Qxd5#; d) 2... 0-0 3.Q×g3+ Kh8 4.Qe5+ Rf6 5.R×a8+ Kg7 6.Rg1#. 'An incredible curiosity.' [The original stipulation 'Mate in 6 moves' proved to be unsuitable.]

No. 64: The more steps the pawn takes to the right, the more solutions and castlings arise. a) 1.0-0-0 B×b5 2.Sc1 R×c1# (= 1 solution with 1 castling); b) 1.Sa5 0-0-0 2.Rf8 Rhe1# plus a) (= 2 s. with 2 c.); c) 1.Bd7 0-0 2.Td8 Rae1# plus a) plus b) (= 3 s. with 3 c.); d) 1.0-0 B×b3+ 2.Kh8 R×h4# plus a) plus b) plus c) (= 4 s. with 4 c.). Magic.

From the Allumwandlung to the Babson Task

Composers and solvers of chess problems are always fascinated by pawn promotion, especially by the four promotions to queen, rook, bishop and knight in the same problem, the so-called Allumwandlung (AUW). This is a small collection out of hundreds of AUW problems.

No. 67 Rafael M. Kofman '64' 1976



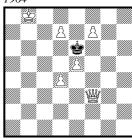
Mate in 2 b)-d) $Q\rightarrow h7/a7/c3$

No. 68 Wouter J. Mees Probleemblad 1959 4th HM



Mate in 2 b) Ba8→g8

No. 69 Hilmar Staudte Deutsche Schachzeitung 1964



Mate in 2 4 solutions

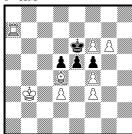
One underpromotion is possible with three pieces only (**no. 65**): *Charles Tomlinson*, *Amusements in Chess 1845*, *wKc6 c7 bKa7*, #2. Not 1.c8Q? stalemate, but 1.c8R! Ka6 2.Ra8#. – A hundred years later two underpromotions are shown with four pieces (**no. 66**): *Allan Th. Werle*, *Tidskrift för Schack 1945*, *wKf2 e7 bKh1 d2*, #4. Not 1.e8Q? d1S+ 2.Kg3 Se3 3.Q×e3 stalemate, but 1.e8R! d1S+ 2.Kg3 Se3 3.R×e3 Kg1 4.Re1#

In **no. 67** the queen is transferred three times. Thereby four different promotions (S, B, R, Q) become possible: a) 1.f8S+! Kf6 2.Qg7#, b) 1.f8B! Kf6 2.Qf5#, c) 1.f8R! Kd6 2.Rf6#, d) 1.f8Q! Kd7 2.Qcc8#. Four different mate squares. Unsurpassed.

In **no. 68** the promotions are equally distributed to version a) 1.d8B! Kd7 2.f8S# and to version b) 1.d8R! $K \times e7$ 2.f8Q#.

The multiple solution problem **no. 69** starts with promotions: I 1.d8R! Ke7 2.Qf6#; II 1.d8B! Kd7 2.Qd5#; III 1.f8Q! $K \times d7$ 2.Qd5#; IV 1.f8S+! Ke7 2.Qf6#.

No. 70 Niels Høeg Nordiske Schackbund 1905 6th HM



Mate in 3

No. 71 Zdravko Maslar Bilten 1962 Ist Prize



Mate in 3

No. 72 *Horst Bäcker Schach-Echo 1976*



Mate in 4

For the first time **no. 70** shows the (alternative) AUW of a white pawn on the same promotion square in the same move with a non capturing key – dual-free with 12 pieces only: 1.f7! [thr. 2.f8Q \sim 3.Qe7#] Kd6 2.f8Q+ Kc6 3.Qc5#; 1...e5×f4 2.f8R Kd6 3.Rf6#; 1...e5×d4 2.f8B Kf6 3.Ra6#; 1... Kf6 2.f8S e5×d4 3.Rf7#. The classical AUW! According to his own words *Niels Høeg* needed twelve years to find this pattern of construction. Later on it was often used in the same or modified form.

The AUW was achieved even in the form of a miniature (**no. 71**): 1.Qh5! Kc7 2.Qc5 Kb8/Kd8 3.d8Q/c7#; 1... Ke7 2.Qc5+ $K\times e6/Kd8$ 3.d8S/c7#; 1... $K\times c6$ 2.d8B Kd6 3.Qd5#; 1... $K\times e6$ 2.d8R Ke7 3.Qe8#. Laid down by the hand of a magician!

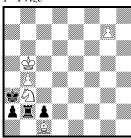
As far as I know the powerful problem **no. 72** was the first to render a completely dual-free AUW with a black pawn: 1.Qxc5!

- 1...f2×g1Q 2.f6 Qf2 3.Rf5 Qf3/Qf4/Q×f5 4.R×f3/R×f4/R×f5#;
- $1...f2 \times g1R 2.S \times g3 + h4 \times g3 3.Qe7 e2 + 4.Q \times e2 #;$
- $1...f2\times g1B \ 2.Q\times a5 \ B\sim 3.Q\times b4 \ B\sim 4.Q\times e1/Qe1\#;$
- $1\dots f2\times g1S\ 2.Q\times e3\ S\times e2/S\times h3\ 3.Kd2/S\times g3+\sim /h4\times g3\ 4.Qe1\#.$

Besides there are three thematic tries which Black parries by the appropriate promotion: 1.Qc7/Qe6/Qh8? f2xg1Q/B/S!.

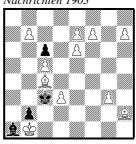
'Problem chess unites essentials of the riddle, the art and the science'. (Werner Speckmann)

No. 73 Matjaz Zigman Delo-Tovaris 1970 Ist Prize



Mate in 3

No. 74
Friedrich Köhnlein
Münchner Neueste
Nachrichten 1903



Mate in 4

No. 75 *Matti Myllyniemi*Suomen Tehtäväniekat

1966

O. Kaila 50 JT 1st Prize



- a) Mate in 2
- b) Selfmate in 2
- c) Helpmate in 2
- d) Helpstalemate in 2

In a very economical style **no. 73** (FIDE-Album) shows white and black promotions: 1.Sd2! [2.g8Q]

- 1...a1B 2.g8R Ka2 3.Ra8#;
- 1...a1S 2.g8Q Sb3 3.Qxb3#.

And there are two thematic tries: 1.g8Q? a1B!; 1.g8R? a1S!.

As early as in 1903 the successive AUW of four white pawns was presented in its Letztform (**no. 74**): 1.f8Q!

- 1...Kb4 2.h8B! (2.h8Q? Ka4!) Kxc5 3.b8R Kd6 4.e8S#
- 1...Kd2/Kd4 2.Qf2+ Kc3 3.Qe1+ Kd4 4.Bg1#.

Even in only three moves a successive AUW (with 3 white pawns and 1 black pawn) was achieved without any duals (P1291184).

No. 75 (FIDE-Album): a) 1.e8S e5 $2.S \times c7\#$; b) 1.e8B e5 2.Bc2 e4#; c) 1.e5 e8Q 2.e4+ Q×e4#; d) 1.e5 e8R 2.e4+ R×e4 stalemate. The change of the stipulation results in an alternative AUW. Highly original.

No. 76 Knud Hannemann Skakbladet 1922



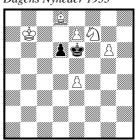
Mate in 2 b)-d) turn 90° (wKh6), 180°, 270° (wKa3)

No. 77 Niels Høeg Skakbladet 1907 Ist Prize



White forces the end of the game in 2 moves

No. 78 Knud Hannemann Dagens Nyheder 1933



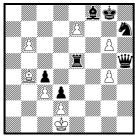
Mate in exactly 1, 2, 3 and 4 moves

No. 76 (FIDE-Album): An astonishing AUW is created by turning the board (clockwise): a) 1.d8Q+! Ke6 2.Qe7#, b) 1.b8R! Kf4 2.Rf8#, c) 1.d8B! Kd4 2.Bf6#, d) 1.f8S! Kd5 2.Bb7#. The Danish wizard!

In **no.** 77 the stipulation and the solution are even more amazing: $1.Qe1! \ e2 \times f1Q$ $2.K \times g3 \ Q \times e1\#$ selfmate, $1...e2xf1R \ 2.Qxg3\#$ mate, $1...e2 \times f1B \ 2.K \times g3$ stalemate, $1...e2xf1S \ 2.Qf2+ Kxf2/g3 \times f2$ selfstalemate; $1...g2 \ 2.B \times e2\#$. This time the actor is a black pawn.

The solution of this curious n-mover **no. 78** (FIDE-Album) is: a) 1.e8Q#, b) 1.e8R+! Kd7 2.Re7#, c) 1.e8B! d5 2.Kc6 \sim 3.Bd7#, d) 1.e8S! Kd7 (1...d5 2. Kc6 \sim 3.Sc7/Sg7#) 2.Sc7,Sg7 d5 3.e5 d4 4.e6#. The weaker the promoted officer, the longer the play. – A counterexample is no. 243.

No. 79 *Harold Lommer Journal de Genève 1933 Ist Prize*



Win

No. 80 Sigurd Clausen Nya Dagligt Allehanda

(c) Alexander Hildebrand Tidskrift för Schack 1985



Win

1927

No. 81 Knud Hannemann (after V. Neidze) Stella polaris 1968 Special HM



Draw

For a long time the presentation of AUW in an **endgame study** had been considered to be impossible. The famous composer *Henri Rinck* is reported to have said that this Himalaya would stay unconquered, even if a million dollar was offered as a prize. So *Harold Lommer's* famous study was a sensation in 1933 (**no. 79**): **1.g6×h7+! Q×h7 2.e7×f8Q#; 1...Kg7 2.e7×f8B+!** 1:0 (2.e7×f8Q+? K×h7 3.g4×h5 Re1+ 4.K×e1 stalemate); **1...Kh8 2.e7×f8R+!** 1:0 (2.e7×f8Q+? Kxh7 stalemate); **1...K**×h7 **2.e7×f8S+!** Kg8! 3.g4×h5 R×h5 4.Kc1 Rb5! 5.Sd7 Kf7 6.Bd6 Ke8 7.Sf6+ Kf7 **8.Sd5** 1:0.

A second sensational event took place 50 years later, when **no. 80** was rediscovered. The original version (with wPg7, bKg8, bPf7) was not sound (1.g6×f7+ Q×f7!), but becomes correct without these two single moves (1.f6+!) and surpasses later no. 60 as to the key move, content and economy. *A. Hildebrand's* small correction only concerns the first two single moves. **1.g7+!** K×g7 **2.f6+** K×f6 **3.f8Q+** 1:0 (3.f8R+? Ke7 4.B×h5 R×a6+ 5.Kb1 K×f8); **2...Kh8 3.f8R+!** (3.f8Q+? Kh7 4.B×h5 R×a6+ 5.Kb1 Ra1+ 6.K×a1 stalemate) **Kg7 3.B×h5** 1:0; **2...Kh6 3.f8B+!** (3.f8Q+? Kh7 etc. stalemate) **Kg5 4.B×h5 K×h5 5.B×b4!** R×a6+ 6.Kb1 R×e6 7.f7 Rg6 8.Kc1 1:0; **2...Kh7 3.f8S+! Kg8** (3...Kh6 4.B×h5 R×a6+ 5.Kb1 Ra5/K×h5 6.Bd1/e7 1:0) **4.B×h5** R×a6+ 5.Kb1 Ra5 6.Sd7 R×h5 7.f7+ Kh7 8.Sf6+ 1:0. Fantastic!

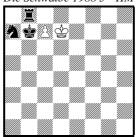
No. 81: 1.Rd1+ Sf1+ 2.R×f1+ $g2\times f1B!$ (2... $g2\times f1Q$ 3.Rh2+ Kg1 4.Rh1+ =; 2... $g2\times f1R$ 3.Rh2+ Kg1 4.Rg2+ =; 2... $g2\times f1S$ + 3.K×f4 1:0) 3.Rh2+! (3.Rb2? Kg1! zugzwang 0:1) 3... Kg1 4.Rb2 (zugzwang) Sd3/Sd5/Rc4/Rd4/Re4 5.Rg2+ Kh1 5.Rh2+ Kg1 6.Rg2+ Bxg2 stalemate. Simply clever!

No. 82 *Theodor Steudel*Deutsche Schachzeitung
1964



Helpmate in 2 b) $Pb2 \rightarrow g2$

No. 83 Harald Haverkorn Dirk Borst Die Schwalbe 1988 3rd HM



Helpmate in 2.5 4 solutions

No. 84 Helmer Ternblad



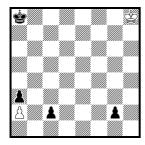
Helpmate in 3*

There are heaps of **helpmate problems** with AUW. Here are four beautiful miniatures. – **No. 82:** The solution of a) is 1.b1B! d8Q 2.Bbg6 Qd2# and b) 1.g1R! d8S 2.Rg6 Sf7#.

A special AUW helpmate is realized by an extraordinary stipulation (P0508180). Besides there is a helpstalemate problem showing AUW with only four pieces (P0501791).

No. 83 is the only AUW with five pieces and four solutions. I 1...c8S! 2.Ka8 Kc7 3.Rb6 S×b6#, II 1...c8B+! 2.Ka8 Kc7 3.Rb7+ B×b7#, III 1...c8R! 2.Ra8 Rc6 3.Kb8 Rb6#, IV 1...c7×b8Q+! 2.Ka6 Kc7 3.Sc6 Qb6#.

No. 84: The set play is 1...f7 2.a1B f8R 3.Bb2 Ra8#, the solution is 1.a1S f7 2.Sc2 f8Q+ 3.Ka4 Qb4#.

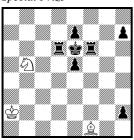


No. 85
Rolf Trautner

(after J. Bebesi) Die Schwalbe 1960 Helpmate in 7

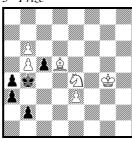
No. 85 shows a successive AUW (1 wP and 3 bPs): 1.c1S! Kg8 2.Sb3 a2×b3 3.g1B b4 4.Bc5 b4×c5 5.a2 c6 6.a1R c7 7.Ra7 c8Q#.

No. 86 *György Páros FIDE Review 1958 Special Prize*



Helpmate in 3 b)-d) $S \rightarrow d3/f3/h5$

No. 87 *Aurél M. Kárpáti Die Schwalbe 1954*3rd Prize



Helpmate in 3 b)-d) $sK \rightarrow e5/e7/h8$

No. 88 Christer Jonsson Springaren 1993



Helpmate in 4 4 solutions

No. 86 (FIDE-Album): 1.h1B! Bd3 2.Bc6 Bg6 3.Bd7 Sc7#, b) 1.h1Q Bg2 2.Qh5 Be4 3.Qf7 Sc5#, c) 1.h1S Bb5 2.Sg3 Bc6 3.Sf5 Sg5#, d) 1.h1R Bb5 2.Rhd1 Be8 3.R1d5 Sg7#. Most elegant.

No. 87 (FIDE-Album): a) 1.b1S b7 2.Sc3 b8S 3.S×b5 Sc6#, b) 1.b1R b7 2.Rd1 b8R 3.R×d5 Re8#, c) 1.b1Q b7 2.Q×b5 b8Q 3.Qe8 Qd6#, d) 1.b1B b7 2.B×e4 b8B 3.Bh7 Be5#. Perhaps the first helpmate to show four echo promotions, the so-called Babson task (cp. p. 18), by means of a quadruplet.

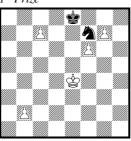
No. 88 (FIDE-Album): I $1.K \times e4$ e6 2.e1Q e7 3.Qa1 e8Q+ 4.Qe5 Q×e5#, II $1.K \times e4$ e6 2.e1B e7 3.Bf2 e8B 4.Bd4 Bc6#, III $1.K \times e4$ e6 2.e1S e7 3.Sc2 e8S 4.Sd4 Sf6#, IV 1.Kc6 e6 2.e1R e7 3.Rc1 e8R 4.Rc5 Re6# Probably the first Babson in a helpmate without a change of the diagram position? A flaw, however, is the same key $1.K \times e4$ in three cases. – Why is this task (often achieved in directmate and selfmate problems) so difficult for the helpmate genre? Who composes such a problem with four different keys?

No. 89 Knud Hannemann Tijdschrift N.I.S.B. 1931



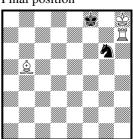
Selfmate in 4

No. 90 Andreas Thoma Die Schwalbe 2009 1st Prize



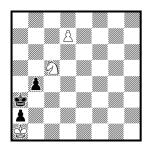
Selfmate in 25

To no. 90 Final position



Selfmate problems are suitable for AUW. **No. 89** is a classic successive AUW (Q-R-B-S): $1.h8Q+! Kg6 2.g8R+ K\times f7 3.e8B+ Ke6 4.d8S+ R\times d8#$.

No. 90 (FIDE-Album) is the first selfmate miniature with successive AUW. 1.c8Q+! Sd8 2.g8B Kf8 3.Bc4! Ke8 4.b4 Kf8 5.b5 Ke8 6.b6 Kf8 7.b7 Ke8 $8.\underline{b8R}$ Kf8 $9.Qc5+\overline{Ke}8$ 10.f7+ Kd7 $11.\underline{f8S}+$ Ke8 12.Sg6 Kd7 13.Se5+ Ke8 14.Qc7 Kf8 15.Kf5 Ke8 16.Kf6 Kf8 17.Qc8 Ke8 18.Rb7 Kf8 19.Rh7 Ke8 20.Kg7 Ke7 21.Qc7+ Ke8 22.Bb5+ Sc6 23.Kh8 Kf8 24.Qe7+ S×e7 25.Sg6+ S×g6# (final position). Hard work for composer and solver.



No. 91 Alexander Hildebrand

Stella Polaris 1968 Special Prize Selfmate in 2 4 solutions

No. 91-94 are alternative AUW. **No. 91** is a lucky finding: I 1.d8Q b3 2.Qh4 b2#. II 1.d8R b3 2.Rd4 b2#, III 1.d8B b3 2.Ba5 b2#, IV 1.d8S b3 2.Sc6 b2#.

No. 92 Alain C. White Pittsburgh Gazette Times 1912



Selfmate in 2

No. 93 William A. Shinkman The Theory of Pawn Promotion 1912



Selfmate in 3

No. 94 Henry W. Bettmann Funkschach 1926 1st Prize



Selfmate in 3

In **no. 92** the white pawn on h7 plays a major role: 1.Bf5+! $K \times f5/Kf7/Kg7/K \times h5$ 2.h7×g8Q/R/B/S B×g3#.

In **no. 93** the black pawn on f2 is the actor: 1.Bd6!

 $1...f1Q 2.Qc4+ Q\times c4 3.Bb4+ Q\times b4#.$

1...f1R 2.Qh8+ Rf6 3.Bc5 Bb2#.

1...f1B 2.Qg3+ Bd3 3.Bc5 Bb2#.

1...f1S 2.Qh3+ Se3,Sg3 3.Bc5 Bb2#.

Furthermore 1...c5 2.Bg3 [3.Qb4+] c4 3.B×f2 Bb2#.

It was *Joseph Babson* who initiated a long series of construction of problems with an AUW of Black and an AUW of White in the form of an echo, if possible by one black pawn and one white pawn. **No. 94** (FIDE-Album) shows the first rendering of this task, the perfect echo AUW, which later on was called the *Babson task*: 1.a8B! $f2 \times g1Q/R/B/S$ 2.f8Q/R/B/S Q/R/B/S $\sim 3.X \times Q/R/B/S$ R×a6#, 2...Q×f1/Q×c5+ 3.b5+ B×b5#; flaws are the duals 1...f2×g1Q 2.f8Q Qf2/Qg7 3.Q×f2,R×f2/Q×g7,h6×g7. Who composes such a problem with dual-free full length variants?

'The rigidity of the material with which we have to compose is a more formidable opponent than Lasker or Capablanca.

Because these lifeless opponents do not have any moments of human weakness'.

(Henri Weenink)

No. 95
Leonid Yarosh

Shakhmaty v SSSR 1983 1st Prize



Mate in 4

No. 96 Peter Hoffmann



Mate in 4

For a very long time the correct rendering of the Babson task in a directmate problem had been considered to be impossible – until 1983, when $Leonid\ Yarosh$ composed his famous masterpiece ${\bf no.\ 95}$ (FIDE-Album): 1.a7! [thr. 2.a7×b8Q,R,B,S . . . 4.#] 1...a2×b1Q 2.a7×b8Q! [thr. 3.R×f4+,Q×f4+,Qd6+,Q×b3] Qe4 3.R×f4,Q×f4 Q×f4 4.Q×f4/R×f4#; 2...Qe1/Q×f5 3.R×f4+,Q×f4+ etc.; 2...Q×b2 3.Q×b3 [thr. 4.R×f4, Q×b2#] Qc3 4.Qa×c3,Qb×c3#. 1...a2×b1R 2.a7×b8R! [thr. 3.R×f4#] (2.a7×b8Q? R×b2 3.Q×b3 stalemate) R×b2 3.R×b3 K×c4 4.Qa4#; 2...Re1 3.R×f4+,R×b3 etc. 1...a2×b1B 2.a7×b8B! [thr. 3.R×f4+,Sd6,B×f4] (2.a7×b8Q? Be4 3.Q×f4 stalemate) Be4 3.B×f4 ~ 4.Be3,Be5#. 1...a2×b1S 2.a7×b8S! [thr. 3.R×f4#; 3.B×e7] S×d2 3.Qc1 Se4/S~ 4.Sc6/R×f4#. Interesting sidelines: 1...Qe5 2.B×e7 Qd6 3.S×d6; 2.Qc7 3.B×f6+. 1...Q×d8+ 2.Kg7! a2×b1Q 3.R×f4+; 2...Qf,g,h8+ 3.K×Q a2×b1Q 4.d8Q,R#. 1...Qd6 2.Re1 Qc6 3.R×f4+. 1...Q×a8 2.R×f4+ Qe4 3.a8Q. A strong try: 1.Re1!? Q×d8+! 2.Kg7 Qf,g,h8+ 3.K×Q stalemate.

Up to now about 20 direct Babson problems have come to be achieved. You will find them in *PDB* (K='Babson task'). **No. 96** is the first with four dual-free main lines: 1.d6xe7! **e1Q 2.e7 \times f8Q!** ($2.e7 \times f8R?$ Qxe4+ 3.d4 Qf5) Q×e4+ 3.d4 Qf5 4.B×f5#. 1...**e1R 2.e7 \times f8R!** ($2.e7 \times f8Q?$ R×e4+ 3.d4 stalemate; $2.e7 \times f8S+?$ Kg8 3.Ka5 R×e4) R×e4+ 3.d4 Kg7 4.R4f7#. 1...**e1B 2.e7 \times f8B!** ($2.e7 \times f8Q/R?$ stalemate; $2.e7 \times f8S+?$ Kg8 3.Qa6,Ka3,Ka5 stalemate) Kg8 3.Qa6 Kh7 4.Qg6#. 1...**e1S** 2.e7×f8S+! ($2.e7 \times f8Q/R?$ S×d3+!) Kg8 3.Ka5 S~ 4.Qc4#. The full length variants with other promotions contain duals, e.g. $1...e2 \times f1Q$ 2.e7×f8Q,R,S. There are two settings with a better key move (P1328423 and P1328425). – Who composes such a problem with dual-free full length variants? And who fulfils my dream of a Babson endgame study?

From the Valladao Task to the Keym Task

Since the beginning of problem chess history the three special moves promotion, castling and en-passant capture have always fascinated composers and solvers, especially the combination of these moves, even if there is no thematic interdependence of such moves. When they are all found in a problem, the special term for such a task is Valladao task referring to *Joaquim Valladao Monteiro*, who organized a relevant theme tourney in 1966.

No. 97 Jacob Elson Daily Evening Bulletin 1867



Mate in 5

No. 98 *Felix A. Sonnenfeld O Globo 1966 Valladao TT 1st Prize*



Mate in 2

No. 99José Figueiredo

O Globo 1966

Valladao TT 1st HM



Mate in 2

No. 97 is probably the first problem to present the Valladao task (in a successive form): 1.0-0-0+! Kc7 2.Bf4+e5 $3.\text{f5}\times\text{e6}$ e.p.+ Re5 $4.\text{e7}\sim5.\text{e8S}\#$.

The winner **no. 98** shows three double pawns' steps and two en-passant captures. 1.a8Q,R? b5!. 1.b4! [thr. 2.e6#] $S \times e2/Se4$ 2. $K \times e2/0-0#$; 1...d5/a4×b3 e.p. 2.e5×d6 e.p./a8Q,R#. Flaw: the (unavoidable) dual of the promotion.

No. 99 has several tries and fine refutations. 1.Kd1?/Rh2? Sg6!; 1.Rf1? Sc8!. 1.0-0! [thr. 2.Re1#] Sc4/Sd5/Sd7 2.c8S#; 1...f5 $2.g5 \times f6$ e.p.#; 1...Sg6 $2.R1 \times f7$ #. This two-mover is a *perfect Valladao* (as no. 97, 100-102): 1) there is no dual of the promotion, 2) there is only the double step of the pawn with the subsequent enpassant capture by the adversary pawn and not the simple step of the pawn with a normal capture by the adversary pawn. In the theme tourney in 1966 both flaws were tolerated.

No. 100 Werner Keym (after I. Godal) Die Schwalbe 2005 Special HM



Mate in 2

No. 101 Frank Fiedler Werner Keym Problemkiste 2005 (v)



Mate in 2

No. 102 Werner Keym



Mate in 2

No. 100: 1.0-0! [thr. 2.g6#] b1S/f5 2.Rc2/g5×f6 e.p.#. The try 1.g6+? Se3 2.0-0#? only fails because the white king is not allowed to jump across the square f1 guarded by bSe3. This is quite rare in Valladao problems. In the related problem (P1288319) there is the typical flaw: the captures $P \times P$ and $P \times P$ e.p. side by side.

No. 101: 1.Ba7+! Kd3/Kd5/c5 2.0-0-0/f7 \times e8S/b5 \times c6 e.p.# A Valladao with a particular feature: the three special moves are the mating moves.

No. 102: It is easier to find the solution than the reasons for the solution. $1.h5 \times g6$ e.p.! [thr. 2.h8Q#] 0-0-0 2.a8Q#. The last moves were g7-g5 $g6 \times Bh7$ (e.g. Bd4-e3 g5-g6 $e3 \times Bf2$) since the light-squared bishop is the only missing black piece. There is no other black move which allows a previous white one: Pb7-b6? would exclude the bB from c8; Pc6 \times Xd5? would prevent the promotion of the wPc on c8. The 4 black captures were Pb7 \times Xa6, Pa7 \times Xb6, Pc6 \times Xd5, Pe3 \times Xf2. Here the retroanalytical aspect is no end in itself, but an aid to present a successive Valladao in a two-mover.

No. 103 Nikolai Mironenko Die Schwalbe 1975



Mate in 3

No. 104 Werner Keym Die Schwalbe 2005 Commendation



Mate in 3

No. 105 Nils G. G. van Dijk Ivar Godal

Schach-Echo 1972



Mate in 3

No. 103: 1.0-0! zugzwang f6/f5 $2.g5 \times f6/g5 \times f6$ e.p. Kg3 3.g8Q,R#; 1...Kg3 $2.Qh5 \sim 3.Rf3\#$. This is the first Valladao miniature, but it is not perfect, since it has the two typical flaws: a dual of the promotion and the captures $P \times P$ and $P \times P$ e.p. side by side (cp. the miniatures P1038497 and P1146356).

In **no. 104** the three special moves succeed one another (successive Valladao): 1.Rh5! [thr. 2.Rh8#] $g5+2.f5\times g6$ e.p. 0-0-0 3.a8Q#. 1.R5 $\times g7$? Kf8!. This is the most economical rendering of the (perfect) Valladao task in a directmate problem. The study needs 8 pieces (no. 107), the selfmate genre 7 (no. 113).

No. 105 shows a perfect Valladao in a double setting: 1.e4! [thr. 2.e8Q+ R×e8 $3.Q\times e8\#$] d4×e3 e.p. 2.0-0-0 [thr. 3.Qd7#] Rd8 3.e7×d8S#, 2...Bd4 3.Qf5#; 1...f4×e3 e.p. 2.0-0 [thr. 3.Bf7#] Rf8 3.e7×f8S#, 2...Bf4 3.Qf5#. Great!

No. 106 Nils A. Bakke

'0-0' 1982 Reiners Memorial 5th Place



Win

No. 107 Jarl H. Ulrichsen EG 2011



Win

No. 108
Werner Keym



White retracts 3 moves, Black 2; then mate in 1. Proca Retractor

No. 106 is the first correct **endgame study** to show the (perfect) Valladao task. **1.g4!** (1.h8Q? Qf4!) **h4×g3 e.p. 2.h8S+!** (2.h8Q? Qf2+!) **Kf5 3.0-0+** (3.Rf1+? Kg4! 4.R×f8 g2 5.Kf2 Kh3 6.Kg1 g4! 0:1) **Kg4 4.R×f8** 1:0. As far as I know all earlier Valladao studies include a cook or a major dual.

No. 107: 1.0-0-0! h5 (1... h6? 2.a4! 1:0) **2.g5×h6 e.p.** (2.a4? h4 0:1) **g7×h6 3.a4 h5 4.a5 h4 5.a6 h3 6.a7 h2 7.a8Q g1Q/h1Q 8.Qa7+/R×h1** 1:0. Letztform!

No. 108: This is a defensive **retractor** of the type Proca: He who is on the move, decides whether and what he captures (cp. p. 137). It is a perfect Valladao miniature: backward 1.e5×f6 e.p.! (1.e5xf6? K/R \sim) forces f7-f5, 2.c7-c8B forces 0-0+, finally 3.Bc5×Ba7! (Black has a previous move by the B) and 1.c8Q#. Not 3.Bc5-a7/×Pa7? since Black has no previous move. Not 3.Bc5×Q/R/Sa7? since there is no mate in 1. Got you?

No. 109 Arturo Carra Isidoro Zezza 2nd FIDE-Turnier 1959 (v)



Helpmate in 5

No. 110 Werner Keym Die Schwalbe 2006



Helpmate in 2

No. 111 Werner Keym

Die Schwalbe 2005 Special Commendation



Selfmate in 2

Probably the earliest Valladao **helpmate problem** is *J. Keeble's* 'A posteriori' problem from 1936 (no. 384). **No. 109** is an excellent long helpmate: 1.0-0-0! Ka2 $2.b1R Se4 3.Sc7 + c4 4.b4 \times c3 e.p. + Ka3 5.Rb8 Sd6#.$

No. 110: This is a successive Valladao in a helpmate two-mover: $1.d4 \times c3$ e.p.+! Rc4 2.0-0-0 a8Q#. The last moves were not Kc5-d5 b7-b6+ (excluding Ba2 from c8), but c2-c4 Rb3-e3+. The bPs captured 11 pieces; bPa4/6 came from a7. There are 15 black pieces, so the wPb captured the bQ on the a-file. Here (as in no. 102) retrograde analysis is a necessary evil. No. 110 obtained an HM in the section helpmate and a commendation in the section retro. What does that result in?

Selfmate problems are very suitable for promotions. **No. 111:** This is an alternative Valladao in a selfmate two-mover. 1.b4+! $c4\times b3$ e.p. $2.Q\times c3+ B\times c3\#$, 1... Kc6 2.b8S+ $B\times b8\#$, 1... Kd4 2.0-0-0+ Sd3#. – There is even a successive Valladao in a selfmate two-mover (P1092162).

No. 112 Rauf Aliovsadzade Thèmes 64 1976



Selfmate in 5

No. 113 Andreas Thoma Die Schwalbe 2007 1st Prize



Selfmate in 11

No. 114 Nils A. Bakke Die Schwalbe 1981 Special Prize



Selfmate in 12

No. 112 is one of the first Valladao selfmate problems: 1.g8B! $b7 \times a6$ 2.Bc4 a5 $3.B \times e2$ a4 4.b4+ $a4 \times b3$ e.p. 5.0-0-0 b2#. The special moves follow each other (successive form). The underpromotion deserves attention.

No. 113 is the first (perfect) Valladao in a selfmate miniature. 1.0-0! h5! 2.Kh1 h4 3.Qg7+ Kh5 4.g4+ h4×g3 e.p. 5.Rf5+ Kh4 6.d8B+! Kh3 7.Qc3 Kg4 8.Qf3+ Kh3 9.Bb6 Kh4 10.Qf4+ Kh3 11.Bg1 g2#. The (dualistic) variants after 1...h6/K~ need less than 11 moves according to *Olaf Jenkner's* computer program. Whoever does not believe that, should disembark to a lonely island with much paper and patience!

No. 114 is probably the first rendering of Valladao going along with Allumwandlung (AUW). 1.h8Q+! Kg6 2.g8R+ Kf7 3.e8B+ Ke6 4.d8S+ Kd6 5.Ra6+ Kc5 6.b4+ c4×b3 e.p. 7.Rc6+ Kd5 8.e4+ K×e4 $9.B\times g6+$ Kd5 10.Qh5+ Bg5 11.Sf4+ S×f4 12.0-0-0+ Sd3#. Excellent construction. – An example with Valladao, AUW and a pawn's walk (from g7 to h2) is P1245419.

No. 115 Werner Keym

(after Peter Hoffmann) Die Schwalbe 2009



Mate in 4

No. 116 Peter Hoffmann Die Schwalbe 2007 198th TT 1st Prize



Selfmate in 8

No. 117 **Kostas Prentos** Andrey Frolkin

Die Schwalbe 2006 1st Prize



Proof game in 26.0

Peter Hoffmann has been the only one so far to succeed in composing directmate problems with Valladao and Allumwandlung (P1291058 and P1291059). My setting (no. 115) is simpler and dual-free in the main lines. 1.0-0-0 [thr. 2.c8Q 3.Qd7#] $h2 \times g1S 2.c8Q Se2 + 3.Rxe2 \sim 4.Qd7 \#. 1...h1B 2.c8R K \times e6 3.Q \times d4 Kf7 4.Qf6 \#.$ 1...h1Q/R 2.c8Q Q/Rh7 3.c4 d4×c3 e.p. 4.Qc5#. Side lines: 1...h2×g1Q/R 2.c8Q Q/R×d1+ 3.R×d1; 1...K×c6 2.c8Q+ Kb5/6 3.Q×d4; 1...K×e6 2.Q×h2 Kf7 3.Qh7+ Ke6/Ke,f8 4.Qd7/c8Q,R# (dual).

Peter Hoffmann again has been the only one to compose problems with Valladao, AUW and Excelsior walk (P1092157-P1092159), the so-called 'Keym task'. No. **116:** 1.f8Q+! Ke6 2.d8R b6 3.R×d5! b6×c5 4.Rd8+!! c4 5.b4 c4×b3 e.p. 6.Ba3! $b3 \times a2 \ 7.0 - 0 - 0 \ a1B/S \ (7...a1Q/R?) \ 8.Bb2/Qb3 + B \times b2/S \times b3\#$. The promotions to wQ and wR (successive) and to bB or bS (alternative) form the thematic AUW. The promotion to bQ/R?, which occurs in a short length variant, is not thematic, but necessary, since it avoids the dual 6.Bb2? b3×a2 7.0-0-0 a1B/S? 8.b6/Qb3+ $B \times b2/S \times b3 \# by 7...a1D + /R + !$ An absolute top achievement!

No. 117 masters this task for the first time in a proof game: 1.h4 a5 2.h5 a4 3.h6 a3 4.h6×g7 h5 5.g4 Sh6 6.g8B Bg7 7.g5 Bd4 8.g6 f6 9.Bd5 Bc5 10.Bc6 <u>0-0</u> 11.g7 Kh7 12.g8R b7×c6 13.Rg5 Ba6 14.Re5 f6×e5 15.f4 Rf6 16.f5 Rd6 17.f6 Bc4 18.f7 B×a2 19.f8Q Be6 20.Qf3 a2 21.Qd5 a2×b1S 22.Ra2 Sc3 23.d2×c3 c6×d5 24.Kd2 d4 $25.\overline{\text{Kd3}}$ Bf5+ 26.e4 d4×e3 e.p.+. The four promoted officers are gone! 'A wonderful presentation of the Keym task.'

The (lightened) 100 Dollar Theme

There are three famous challenges in problem chess: Babson task (p. 26), Valladao task (p. 28) and 100 Dollar Theme. The tasks were mastered, but not yet the 100 Dollar Theme of the year 1963. Required is a one line, dual-free helpmate problem (**without** promoted officers in the position of the diagram), in which a black pawn and a white pawn start from their original square and after five moves are promoted to knights: the double knight Excelsior.

No. 118 Jenö Ban FEENSCHACH 1965 Ist HM



Helpmate in 5

No. 119 Antti Pyhälä Michel Olausson Anton Preinfalk Sahovska misel 2004



Helpmate in 5

No. 120 Josef Ettner Ryszard Nojek Werner Keym



Helpmate in 5

No. 118: 1.b5 b4 $2.b5 \times c4$ b5 $3.c4 \times d3$ $b5 \times c6$ $4.d3 \times e2$ $c6 \times d7$ 5.e1S $d7 \times e8S\#$. The earliest rendering of this Excelsior, but with six promoted officers. (No. 427 shows the Excelsior 'backward' – without promoted officers.)

No. 119: 1.h5 h4 $2.h5 \times g4$ h5 3.g3 h6 4.g2 h6 $\times g7$ 5.g1S g8S#. *Antti Pyhälä* created the (dualistic) basic position with three promoted officers in 1970. *Michel Olausson* removed the dual in 1989 and *Anton Preinfalk* saved one promoted officer in 2004.

No. 120: 1.b5 e4 2.b4 e5 $3.b4 \times c3$ e6 $4.c3 \times d2$ e7 $5.d2 \times e1S$ e8S#. *Josef Ettner* created the basic position with two promoted officers in 1994. Two pieces were saved in 2005 by *Ryszard Nojek* and one piece shortly afterwards by myself.

I am offering 100 Euro for a rendering with one promoted officer – and 100 Euro plus 100 Dollar for a rendering without promoted officers at all!

[A rendering without promoted officers is possible, if you modify the chessboard (see no. 343) or apply the 'single box' condition (P1197947-P1197950).]

How to solve retro problems

The following chapters contain several retro problems. I would like to show the typical ways of solving such problems to chess players and problemists not yet accustomed to playing in this genre, and I would enjoy to open the gate to the incredible variety of retro problems.

No. 121 Well-known patterns



Four times illegal

No. 122 *Josef Haas Problème 1971*



Is the position legal?

No. 123 Sam Loyd

US Chess Association 1891



Which was the last move?

For all usual problems, retros included, one characteristic feature is an absolute condition: the diagram position of a problem must be 'legal'. That means that you can play from the initial array of the game to the diagram position according to the laws of chess, even if the moves of this game seem to be improbable or bad in the eyes of a chess player. That is convincing. The contrary feature, illegality, however, often cannot recognized as easily as in the simple examples of **no. 121**. Above left: the bBa8 could never go to a8. Above right: there is one pawn too many. Below left: the wK could never pass by the bR. Below right: the bK could never reach h2; without Pe2 or Pf2 or Pg2 or Bf1 that would be possible (= legal).

The 'Last move records' (no. 124–150) are very suitable for taking the first steps in retro land. **No. 122** is more difficult. Let us begin our way of solving with typical retro questions:

- 1) How many white and black pieces are there?
- 2) Are there obvious captures due to the constellation of the pawns and if so how many?
- 3) Which pieces can be sacrificial pieces, which pieces cannot?
- 4) Are there promoted officers? If so, on which squares were they born and how many sacrificial pieces were needed for it?

These are the answers: 1) There are 10 white and 8 black pieces. 2) The bPd7 moved to a4 capturing three times. 3) The wBc1 was captured on c1 and the bBf8 on f8. (Hint: wPs on b2 and d2 or on e2 and g2 are revealing those circumstances; analogous bPs on b7 and d7 or on e7 and g7). The wRs could not leave their cages and could not be captured on c6, b5 or a4. 4) The Bg1 does not come from c1 (because of Pb2 and Pd2), but it is a promoted officer. It was born on b8. Therefore the wPf2 captured 6 black pieces on e3, d4, c5, b6, a7 and b8, namely on black squares. That is the *inventory*.

Now the *interim balance*: sacrificial pieces for the wPf2 were Q, R, R, S, S, not the light-squared B, but the promoted officer X born by the promotion of bPh $(bPh \times Q/Sg \text{ and } g3 \times Rh2 - h1X \text{ had occurred before})$. In this case there are only two sacrificial pieces for the bPd7, so it cannot reach a4. Exactly one sacrificial piece is lacking either for the bPd or for the bPh.

Conclusion: the position is not legal! As in other fields it is easy to work out the inventory, but it is not so easy to draw the right conclusion.

Let us apply the above-mentioned questions to **no. 123**. *Inventory*: 1) There are 8 white and 6 black pieces. 2) The wPs captured 5 times. 3) The bBf8 died on f8. 4) The wBa8 seems to be a promoted officer, but it is not, for the wPf would need 5 captures, but there are only 4 sacrificial pieces. *Interim balance*: The position is either illegal or there is a well-hidden legal retro trick. And here there is such one: the last moves were $Kf3 \times Pg3 + Pf4 \times g3$ e.p.+ Pg2-g4. *Conclusion*: The position is legal since the last move was definitely $Kf3 \times Pg3 +$.

As you can see retro moves are noted in the usual way of forward notation.

If you do not succeed in releasing a position, you should begin with the initial array of the game and try to reach the diagram position by playing forward.

In complicated cases I present an auxiliary diagram or state the genesis of the position, i.e. the important (not constantly unique) moves from the initial game array to the diagram position.

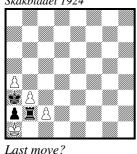
Economical retro records (type A, B, C, M)

The economical records with the stipulation 'Which was the last move?' are the best known retro themes. In a most economical rendering a unique move (e.g. $K \times B$) is proved to be the last one by retroanalysis. The following criteria apply to the economy: a minimum of 1) pieces, 2) officers (Q, R, B, S), 3) major officers (Q, R), 4) queens. B and S are equal in evaluation.

There are 60 different last moves (records): K, Q, R, B, S, P moves (6 different moves); K, Q, R, B, S, P captures Q, R, B, S, P (30); P moves and promotes to Q, R, B, S (4); P captures Q, R, B, S and promotes to Q, R, B, S (16); P does a double step (1); P captures en-passant (1); long and short castling (2).

Furthermore there are various types. **Type A:** it is not stated who is on the move; neither king is in check (59 different moves, not e.p. capture). **Type B:** it is stated who is on the move; neither king is in check (59 different moves, not e.p. capture, but see no. 439). **Type C:** a king is in check (60 different moves). You will find these records in my book 'Eigenartige Schachprobleme' or *PDB* (K='economy record' and K='type A') or *www.janko.at/Retros* or *www.anselan.com.* – **Type M** (related to type C) is less known: Black is mate (60 different moves).

No. 124 H. August, V. Onitiu, O. Brennert, N. Høeg, T. R. Dawson Skakbladet 1924



No. 125 *Niels Høeg Skakbladet 1924*



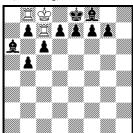
No. 126 Theophilus Willcocks Die Schwalbe 1978



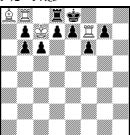
Last move? Last move?

No. 124 (Kb4×Sa3), the most economical type A record, and **no. 125** (FIDE-Album; Ba2×Sb1) are simple. – **No. 126** is singular: Bh7×Rg8! Rg7-g8+Bg8×Sh7 Sg5-h7+ Bh7-g8, e.g. Sf3×Rg5 ... bRe8-a8! wRd8-d7! and the cage is open.

No. 127 Istvan Gajdos problem 1957 1st/2nd Prize



No. 128 Zdravko Maslar problem 1957 1st/2nd Prize



No. 129 Vojko Bartolovic Rudolf Buljan problem 1957 5th Prize



Last move?

Last move?

No. 127 (Ra8×Qb8!) and **no. 128** (Rc8×Qb8!) have got 13 pieces, but no. 127 is the record (B is more economical than R). – **No. 129** is tricky: Qf8×Qd8! bQe8-d8+ wQh6-f8... wKh6 \rightarrow c7. The last move was not Qf8×Rd8?, for the wK cannot pass by the bR nor (after bPg7-g6) leave the cage.

Last move?

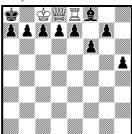
No. 130 (b7×Qa8Q!) is the only record to need 15 pieces. – **No. 131:** backward f7×Qe8R!, before h6-h5 e6/g6×Sf7. – **No. 132** (FIDE-ALBUM) is unique: the last move was Bg8×Qh7!, before e.g. Qh1-h7 h7×Rg8B! ... h2 \rightarrow h7 bKh5 \rightarrow h8 bRh6 \rightarrow g8 wKg8-f7 bSd6-e8 wKa6 \rightarrow g8. The bRh is needed as a sacrificial piece, so not backward Bg8×Rh7?. This is my best last-mover.

No. 130 Harold H. Cross Fairy Chess Review 1958



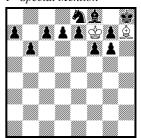
Last move?

No. 131 Jan Mortensen Fairy Chess Review 1958



Last move?

No. 132 Werner Keym Die Schwalbe 1979 Ist Special Mention



Last move?

No. 133 Luigi Ceriani problem 1951 Ist Prize



No. 134 Werner Keym Die Schwalbe 1980 3rd Prize



No. 135 Werner Keym Die Schwalbe 1990



Last move? Last move?

Last move?

In 16 cases the records of type A and B are the same, among them the classic **no. 133** (K×Q). Here the last move was Kg8×Qh8. Before Kg7×Rh8? or Pg7×Sf8S? a black move would be missing. Pg7-g6? locks up the wK.

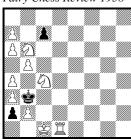
No. 134, too, deals with $K \times Q$. Here the last move was not $Kc8 \times Q/Rb8$? $Q/Ra8 \times Sb8 + Kd8 - c8$ since a black move would be missing. Pe7-e6? locks up the wK, for he cannot pass by the bRg which is not able to go to h8. So the last move was $Ka8 \times Qb8!$, before e.g. $Qd8 \times Sb8 + \dots Qh4 - d8 \dots wKf6 \rightarrow a8$. No. 92 is the only type A record with a white Rex solus.

In later publications no. 134 was presented as the new type A record for $K \times Q$ because in the chess game a knight is generally considered to be a little weaker than a bishop. But that depends on the position. Therefore this is not a criterion serving for the economical retro records.

In 2007 retro specialists followed my suggestion and agreed that in type C records a king **must** (before 2007: **can**) be in check.

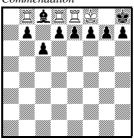
Therefore the type C record for $K\times Q$ is neither no. 133 nor 134, but **no. 135** (Ke8×Qf7#). Genesis of the position: wS×Bc8, wS×Bf8, bKe8-f8, f7-f6, bQd8→d6, bKf8→c8, bSb8→d8, bRa8-b8, bSg8-h6, bRh8→f7, wPg6×Rf7-f8R, bSh6-g8, bPh7-h6, wKe1→e8, bSd8→a8, bPa7×Xb6, wPa2→a7×Rb8B and then bQd6-e6 Bb8-a7 Qe6-f7+ Ke8×Qf7+. No. 135 is the only type C record which needs one piece more than the respective type A record.

No. 136 Oskar E. Vinje Fairy Chess Review 1938



Last move?

No. 137 Werner Keym feenschach 1977 Commendation



Last move?

No. 138 Frank Christiaans Die Schwalbe 1995



Last move?

The **type A records** are playing in the champions' league of the last move records. In no. 136–138 the number of captures is important. In **no. 136** the white pawns captured the 13 missing black pieces. So there is no sacrificial piece for the wK or wR or wS. Therefore the last move was only 0-0-0! Kc2-b3/Kc2×Xb3.

In **no. 137** the wPb and the wPd captured Q, S, S and the promoted officer X (= bPa) on squares c7 and d8 and promoted to rooks. The last move was not wPc7 \times Xd8R? without a previous black move, but wPa7 \times Rb8R! with the previous move bRa8-b8.

No. 138 is a challenge. The wBc1 was captured on c1, the bBf8 on f8. So the Ba3 is a promoted officer (wPh \rightarrow d7-d8B), the white pawns captured 11 pieces, among them three of the four black pawns of the files a–d. For that purpose either the bPa or the bPb had to move to the d-file. For both pawns there were not enough white pieces to be captured (Q, R, B, S). So one of the two pawns was captured on the file a or b by a white officer. The last move was not wBb4×Pa3? retrostalemate, but wKa5×Pa4! b5×Xa4, and the position can be released.

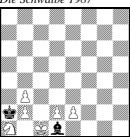
Many well-known retro composers have created last move records. For the last time one piece was saved in type C ($P \times Q = R$) in 1980 and in type A ($Q \times P$) in 1995. Two pieces were saved in type B for $P \times Q = Q$ (= no. 144) and $P \times Q = R$ by myself in 2007 and one piece in type B for Q- (= no. 141) by *Andrew Buchanan* in 2012. Who will be the next one?

No. 139 Jan Mortensen Feenschach 1956



Last move? Black to play

No. 140 Rolf Uppström Die Schwalbe 1987



Last move? Black to play

No. 141 Andrew Buchanan feenschach 2012

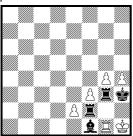


Last move?
Black to play

Six **type B** records. **No. 139** (Ka2×Sa1! Sb3-a1+) is a well-known position by *Jan Mortensen* which completely anticipates *Raymond Smullyan's* mirrored version. – **No. 140** (Sc2-a1!) and **no. 141** (Qa7-a8) are smart.

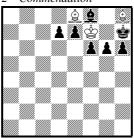
No. 142 (R×B) shows a clever release: wRg2×Bg1! Bh2-g1 Rg1-g2 Rg2-f2 f2-f3. – **No. 143** (B×R) is partly similar, partly different: wBg7×Rh8! Rg8-h8 Bh8-g7 g7×Xh6. – **No. 144:** a7×Qb8Q!; not a7×Sb8Q? Sc6-b8+ retrostalemate; not a7×Rb8Q? Ka5-a6 a6-a7 a7×Xb6 X-b6 Sb6-a8 illegal.

No. 142 Vojko Bartolovic Rudolf Buljan problem 1957 1st Comm.



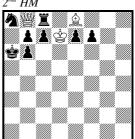
Last move? Black to play

No. 143 Jörg Varnholt Die Schwalbe 1988 2nd Commendation



Last move? Black to play

No. 144 Werner Keym feenschach 2012 Die Schwalbe 2007 2nd HM



Last move? Black to play

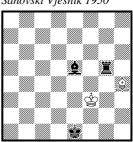
No. 145 Niels Høeg Skakbladet 1916



No. 146 Sveto Stambuk Problem 1951 2nd Prize



No. 147 Branko Pavlovic Sahovski Vjesnik 1950



Last move?

Last move?

Last move?

Three unsurpassable classical type C records. **No. 145** (FIDE-Album) is the oldest record: backward $d5 \times e6$ e.p.+! e7-e5 d4-d5+. – In **no. 146** the last moves were Kg2-f2+! f2-f1B+. – **No. 147** shows the well-known double check of rook and bishop: backward Kg3×Pf3! g4×f3 e.p.+ f2-f4. In 1957 *Raymond Smullyan* presented this 'trick' in his famous puzzle (cp. no. 218).

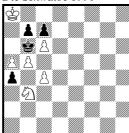
Three **type M** records. **No. 148:** backward g7-g8S#!. – **No. 149:** backward not $b4\times Q/R/B/Sa5\#$? (illegal!), but $b4\times Pa5\#$!. – **No. 150:** the white Pawns captured 15 times, so there is no sacrificial piece for the white king. Therefore the last move was not $Kc6\times Xb6\#$?, but Kc6-b6#!.

No. 148 Bernd Schwarzkopf Werner Keym Die Schwalbe 1990



Last move?

No. 149 Ladislav Packa Andrej Frolkin Die Schwalbe 1990



Last move?

No. 150 Werner Keym



Last move?

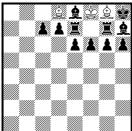
Economical retro records (type D, ELM, further types)

Type D means Duplex (= type B twice): a) If Black is to play, there is a unique last white move; b) If White is to play, there is a unique last black move. This results in $60 \cdot 59 : 2 = 1770$ combinations of different moves.

Bernd Schwarzkopf presented type D in 1981 and published about 35 combinations in 1983 in feenschach. In 2007 many records were published in the Retro Mailing List. You find about 160 type D records in www.janko.at/Retros or www.anselan.com. Each of the 59 different moves (e.p. is impossible) was achieved at least once. Unlike the old fashioned types A, B and C, type D offers many chances for composers.

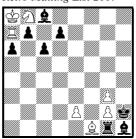
No. 151 shows the combination B-/B×S; a) backward wBf7-g8 Bg8×Sh7 Sg5-h7 h7×Xg6, b) backward bBf7×Se8. – The corner positions of **no. 152** are different: a) wPc7×Bb8S, b) bPf2×Sg1R. – **No. 153:** a) wPh7×Rg8B, b) bPa2×Rb1B; bPa7 \rightarrow a2, wPa6×Xb7, the cage is open. There we have got the famous duo from Argentina.

No. 151 Wolfgang Dittmann Hans Gruber Günter Büsing Bernd Schwarzkopf feenschach 1983



Last move?
a) Black to play
b) White to play

No. 152
Andrew Buchanan
Retro Mailing List 2007



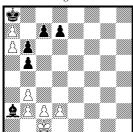
Last move?
a) Black to play
b) White to play

No. 153
Roberto Osorio
Jorge Lois
Retro Mailing List 2007



Last move?
a) Black to play
b) White to play

No. 154 Werner Keym Retro Mailing List 2007



Last move?
a) Black to play
b) White to play

No. 155 Werner Keym Retro Mailing List 2007



Last move?
a) Black to play
b) White to play

No. 156 Werner Keym Retro Mailing List 2007



Last move?
a) Black to play
b) White to play

No. 154–156 are all a challenge to advanced solvers. **No. 154:** a) wKd1-c1, b) bBb1-a2; bOfficer×Bc1; bPg×Ph \rightarrow h1X, bPh \rightarrow h1X, wPg \rightarrow g8X. The wPs captured 10 times; backward bPb6-b7? would lock up the bBc8. The bPa7 (Pa7 \times Xb6-b5) or the bPe7 (Pe7 \rightarrow a3-a2 \times Xb1B) captured the promoted officer X, but not the light-squared wB. So backward bBb1 \times Xa2? is impossible for the lack of a sacrificial piece.

In **no. 155** the bPs captured 7 times, bOfficer×Bf1. The wPb2 captured 5 times on dark squares, wOfficer×Ph. Backward bPd7×Xc6? or bPe7×Xd6? would lock up a bishop, since wPf6×Pg7 is necessary. At first the release below must be performed by wSg1-f3 \sim Kh1-h2 Kg3-f2, then follows wPf3×Be4. Therefore backward in a) wPf6×Pg7, in b) bPb3×Pa2. 'Simple in form, rich in content.'

No. 156: a) w0-0-0, b) bPh2-h1S. Here is the genesis of this complex position for sceptists as to the issue of legality: bS×Bc1-, wSg-, wPg2×Bf3×Pe4, wBf \rightarrow f5, g7 \rightarrow g2, h2×Qg3, h7 \rightarrow h2, wBf5-h3, g3-g4, f2×Be3, bR \rightarrow g3, bR \rightarrow f2, c7 \rightarrow c3, f7 \rightarrow f3, bK \rightarrow e5, e3×Sf4+, bKe5-d4, d2×Pc3+, bKd4-e3, wQ \rightarrow c4, d7 \rightarrow d3, e2×d3, bRf2-d2, wRh1-f1, bS \rightarrow g1, b7 \rightarrow b3, a2×b3, a7 \rightarrow a2×Sb1B, d3-d4, bRd2-d3, wRf1 \rightarrow d1, bRd3-d2, wS-f2 and then bBb1-a2, wQc4-f1 bRd2-d3 wRd1-d2 bPh2-h1S w0-0-0 – quod erat demonstrandum.

Equal Last Move (ELM) is a duplex form created by *Roberto Osorio* in 2007. The stipulation 'Equal last move?' requires the same last move of White, if Black is to play, and of Black, if White is to play, e.g. wQ×S and bQ×S. 57 of the 60 possible last moves exist as economical records (not e.p., 0-0-0, 0-0). You will find them in *www.janko.at/Retros*.

No. 157 Bernd Schwarzkopf Retro Mailing List 2007



Equal last move?

No. 158 Jorge Lois Roberto Osorio Retro Mailing List 2007



Equal last move?

No. 159 Bernd Schwarzkopf Werner Keym



Equal last move?

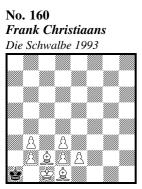
In **no. 157** White's last move was wKg2-h2 h2-h1B+, therefore Black's last move was bKh5-h4 (equal move: K-).

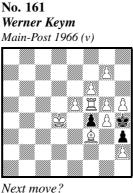
In **no. 158** White's last move was not Kf8/Kg7-g8 (illegal), but g7×Xh8S, therefore Black's equal last move was a2×Xb1S. The intersection set of the moves wPg7×B/Sh8S and bPa2×b1Q/R/Sb1S is the solution: P×S=S.

In **no. 159** Black's last move was not Kh2-h1 (illegal), but Pf2/h2 \times Xg1R, therefore White's equal last move was Ph7 \times Xg8R. The intersection set of the moves wPh7 \times Q/Rg8R and bBh2 \times Q/Bg1R results in the solution: P \times Q=R. The try bPf2 \times Qg1R? is illegal.

What is typical of ELM records: It is easy to solve them, yet anything but easy to construct them.

In a problem with the stipulation 'Which is the next move?' it can be proved who did not move last and who must make the next being absolutely unambiguous. There are two types (A: neither king is in check; C: a king is in check), but less than 60 economical records (cp. the classical last move records no. 124–147), since some moves (e.g. promotions) cannot be unique. Most records are quite simple miniatures. You will find the economical records of this type in *Die Schwalbe*, December 2007.





Werner Keym Bernd Schwarzkopf Die Schwalbe 1992 22

No. 162

Next move?

Problem without words

In **no. 160** the last move was not bKa2-a1? nor bKa2×Ra1? because of retrostalemate, but wBb1 \times Xc2 or wPa2 \times Xb3. So the next move is 1.Ka2!.

In no. 161 the wPs captured 13 times, so there is no sacrificial piece for the white king or bishop. The last moves were wPg2-g4 Kg4-h4 B-f3+. So the next move is bPf4×g3 e.p.!. In 1966 no. 161 was published with the stipulation 'Mate in 3 moves'. Solution: 1.bPf4×g3 e.p.! Rf4+ 2.K×g5 g7-g8Q+ 3.K×f4/Kh6 Qg4/Qg6#.

In no. 162 White moved last and the next move is bQa8-a7#. No. 162 is not only the record for the move Q- of the type 'Which is the next move?' (type A), but also (because of the mate Qa7#) the economical record for the type 'Problem without words' (= 'Which is the next and final move?').

In a problem with the stipulation '**Problem without words**' it can be proved a) who moved last, b) who is to play and c) which forced move results in mate or stalemate. You will find the economical records of this type in *Die Schwalbe*, August 1993.

No. 163 Karl Fabel Werner Keym Basler Nachrichten 1967



Problem without words

No. 164 Werner Keym Allgemeine Zeitung Mainz 1993



Problem without words

No. 165 Frank Christiaans Die Schwalbe 1993



Problem without words

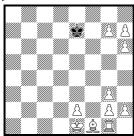
No. 163 is a joined problem by *Karl Fabel* and myself. He composed a one-mover with a forced mate by the en-passant capture, I found a more economical setting and the new stipulation. The white pawns captured 13 times. Black captured 3 pieces: bPh×Sg, bPg×Sh and bPb×Xa→a1X (furthermore bPa→a1X). So for lack of a sacrificial piece the last move was not bPe5xXf4? (with 1.Bf2#), but wPg2-g4 Kg4-h4 f2-f3+. Therefore 1.bPf4×g3 e.p.#! is forced. This first rendering fascinated the solvers. [A more economical setting is possible by replacing Qf6 by Bf6 and Bg1 by Sg1, but then the try 1.Bf2#? would be lost.]

In **no. 164**, too, the next and last move is a forced en-passant capture: $1.\text{h4} \times \text{g3}\#$!. In type C (king in check) this works out much more easily. The last move was not wPg3-g4#? which would not allow a previous black move, but wPg2-g4+.

No. 165 is more difficult. The black pawns a–d captured 6 times, furthermore bPg×Ph→h1X and bPh→h1X. The white pawns captured 10 times. So there is no sacrificial piece for bK or bR or wK. Therefore the last move was wKe1-d1 (before bKc1-b1) and Black to play is forced to mate by 1.Kb2#. Well done.

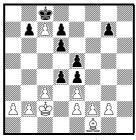
In a problem with the stipulation **'Which was the first move?'** the first and unique move of a definite piece is required. No king is in check and it is not stated who is to play (= type A). This record theme was created by *Bernd Schwarzkopf* in 1981. There are 60 possible moves, but not the same as in the classical last move records since it cannot be proved that moves of knights are the first moves, for a chess game may begin as follows: $1.\text{Sb1-c3} \sim 2.\text{Ra1-b1} \sim 3.\text{Rb1-a1} \sim 4.\text{Sc3-b1}$. On the other hand it is easy to show the first move of a promoted knight.

No. 166 Bernd Schwarzkopf Wolfgang Dittmann Godehard Murkisch feenschach 1981



Which was the 1st move of the rook?

No. 167 Michel Caillaud feenschach 1984



Which was the 1st move of the white queen?

No. 168
Gerd Wilts



Which was the 1st move of the white king?

In **no. 166** the white pawns captured the missing 15 black pieces. So the first move of the wRh was not $Rh1 \times Xg1$, but Rh1-g1.

No. 167 is an excellent retro problem. The release of the position depends on wPd2×Be3 (before bBf8 \rightarrow e3 and bPe7×Xd6, before wPd6×Xc7 and bK-c8). So the last moves were 1.Kc1-c2 c5×Rd4 2.Rd1-d4 c6-c5 3.0-0-0 f5×Qe4 4.Qa4-e4 g6×Sf5 5.Qd1×Pa4 f6×Be5 6.c2-c3 f7-f6 7.Bc3-e5 a5-a4 8.Bd2-c3 a6-a5 9.Bc1-d2 a7-a6 $10.d2\times$ Be3. This is the record (with 18 pieces!) for the first move Q×P.

No. 168: The last moves were 1.Qd1-e1 f6-f5 $2.\underline{\text{Ke1}} \times \text{Sf1}$ Qg1-h2 3.Rh2-h3 Se3×Bf1 and then 4.Rh3-h2 Sc4-e3 5.Rh2-h3 Sd6-c4 6.Rh3-h2 Se4-d6 7.Rh2-h3 Sg5-e4 8.Rh3-h2 f7-f6 9.Rh2-h3 Sh3-g5 10.c4×Pd5 Bf6-h4 10.b3×Pc4 Kh4-h5. This is the record for the first move K×S. Superb!

Endgame studies with retro aspect

Studies with a satisfactory content of both retro and endgame are rare. That came to be true with most entries of the 2^{nd} *International Team Match 1968–70* as well with the theme 'Retrograde analysis in the endgame study'.

No. 169 *Jan Knöppel Springaren 1961*



No. 170 Jan Knöppel 2nd Int. Team Match 1968–70 4th Place



No. 171 Werner Keym Die Schwalbe 1997



Draw Win

No. 169 (FIDE-Album): The wPs captured the 8 missing black pieces, among them the two promoted officers born on f1 (= bPg and bPh); wBc1 died on c1; the bPa captured twice. So there is no sacrificial piece for bK or bS. The last moves were 1...c7-c5! 2.c5×Qb6 (or 2.c5×Rb6) Qf6-b6 3.d4×Rf5 Qf1-f6 4.e3×Bd4 f2-f1Q 5.c4×Bb5 g3×Rf2. Therefore **1.b5**×**c6 e.p.! Sb4 2.c7!** 1:0, not 2.c6×b7? Kc1 3.b8Q Sc2+ 4.K×a2 Sb4+ with perpetual check.

No. 170: The bPs captured the 9 missing white pieces. The wPs a, b and e captured four times. There are only 3 sacrificial pieces for the promotions of the wPs f, g and h. So the bK or the bR must have moved. 1.Ke6! Kf8 2.Kf6 Kg8 3.Rg7+ Kf8 4.Ra7 Ke8 5.Ke6 Kd8 6.Kd6 Kc8 7.Ra8+ Kb7 8.R×h8 a5 (8...b1Q 9.Rh7+ 10.Rh8+11.Rh7+=) 9.Rh7+ Ka6 10.K×c6 b1Q 11.Rh8 Ka7 12.Rh7+ Ka6 13.Rh8 Qh1+14.R×h1 15.Rh8/Rh7 etc. =

No. 171: The wPs captured six times, the bPh4 three times. Backward not Kc4-b4? d2-d3+ (then Bc1 \rightarrow f8 impossible) nor c2 \times Pd3X? (then bPd7 \rightarrow d3 illegal), but c7-c5! Rd6-a6+. Therefore **1.b5** \times **c6 e.p.! Q** \times **f8** (1...K \times a4 2.Rb6 Q \times f8) **2.Rb6+** K \times a4 **3.0-0!** (3.Kf2? R \times h2+ 4.R \times h2 Qd8 0:1) **Qb4 4.R** \times b4+ a5 \times b4/K \times b4 5.Kg2 conquers the rook and wins, e.g. 5...h4 \times g3 6.K \times h3 g3 \times h2 7.K \times h2 Kb5 8.c7 Kc6 9.R \times f7. First rendering of en-passant key and castling in a study. It is even a Valladao study since the promotion of a pawn is necessary for the win.

No. 172 Mauricio Herman Mugnos Memorial

1987–91



Win

No. 173
Attila Koranyi

2nd Int. Team Match 1968–70



Win

Partial Retrograde Analysis (p. 106) is the rare theme of the study **no. 172:**

- a) If 0-0-0 is permitted and $g5 \times f6$ e.p. is not permitted, then $1.c5 \times d6$ e.p.! 1:0 (1.Kf6? 0-0-0 2.e7 Re8 3.g7 e3 4.g7 × h8Q Rxh8 5.g6 Kc7 6.g7 Rc8 7.Kf7 e2 8.g8Q R×g8 9.K×g8 e1Q 10.Kf8 d4 11.e8Q Q×e8+ 12.K×e8 d3 13.h6 d2 14.h7 d1Q 15.h8Q Qd8+ 0:1).
- b) If 0-0-0 is permitted and $c5\times d6$ e.p. is not permitted, then $1.g5\times f6$ e.p.! (1.Kf6? as a)) e3 2.g7 0-0-0 (2...Sf7+ 3.Kd4/Kf4 Sh6 4.f7+ Ke7 5.f8Q+ R×f8 6.g7×f8Q+ Kxf8 7.c7 1:0) 3.e7 Sf7+ 4.Ke6 e2 5.K×f7 e1Q 6.e7×d8Q+ K×d8 7.g8Q+ 1:0.
- c) If $c5 \times b6$ e.p. and $g5 \times f6$ e.p. are not permitted, then 0-0-0 is not permitted. In this case **1.Kf6!** (1.g7? Ke7 2.h6 e3 3.h7 e2 4.g8Q e1D+ 0:1) **Kd8** (1... Kf8 2.g7+ Kg8 3.g6 e3 4.h6 $S \times g6 5.K \times g6 \sim 7.h7\#$ or $1... S \times g6 2.h5 \times g6$ Kd8 3.g7/h5 Kc7 4.h5/g7 e3 5.h6 e2 6.h7 e1Q 7.g8Q $R \times g8$ 8.h7 $\times g8Q$ 1:0) **2.g7** Kc7 3.h6 e3 4.h7 e2 **5.g8Q** e1Q 6.Q \times a8 Qc3+ 7.Ke7 Qg7+ (7... Sg6+ 8.Kf7 Se5+ 9.Kg8 $S \times c6$ 10.h8Q 1:0) **8.Ke8** Qg6+ 9.Kf8 1:0.

No. 173 deals with *Retro-Strategy* (p. 115). If the wRf2 comes from a1, then w0-0 is not permitted, but b0-0-0; it is all the same, if it comes from b8 (as a promoted R), for in this case a black promoted officer (f7 \rightarrow f1X) from f1 is needed as a sacrificial piece. If the wRf2, however, comes from d8 or f8, then b0-0-0 is not permitted, but w0-0. Therefore not 1.Rhf1? 0-0-0! nor 1.Sg6? b6 \times c5! 2.Rhf1 0-0-0 or 2.0-0 c4 3.Kh1 Q \times f2, but **1.0-0!** b6 \times c5 (1...b5 2.d4 3.Sg6 or 1...g5 2.Sg6 or 1...Qa5 2.Sd7 Qg5+ 3.Sg2) **2.c4** g6 3.Kh1 1:0, e.g. 3...Qa4 4.S \times g6 (or 4.d3) Qd1 5.R \times d1 R \times g6 6.Rdf1.

Four castlings in retro problems

In no. 174–176 the question of which castling is permitted can only be answered by retroanalysis.

No. 174 Werner Keym Schach 1971 2nd HM



No. 175 Werner Keym Die Schwalbe 1971 (v)



No. 176 *André Hazebrouck Die Schwalbe 1972 Special Prize*



Mate in 3 Who can mate in 5?

No. 174: The wPs captured 7 pieces, among them the promoted piece from b1 (earlier bPa4×Bb3→b1X), besides a2→a8X (b0-0-0 not permitted) and d6×Xc5. Therefore 1.0-0! [thr. 2.g5 3.Qd7#] Rf8 2.Rae1+ Kd8 3.R×f8#, 1... Kd8/Ke7 2.g5 Ke7/Ke8/Rd8 3.Qd7/Qd7/Rae1#. Try: 1.0-0-0?/g5? 0-0!.

No. 175: The wPs (wPh2×Xg3) captured 6 pieces, among them the promoted officer X from a1 (earlier a7 \rightarrow a1X); besides sPb7×Sc6, bPd×Be, bPf7×Pg6. So w0-0-0 is not permitted. Therefore not 1.0-0-0!? ... 3.Q/R# nor 1.Rf1? 0-0-0! 2.Q×c6 Rd1+, but 1.0-0! 0-0-0/Ke7/Kd8 2.Q×c6 Kb8/Rd8/Kc8 3.Qb7/Rf7/Q×a8#, 1... Ra6 2.Qd3 \sim 3.Qd7#.

No. 176 (FIDE-Album): wPa×Pb, bPa×Pb, wPd2×Se3, wPf×Pg, bPh×Pg, h2 \rightarrow h8X, f7×Xe6. So only b0-0 is not permitted: 1.wQc7! Q×h1+ 2.Kd2 Qc1+/Qd1+/Qe1+ 3.R×c1/R×d1/R×e1,K×e1 Kf8 4.Q×e7+ Kg8 5.Qf7#. Not 1.wQg7? Q×h1+ 2.Kd2 Q+ 3.R×Q 0-0-0!, not 1.bQc2?/bQg2? Q×h8+ 2.Kd7 Q+ 3.R×Q 0-0!/0-0-0!. See *PDB* for further examples by *A. Hazebrouck*. The computer does not solve no. 174 nor 176, but it gives two solutions for no. 175!

'Any chess problem can in principle be solved by trial, error and exhaustion, provided only that the problem is exhausted before the solver'.

(John D. Beasley)

Text problems

The following text problems, the authors of which are in some cases unknown, do not require any weary or complicated calculations; instead, they present some spectacular effects. Many of them are computer-defying and what matters most of all, they are unambiguous and unique in the best sense of the term.

No. 177: Can eight white pieces (K, Q, R, R, B, B, S, S) guard all empty squares of the chessboard?

No, if the bishops occupy squares of different colours: at least one square will remain unguarded (e.g. Kf5 Qh2 Ra7 Rb8 Bd4 Be4 Se3 Sf3, square c1). Yes, if they occupy squares of the same colour (e.g. Kc3 Qf6 Ra8 Rh1 Bc6 Bf3 Sd5 Se4).

No. 178: Werner Keym, Die Schwalbe 1988. On how many squares can a king be double-checked by two queens?

On all 64 squares. The bK can be in double check from two wQs on the 6^{th} - 8^{th} ranks as a result of disclosed check following pawn promotion (e.g. wQa8 b7 bKc6 Sc8 and b7×c8Q++) as well as on the 4^{th} and 6^{th} ranks as a result of an e.-p. capture (e.g. wQc8 Qg8 g5 bKg4 f5 and g5×f6 e.p.++). The situation is analogous for the wK on ranks 1-3 and 5. 'An amusing idea.'

No. 179: From a large quadrate, which consists of 64 small quadrates, two small quadrates are removed in the bottom left and upper right corners. Can the resulting figure be fully covered with 31 rectangles the area of which amounts to that of two small quadrates?

No. Colour the quadrates of this figure in the way the chessboard squares are coloured. Then it will consist of 32 light and 30 dark squares, while each rectangle covers 1 light and 1 dark square. An elegant proof by means of the chessboard!

No. 180: Can a queen run through the 9 squares of the quadrate a1-c1-c3-a3 in four moves?

Yes, if this quadrate is part of the standard 8×8 chessboard: Qc3-a1-a4-d1-b1. No, in case of a 3×3 board.

No. 181: Henry E. Dudeney, Amusements in Mathematics 1917 (Original or reprint?). The queen starts from e1 and in five moves covers the longest non-crossing path possible. How? [distances are measured between square centers]

The nicer path is e1-h1-h8-a1-a8-g8 (33,899 length units), but the longer one is e1-h1-a8-h8-h2-c7 (33,970 length units). 'A brilliant piece.'

No. 182: Werner Keym, Die Schwalbe 1991 (v). In which mate position with the kings and a white piece did this piece have to make at least three moves from the initial game array to the mate position?

Only in the mate position wKd3 Qd2 bKd1.

No. 183: Werner Keym, König & Turm 2004. The centers of the squares occupied by three pieces form the apexes of a triangle. Its area can be decreased through five different moves of the white king to one, two, three, four, or five sixths. What is this (legal) position?

The only position is wKe1 Rh1 bKb5. Its area amounts to 6 area units (AU). The move Kf2 decreases it to 1 AU (1/6); 0-0, to 2 AU (2/6); Ke2, to 3 AU (3/6); Kf1, to 4 AU (4/6), and Kd2, to 5 AU (5/6).

No. 184: *Alex Fishbein, The Problemist 2016, Commendation ex aequo. Find an orthodox game that ends with 7...Kxb7#.*

1.d4 c5 2.d4xc5 Sa6 3.Q \times d7+ K \times d7 4.Kd2 Kc7+ 5.Kc3 Be6 6.c6 Rc8 7.c6 \times b7 K \times b7#. 7 moves are the current record (cp. P0008162).

No. 185: *Gerd Wilts, Eigenartige Schachprobleme 2010. In a game in 11 single moves,* 6 *checks were delivered. How did the game go?*

1.d4 e5 2.Kd2 Qg5+ 3.Kc3 e5×d4+ 4.Q×d4 Qg3+ 5.Qe3+ Qe5+ 6.Q×e5+

No. 186: Werner Keym, The Problemist 1990. Construct symmetrical positions with the kings and a third piece (that is, the centers of the three occupied squares lie on a line) which remain symmetrical after a checking move. What can the third piece be? Pawn through promotion (wKa1 Pa7 bKa5 and a7-a8Q+), rook through castling

(wKa1 Fa7 bKa3 and a7-a8Q+), rook through casting (wKe1 Ra1 bKh1 and 0-0-0+), and – which is the point – knight on a nightrider line (wKa1 Sc2 bKg4 and Sc2-e3+). [A nightrider is a long-distance knight, which can make moves like Sa1-e3 or Sa1-d7.]

- **No. 187:** Werner Keym, Die Schwalbe 1993, 2nd commendation. What is the maximum number of squares that can become reachable for an unpinned white piece as result of a move by a) another white piece, b) a black piece?
- a) The maximum number of new moves to be performed is 12; these options become available for the wRh1 following 0-0 (castling is considered to be a king move!) (e1 ... a1 and f2 ... f8). b) The maximum number of new reachable squares is 9, resulting from an e.p. capture, e.g. wQh3 g4 bPh4 and h4×g3 e.p. (g4 ... c8 and h5 ... h8). When first being confronted with the stipulation of this problem who would have thought of the two special moves, castling and en-passant?

No. 188: Werner Keym, Die Schwalbe 1987. How many legal positions with the kings and a rook are there in which the ratio of the number of moves that the three pieces can make is 1:2:3 and becomes 2:1:3 after a white and a black move?

Only the position bKa8 wKe1 wRh1 (possible moves 3:6:9=1:2:3) and 1.0-0 Kb7 (8:4:12=2:1:3); e.g. bKb8×Sa8 was played and 0-0 is legal. The wrong answer is wKa1 bKe8 bRh8 (0-0 is illegal, since the bK/bR made the last move). This is the first ever problem where the ratio of possible moves is involved. Cp. P1204512 and P1347496.

No. 189: Werner Keym and Bernd Schwarzkopf, Die Schwalbe 2005 (c). Construct an economical legal mate position (Black is mate). All possible mirror reflections of this position are not legal mate positions.

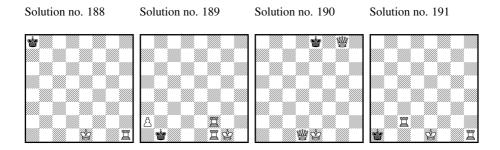
The only position is wKg1 Rf1 Rf2 (Qf2 is not economical) Pa2 bKb1 (last move: 0-0+). Illegal are the mirror positions wKb1 Rc1 Rc2 Ph2 bKg1 or wKc1 Rd1 Rd2 Pi2 bKh1 or wKg8 Rf8 Rf7 Pa7 bKb8 or wKh2 Rg3 Rh3 Pg8 bKh7. A legal position, but without a mate, is wKg1 Rf2 Rg2 Pf7 bKg6. Two brains, one find.

No. 190: Werner Keym, Eigenartige Schachprobleme 2010. The pieces making up a position have made the smallest possible number of moves. White mates in 1 move. How many pieces are necessary?

Only 4 pieces are necessary: wKe1 Qd1 Qg8 bKe8 and 1.Ke7 Qdd8#. If Qg8 is a promoted piece and the last moves were h7×Xg8Q X-g8, not a single piece had to make any moves. This was extremely hard to find even for experienced solvers.

No. 191: *Karl Fabel, Die Schwalbe 1937. Construct a position with the kings and two white rooks in which White can mate in four different ways.*

wKe1 Rc2 Rh1 bKa1 and 1.Kd2/Ke2/Kf2/0-0#.



No. 192: Werner Keym, Die Schwalbe 1994. Is there a chess piece the moves of which can all be forced (without any exception)?

All moves performed by a knight can be forced by zugzwang. On the contrary, certain moves by the kings (0-0), queens (Qd1-a1), rooks (Rh1-h3), bishops (Bc3-h8), and pawns (a2-a4 and c7-c8B) cannot be forced.

No. 193: Werner Keym, The Problemist 1991. Construct a legal position with three pieces in which the distance (measured between square centers) between the first and the second piece is half as long as that between the second and the third piece, but after a white move it is four times as long.

First piece bKg1, second wKe1, third wRa1; 1.0-0-0+. 'Quite elusive.'

No. 194: Werner Keym, Allgemeine Zeitung Mainz 1994. In a chess game, all pieces on the board occupy light squares. Does such a circumstance make no difference for White in any case?

In almost all cases it makes no difference; but in one case (bKe8 and bRa8 and legal castling) this can be unfavourable for White.

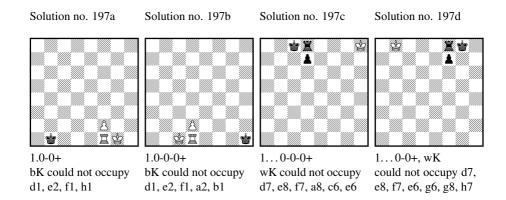
No. 195: Werner Keym, Die Schwalbe 1994, 1st HM, version. What common feature is shared on a standard chessboard only by a2, g4 and h5 as the starting squares for a particular white piece?

The ratio of the number of light squares to the number of dark squares that can be reached by a white pawn from a2, g4 and h5 is 15:12, 10:8, and 5:4, i.e. 5:4 in each case. This common feature is in fact 'simple'; but nobody found out about it in 1994 – not even with the assistance of the computer.

No. 196: Werner Keym, Die Schwalbe 2014, 1st HM. Construct a position with the kings and a bishop which has the following features: the wK and the B have made the fewest possible number of moves; there is only one possibility to add a) a white, b) a black piece for a mate position. 3 solutions.

Tries: in the positions Ke1 Bd3 Ke3 and Ke1 Bf3 (promotee) Ke3 there are two possibilities in b), namely bQc1/Rc1# and bQg1/Rg1#. Here are the three solutions: 1) Kg1 Bc1 Kf3 (last move bK×Xf3; only move of wK was w0-0) with +wQg2# and +sQg2#; 2) Kf1 Kh2 Be1 (promotee) with +wQg2# and bQf2#; 3) Kc1 Ka2 Bd1 (promotee) (only move of wK was w0-0-0) and +wQb2# and +bQc2#. – Thus, all four options of move possibilities are presented in the tries and solutions for the wK (not to move; to make an ordinary move; short castling; long castling) and for the B (wB on a light/dark square; bB on a light/dark square; moreover, original Bs and promoted Bs).

No. 197 (FIDE-Album): Werner Keym, Die Schwalbe 2006, 2^{nd} Prize. With the two kings (on different coloured squares), one officer and one pawn, construct a position in which it can be proved that a piece, in the course of the retro-play, cannot have occupied precisely 4 light squares. Same question with b) 5, c) 6, d) 7 light squares.



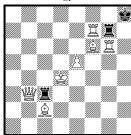
No. 198: Werner Keym, Die Schwalbe 2013, Prize. Every square on an ordinary 8×8 chessboard carries a number, a different one in each case. The sum of the numbers carried by those squares on which white and black pieces are arranged in a legal position remains unchanged at each stage after White's 1^{st} , Black's 1^{st} , White's 2^{nd} and Black's 2^{nd} move. On which of these moves is no capture made?

The only moves that fulfil the condition of the unchanged sum are the following: enpassant capture, White's castling, Black's castling, capturing move from the square carrying the number 0. The right order of these moves is 1) en-passant capture (White), castling or capturing move from the square 0 (Black), 2) castling (White), capturing move from the square 0 or castling (Black). So on White's 2nd move no capture is made. Surprise: We do not know the number nor the kind of the pieces nor the numbers on the squares, yet the solution is unambiguous. No. 197 and no. 198 are my best text problems.

Asymmetry

You will find more than three thousand symmetrical problems in *PDB* (K='symmetrical position'). Many of them have a symmetrical key, i.e. a move which keeps the symmetry of the position. In general they are less interesting than the problems with an asymmetrical key as no. 200–217.

No. 199 Sam Loyd Chess Strategy 1878



Mate in 2

No. 200 a) Bror Larsson Eskilstuna-Kuriren 1945 b) Jan Hartong Bulletin Ouvrier des Echecs 1948



Mate in 2 a) diagram b) all 1 file to right

No. 201 Miroslav Stosic problem 1971 Ist Prize



Mate in 2

No. 199: On this problem *Loyd* himself gives the following comment: 'It is a little bagatelle I once posed in the shape of an arrow, and sent to a friend, who, from the nature of the solution, christened it Peek-a-Bo. My friend, Capt. Mackenzie, has shown it for years as the funniest problem he ever saw. He used to bet that no one could solve it "without taking back" a move.' Solution: 1.B×g7+ Kg8/Kh7 2.Bf6#. This problem is a curious cross between asymmetry (position: wQb3 and wBc2) and symmetry (solution: 1.B×g7+).

No. 200a: Thematic try: 1.Qb4? f6,f5!. Solution: 1.Qh4! [thr. 2.Qh8#] d6,d5/f6,f5 2.Qa4/Qh5#. - **No. 200b:** Try: 1.Q1?. Solution: 1.Qa1! [thr. 2.Qa8#] e5/g5 2.Qa3/Qh8#. (No. 200a/b: FIDE-Album)

No. 201 (FIDE-Album): Six tries by the bishop are refuted by six flights of the king: $1.Ba3/Bb4/B \times c7/Bg3/Bf4/B \times e7? Kc3/K \times c4/Kc5/Ke3/K \times e4/Ke5!$.

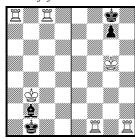
Solution: 1.Bh2! Kc3 2.Be5# and 1... Kc5/Ke3 2.Bg1#

No. 202 (left) Heinrich Wagner

Wiener Schachzeitung 1926

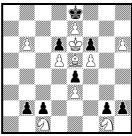
No. 203 (right) Herbert Hultberg

Tidskrift för Schack 1947



Mate in 3

No. 204 Thomas R. Dawson Falkirk Herald 1914



Mate in 3

No. 205 Gerhard P. Latzel Lippische Landeszeitung 1951 HM



Mate in 3

No. 202: Thematic try: 1.Ra3? Bd4/e5... Solution: 1.Rc3! Ba3 2.K×a3 Ka1 3.Rc1#, 1...B×c3 2.K×c3 Kc1 3.Ra1#, 1...Ba1 2.R×a1+ K×a1 3.Rc1#, 1...Bc1 2.Ra1+ K×a1 3.R×c1#. Sacrifices of the rooks with zugzwang, star-flight of the bishop. Cp. P1167955.

No. 203: Thematic try: 1.Rf6? g6! 2.R×g6+ Kf7/Kf8 3.Rf1+. Solution: 1.Rh6! g6 2.R×g6+ Kh7/Kh8 3.Rh1#, 1...g7×h6+ 2.K×h6 Kh8 3.Rf8#.

No. 204: Thematic try: $1.B \times b2$? h1B! 2.b7 stalemate. Solution: $1.B \times h2$! b1B 2.h7 Ba2 3.h8Q/R#. A paradox: The surplus of space turns out to be a disadvantage for Black.

No. 205: Thematic try: 1.d4? [thr. 2.d5#] e4 2.f4 [thr. 3.d5/f5#] $g4 \times f3$ e.p. 3.Q2#?. Solution: 1.f4! [thr. 2.f5#] e4 2.d4 [thr. 3.d5/f5#] $c4 \times d3$ e.p. 3.Qa2#. This problem shows a remarkable feature: the positions after the second white move both in try and solution seem to be the same, but they do not contain the same move rights as to what happens with the en-passant capture.

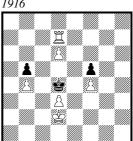
No. 206
Erich Zepler
Die Schwalbe 1937



No. 207 Josef J. Breuer Die Schwalbe 1948



No. 208 Wolfgang Pauly Deutsche Schachblätter 1916



Mate in 4

Mate in 4

No. 206–208 are outstanding examples of chess composition.

No. 206: Thematical try: 1.Rg1? Bg7! 2.Rc1 Bc3 3.Rc2 3.Ba5!. Solution: 1. Rc1! Bc7 (1...Bc3? 2.Rc2) 2.Rg1! Bg3 3.Rg2 B~ 4.Rg8#.

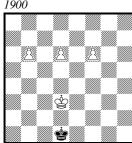
No. 207 (FIDE-Album): 1.Ba7!! f6 2.Sb6! Ke3 3.Sc4+ Kf3 4.Sd2#. The good old Indian theme in a symmetrical position with a surprising key. This is probably the most famous (a)symmetry problem at all.

No. 208 (FIDE-Album): Solution: 1.Rh7! Kd5 2.d7 Kd6 3.d8S! Kd5 4.Rd7#, 2... Kc6 3.d8R! (3.d8Q? stalemate) 3... Kb6 4.Rd6#, 2... Ke6 3.d8R! (3.d8Q? stalemate) 3... Kf6 4.Rd6#. Three model mates. One of *Pauly's* symmetrical masterpieces.

'Elegance is the restriction to the essentials in its most beautiful form'.

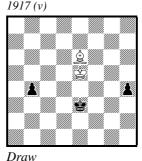
(Ralf Rothmann)

No. 209 William A. Shinkman Deutsche Schachzeitung 1900

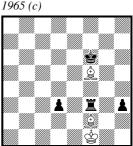


Mate in 5

No. 210 Alexey S. Selezniev Deutsches Wochenschach



No. 211
Werner Keym
Allgemeine Zeitung Mainz
1965 (c)



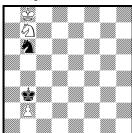
Draw

No. 209: The symmetrical try 1.d7? is only refuted by 1...Ke1!. This is the thematic try: 1.b7? Ke1! 2.f7 Kf2 3.f8Q+ Kg3 4.Ke3 Kg2/Kg4 5.Qf2+/Qf4+ Kh3!. Solution: 1.f7! (first on the 'wrong' side) Kc1 2.b7! (then on the right side) Kb2 3.b8Q+ Ka3 4.Kc3 Ka2/Ka4 5.Qb2/Qb4#.

No. 210: Tries: 1.Kd5?/Kf5? b3!/h3! 0:1; thematic try: 1.Kf6? Kf4! 2.Kg6 Kg3! 3.Kf5 h3 4.Ke4 h2 0:1. Solution: **1.Kd6! Kd4! 2.Kc6 Kc3 4.Kd5! b3 4.Ke4 b2 5.Ba2! h3 6.Kf3 h2 7.Kg2** =. An instructive endgame for the theme 'Bishop against two Pawns'.

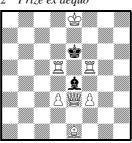
No. 211: Tries: 1.Bxh3? d2! 2.Ke2 $R \times f2+ 3$.Kd1 Rf3 4.B $\sim Rd3$, analogous with 1.Bxd3? h2. This is the thematic try: 1.Bg4? Rf4 2.B \times h3 d2 3.Bg4 $R\times$ g4 4.Ke2 Rg2 5.Kd1 $R\times$ f2 6.Kc2 0:1. **1.Be4!** (foreplan for the purpose of opening the line e4-h1) **Rf4** 2.B \times d3 h2 3.Be4 (3.Kg2? $R\times$ f2+!) $R\times$ e4 4.Kg2 Re2 5.Kh1 $R\times$ f2 stalemate or 5...Kf5 6.Bg3 Kg4 7.B \times h2 Kh3 8.Bg1 =. Both bishops are sacrificed for the surprising stalemate.

No. 212 Henrik Eriksson Stella Polaris 1967 1st Prize



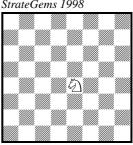
Helpmate in 3

No. 213 Wolfgang Pauly Chess Amateur 1924 2nd Prize ex aequo



Selfmate in 9

No. 214
Noam Livnat
StrateGems 1998



Add wKQS and bK for an Illegal Cluster

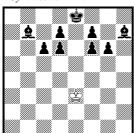
No. 212 (FIDE-Album): 1.Sd5! (asymmetrical) Ka7 (asymmetrical) 2.Sb4 Kb6 (symmetrical position!) 3.Ka4 (asymmetrical) Sc5#. A successive double setting with an ideal mate!

No. 213: Thematic try: 1.Rc5? Kd6 2.Bg3+ Ke6 3.B?. Solution: 1.Rg5! Kf6 2.Bc3+ Ke6 3.Ba5! Kf6 4.Bd8+ Ke6 5.Rc5 Kd6 6.Qf4+ Ke6 7.Qf7+ Kd6 8.Qf8+ Ke6 9.Rc6+ Bxc6#. 'Charming and difficult.' 'Elegant echo of idea by Bishop and Queen.'

No. 214: Thematic try: add wKh3 Qh1 Sg3 bKg1?, then there is a legal move: Qf3×Xh1+ h2-h1X. Solution: add wKf1 Qh1 Sf2 and bKh2, then there is no legal last move: neither wQf3-h1+? nor wQf3×Xh1+?. Cunning. Cp. no. 424.

No. 215 is a similar IC with only one piece on the board: *Bernd Schwarzkopf*, *Die Schwalbe 1987*. *Add to the wKg7 five white knights and the black king for an Illegal Cluster*. Thematic try: knights on f6, f8, g6, g8, h7 and bKg5; without Sg8 the position remains illegal. Solution: knights on f6, f7, g8, h6, h7 and bKe7; without Sh7 the position becomes legal since the last move could have been h7×Xg8S+.

No. 216 Bernd Schwarzkopf ASymmetrie 2013



Black retracts 1 move, then helpmate in 1

No. 217a Michel Caillaud diagrammes 1980



Mate in 1

No. 217b



No. 216: Tries: backward 1.e7 \times Qf6??, then 1.Bh7-g8 and no mate; backward 1.e7 \times Qd6!?, then 1.Ba8 Qb8#, but this position is illegal since Bh7 cannot leave the NE cage. The same circumstance goes for g7 \times Qf6!?, then 1.Kf8 Qd8#. What next? Backward c7 \times Qd6!, then 1.Kd8 Qf8#. Insidious.

No. 217: a) The last move was not $e^7 \times Xd6$? because then the wRc8 would be a promoted piece, which would require three captures (S, S and Q?) by white pawns on g, h7 and g8. The black queen, however, could not have passed by the king and become a sacrificial piece. Hence Black is on the move and plays 1.g6#!. b) Here the last move $d^7 \times Xe6$! was legal, the white pawns captured three times (S, S and Q) and a white pawn promoted to rook on b8. So the solution is 1.R×g8#. Cp. no. 38.

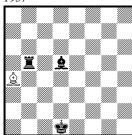
The asymmetrical position of king and queen in the initial game array plays a part in the famous problems no. 238 by *Loyd* and no. 310 by *Dawson* as well as in my text problem no. 182.

An excellent book (in German) on such problems is 'ASymmetrie' by Michael Schlosser & Martin Minski (Potsdam, 2013; 645 p.).

Adding pieces!

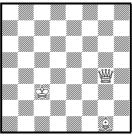
By adding pieces many options may arise, quite some of them turning out to be wrong. Therefore those problems are varied and attractive, often being a challenge as to retroanalysis. Here the aid offered by the computer is rather limited.

No. 218 Raymond Smullyan Manchester Guardian 1957



Add the white king.

No. 219 Sam Loyd Le Sphinx 1866



Add the black king
a) for a stalemate
b) for a mate
c) for a mate in 1
d) on a square where he
can never be mated

No. 220 M. Techritz Source unknown



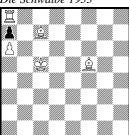
Add the kings. White to play mates in 1

No. 218: the solution is wKc3. The last moves were Kb3×Pc3+ b4×c3 e.p. c2-c4 B-d5+ (cp. no. 123). The last move record for K×P by *B. Pavlovic* (no. 147) has the (mirrored) position: wKf3 Bh4 bKe1 Rg5 Be5. An evergreen!

No. 219: a) Kh1, b) Ke3, c) Ka8 and Qc8#, d) the bK can never be mated by the queen and a dark-squared bishop on g7 (and – here illegal – on b2). *Loyd* again.

No. 220: Add wKf3 and bKh1, then mate by $1.K \times f2\#$. Seemingly easy. The simpler stipulation 'Add the kings. Mate in 1' would allow two additional solutions: wKc1 and bKa1 with $1.Qb2+/Qd4 B \times b2/B \times d4\#$ as well as wKg6/Kh6 bKh8 with $1.Qf6+B \times f6\#$.

No. 221 Ernst O. Martin Die Schwalbe 1933



Add the black king. Mate in 1

No. 222 Werner Keym Die Schwalbe 1998



Add a bishop.

Mate in 1

How many solutions?

No. 223 Günther Weeth Werner Keym Stuttgarter Zeitung 2005



Add the black king and a black rook.

Mate in 1
3 solutions

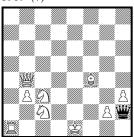
No. 221: If you add the bK on b7, then Black is on the move with three variants: $1.K \times a6/K \times a8/K \times c7$ Bc8/Be4/Rc8#.

No. 222 has four solutions: I +wBd5 and 1.Re7#; II +bBg8 and 1.wPf5 \times g6 e.p.#; III +wBg6 and 1.Kg8 Re8#; IV +bBf3 and 1.K \times g5 Rg8#. Devilish – because ever so insidious! In 1998 there was only one solver to find the four solutions.

No. 223 caused many flops among solvers. At first two harmless solutions: +bKc6 +bRb5 and 1.Sab8#, +bKe8 +bRd8 and 1.Sc7#. Moreover: +bKc8 +bRd8 and 1.Sb6#, since the last black move was 0-0-0. A nice try is +bKa8 +bRa7 and 1.Sc7/Sb6#?, but in this case it was White who moved last.

No. 224 Werner Keym

Heidelberger Tagblatt 1967 (v)



Add the black king. Mate in 1 single move How many solutions?

No. 225 Werner Keym



Add 1 pawn.
Mate in 1
How many solutions?

No. 226
Werner Keym



Add 1 piece.
Mate in 1
8 solutions

No. 224-226 are real puzzles. They are suitable for solving contests, especially when the number of the solutions is not stated.

No. 224: There are two solutions: a) +bKc6 and 1.Qb5#; b) +bKd3, in this case White moved last, therefore not 1.0-0-0#?, but 1.Qg1#!. Not +bKb2? and 1.Ra2# since again White moved last. The term 'single move' is necessary; otherwise there would be the solutions +bKb6/bKc5 and 1.Kc6 Qb5#.

No. 225 has four solutions:

- a) +sPb4 and $1.B \times b4\#$
- b) +wPb4 and 1.c5#
- c) +bPc7 and 1.c7-c5 b5×c6 e.p.#
- d) +bPe5 and 1.Ke6 Qg6#

No. 226: In the diagram position Black is on the move.

- a) +wBd4 (backward Ke4-f3 possible) and 1.Se5# $\,$
- b) +wSf5 (backward Ke4-f3 possible) and 1.Se5#
- c) +wSe4 (White moved last) and 1.K \times g4 Sg5#
- d) +wBe4 (White moved last) and 1.K \times g4 Bg2#
- e) +bRd1 (last move bR-/×Xd1+) and 1.Be1 R×e1#
- f) + bQd1 (last move bQ-/×Xd1+) and 1.Be1 Q×e1#
- g) +bQh3 (White moved last) and 1.Qg2#
- h) +wRh1 (part of 0-0, earlier bKg2-f3) and 1.Rf1#

Here you see the four theoretical possibilities of White's/Black's turn to move and White's/Black's mate plus half castling.

In 1995 there was only one solver who found the 8 solutions.

No. 227 Werner Keym Die Schwalbe 1968



Add the black king. Mate in 1

No. 228 Rafael M. Kofman Vecherny Leningrad 1968 3rd Prize



Add the white king. Mate in 2

No. 229 Andrew Buchanan France-Echecs 2002



Helpmate in 2 b) Add 1 piece. c) Add 1 piece again.

No. 227: The black king on d3 or f3 can be mated by 0-0-0 or by 0-0. But with bKf3 there was no previous black move, so it is Black to play. With bKd3 the last move could have been Kc4-d3 a2 \times Xb3+. So the solution is bKd3 and 1.0-0-0#. It is important to be aware of the fact that Re7 and Be8 are promoted officers. If you put a white queen on e8, the problem will become unsound, for in this case the last moves could have been bKe4 \times Sf3 Se5-f3+ (S = promoted officer).

In **no. 228** (FIDE-Album) everything would be alright without the white king: 1.Rd1 0-0 2.Rg1#. But where to place it? Whichever square you choose it proves to be an obstacle, on square e1 as well. But there is one unexpected method we can have resort to, and this is castling: 1.0-0-0! 0-0 2.Rg1#. Necessity is the mother of invention.

No. 229: a) 1.Sa6 R×a6 2.0-0-0 Ra8#; b) (+bRh7) 1.0-0 R×f6 2.Kh8 R×f8#; c) (+bBf5) 1.Kf7 Sf3 2.Kg6 Se5#. Black moved Pe×Xf and Pf×Xg×Rh2, so no white piece may be added. White captured Pa2×Xb3 and the wPd promoted to R somewhere. In a) the wPd captured 4 times and promoted to R on h8 (0-0-0 permitted); the promotion on a8 (0-0 permitted) is possible as well, but not successful since there is no mate because of the flight square h7. In b) with an additional piece the wPd captured only 3 times and promoted on a8 (0-0 permitted) and there is a mate by means of the block (bRh7). In c) with two additional pieces the wPd promoted on c8, d8, e8, f8 or g8 and castling is no longer permitted, but the second block (bBf5) is helpful. A new and surprising idea.

No. 230 Thomas R. Dawson Chess Amateur 1918



Add a white rook. Mate in 1

No. 231 Karl Fabel Die Welt 1952



Add the black king. Mate in 1

No. 232 Hans Klüver Die Welt 1948



Add a white queen. Mate in 1

No. 230–232 are classical showpieces. In **no. 230** the wBf1 died on f1. The wPs captured 6 pieces, among them the promoted officer from a1 (earlier $b3 \times Ra2!$). Therefore not +wRb1? and 1.b3#, but +wRc3! and 1.b3#. *T. R. Dawson* reports that even the editor of the *Chess Amateur* was taken in by the try +wRb1.

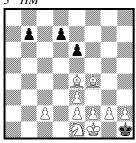
No. 231: The try +bKc1? followed by 1.0-0# is striking. The black king, however, did never leave the 8^{th} rank. Here the genesis of the position: wS×Bf8, bS×Bc1, bS×Bf1, b0-0, bPa×Qb-b3×Ra2-a1X, wPh2×Rg3×Sf4×Se5×Xd6×Pc7×Qd8R. So +bKh8! and 1.R×f8# is correct.

In **no. 232** the wPs captured the 8 missing black pieces, among them the bBc (therefore not backward b7-b6?). Backward a2-a1S? is illegal, since then there would be too many captures by pawns in view of the 11 white pieces (including the queen), for bPf must pass by wPf. The solution is amazing: +wQf8! and 1.Qf1#. In this case Black moved last, i.e. Ka2-b1 f7-f8Q+! (earlier bPf×Xe→e1X). Tricky.

'The chess problem is poetic mathematics or mathematical poetry'.

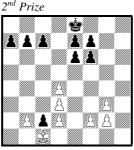
(Philipp Klett)

No. 233 Werner Keym Die Schwalbe 1987 3rd HM



Add 1 white pawn on the f-file.
Mate in 1

No. 234 Henrik Juel Thema Danicum 1997



Add 1 piece.
Last move?

No. 235 Alexander Zolotarev Shakhmatnaya

Shakhmatnaya Kompozitsiya 1993 Ist/2nd Prize



Add officers for a legal position.

In **no.** 233 the wBf1 died on f1, the bBc8 on c8. Be4 is a promoted officer. Obviously it is illegal to add +wPf3? or +wPf5?. Genesis of the position with wPf6: a2×Qb3×Xc4(X=bPa)×Rd5×Se6×Pf7×Se/g8B, bPh×Qg×Rf×Re-e3, g7×Sf6, bBf8→e5, b2×Pc3×Rd4×Be5×Pf6, d2×Pe3. So White moved last (e.g. d2×Pe3), earlier e7-e6. Therefore Black plays 1.d7-d5 and prevents g2-g4#. Genesis of the position with wPf7: b2×Pc3×Rd4×Se5×Pf6×Pg7-g8B, d2×Be3, h7×Qg6×Rf5×Re4×Sd3-d2-d1Q/R/S, a2×Qb3×Xc4(X=bPa)×Rd5×Se6, finally e6×Q/R/Sf7 e7-e6. Now the solution is 1.g2-g4#. Deciding on Pf6 or Pf7 makes a great difference. 'It is impressing, how many retroanalytical subtleties can be deduced from such small material.'

In **no. 234** a bBf8 must be added. Critical position: wKc1 Be6 a2 b2 c3 d2 d3 f2 g2 g3 bKe8 Qd8 Ra8 Rb5 Bc8 Bf8 a7 b7 c2 c7 d7 e7 f7 g7. Then $1...d7 \times Be6$ 2.a2-a3 Qd8-d4 3.a3-a4 Bc8-d7 4.a4 \times Rb5 Bd7-c6 5.b5 \times Bc6 0-0-0! 6.c3 \times Qd4 Rd8-d7 7.c6 \times Rd7+ Kc8-b8 8.d7-d8S! Kb8-c8 9.Sd8-c6 Kc8-d7 10.Sc6-b4 (or Sc6-e5+) Kd7-d8 11.Sb4-d5 Kd8-e8 12.Sd5-f6+ g7 \times Sf6. The added piece is a total idler and only counts for the fulfilment of the stipulation.

In **no. 235** (FIDE-Album) these pieces must be added: wSg7, bBg4, bSg5. Critical position: wKf6 Qh6 Rg5 Rh4 Bf1 Bh2 Sg1 Sg3 Sg4 b3 c2 e2 f2 g2 h5 bKf4 Qh3 Rf3 Bc8 Bd8 Bh8 Se7 Sg7 b7 c7 d7 e6 f7 g6 h7. Then 1.e2×Rf3 e6-e5 2.Bf1-b5 e5-e4 3.Bb5-c6 b7×Bc6 4.b3-b4 Bc8-a6 5.c2-c3 Ba6-c4 6.b4-b5 Bc4-e6 7.Sg4-e3+ Be6-g4 8.Se3-f5 Sg7-e6+ 9.Sf5-g7 e4-e3 10.Rg5-e5+ Se6-g5 11.Re5-e6 Se7-f5+ 12.Re6-e7 e3-e2 13.Sg3-h1+ Sf5-g3 14.Bh2×Sg3+. 5 retro unpins!

No. 236 Jens Guballa Werner Keym

Problem-Forum 2006



Add a black piece so that Black can never castle.

How many solutions?

No. 237 Josef Haas feenschach 1971

1st Prize



Add the black king.
Mate in 1 single move

- *a)* +*bPb4*, +*bPg5 b)* +*bPb4*, +*bPe7*
- c) +bBh5, +bPg7
- d) + bPb4, + bPg7

No. 238 Sam Loyd Chess Monthly 1858



Add the black king. Mate in 3 moves

No. 236: There are 5 solutions.

- 1) +bSd6, then White is mate.
- 2) +bRh7, then Rh8 must have moved.
- 3) +bQa8, then Ke8 must have moved (because of wKe1 \rightarrow e8 \rightarrow c8).
- 4) +bBa6, then Ke8 must have moved (last move was $b7 \times Xc6+$).
- 5) +bPa2, then Ke8 or Rh8 must have moved. Genesis of the position: $wS \times Bf8$, $bS \times Bf1$, bPb7 und bPf7 ($\rightarrow a2$) captured 6 pieces on light squares, among them the promoted officer from f8/h8 (earlier $wPh \times Xg \times Xf/h$), wPb2 captured twice. 'It is fantastic that each of the five pieces occurs once. It is funny that the K, the R, the K or the R, neither the K nor the R must have moved.'

No. 237: The wPs captured 11 times. a) +bKh5! and 1.Sf6#; not +bKg1? and 1.0-0-0#, since the bPa had to promote on a1; not +bKe4? and 1.e5×d6 e.p.#, since $f6\times Bg5$ was possible as well. b) +bKg1! and 1.0-0-0#; not +bKe4? and 1.e5×d6 e.p.#, since Black had no previous move before d7-d5 and Rc6-g6+. c) +bKe4! and 1.e5×d6 e.p.# (before that d7-d5 Rc6-g6+ B-h5); not +bKg1? and 1.0-0-0# because of bPa7-a1X. d) +bKe4! and 1.g1Q# (Black to play!). To me the best of *J. Haas'* sophisticated problems with the theme of 'adding pieces'.

No. 238: +bKh4! and 1.d4! Kg4 2.e4+ Kh4 3.g3# or 1... Kh5 2.Qd3 \sim 3.Qh3#. According to *S. Loyd* (and to the computer!): unique!

Adding pieces: construction records

There are countless record constructions, in the field of retro as well. They are fascinating for quite many problemists. Besides they show one specific characteristic in comparison with other problems: a record can only be measured and there is no subjective judgement.

No. 239 Hansjörg Schiegl feenschach 1973



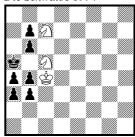
Adding a black pawn on 33 squares raises the number of White's possible moves.

No. 240 Werner Keym Die Schwalbe 1969



Adding a black pawn on 42 squares prevents mate in 1

No. 241 Peter Kahl Die Schwalbe 1974



Adding a white queen on 54 squares changes the turn to move

In **no. 239** the record of 33 squares is achieved by line obstructions and unpinning. The same number of squares and of pieces is obtained in a retro problem (P1068549).

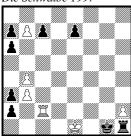
No. 240: White can mate in 1 move by 1.0-0#. Castling is permitted: the white pawns (on the a-file) captured 10 pieces, moreover wPh×Pg-g8X; besides wPg2 \rightarrow g7, bPh×Xg \rightarrow g1S, bPf×Qg-g1S, wPf2 \rightarrow f8X, bPe7 \rightarrow e2×Xf1S. If you add a black pawn, one sacrificial piece for White will disappear. So one black pawn had to promote on e1 or h1 and castling is not permitted.

No. 241: The last black move could be bPa7×Xb6 since there were 3+1 white pieces and 12 captures by black pawns. This is changed by adding a white queen (4+1 white pieces). In this case the bPb6 did not come from a7, but from c7 (10 captures by black pawns). So White moved last and Black is to play.

Adding pieces: the stronger the slower

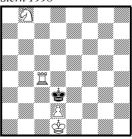
In general a stronger piece mates more quickly than a weaker. But the exception proves the rule.

No. 242 Werner Keym Die Schwalbe 1997



Add wBa1, wRa1 or wQa1. Mate in how many moves?

No. 243 Werner Keym Stern 1998



Add wSe5, wBe5, wRe5 or wQe5. Mate in how many moves?

No. 244 Ralf Krätschmer Die Schwalbe 2001



Add wPg7, wSg7, wBg7, wRg7 or wQg7. Mate in how many moves?

No. 242: There is a mate in 1 single move by a bishop (1.Bd4#). The last move could be a4-a3 because the bPs could capture the 9 missing pieces on light squares. With Ra1 or Qa1 the bPd7 captured the dark-squared bishop on c5 or b4 or a3, so the last move could not be a4-a3 and Black is to play. The rook needs one single move more: $1.bR \times h2 0-0-0\#$ and the queen even four moves: $1.bR \times h2 Qg7 + 2.Kh1 R \times h2 + 3.K \times h2 Kf2 4.Kh3 Qg3\#$.

No. 243: There is a mate in 0 moves by wSe5, in 1 move by wBe5 (1.Rd4#), in 2 moves by wRe5 (1.Rc3+ Kd4 2.Sc6#) and – that's the point – in 3 moves by wQe5 since in this position White moved last and Black is to play: 1.K×c4 Kc2! 2.Kb4 Sc6+ 3.Ka4/Kc4 Qa5/d3#. 'Chess paradoxical in letztform: the stronger the pieces are the longer the mating will endure. Normally all that works in the opposite direction as was shown by *Knud Hannemann* [no. 78].'

The first problem with five additions (P, S, B, R, Q) was a retro problem (P 1108924). **No. 244** is the first 'normal' problem to master this task. The queen must avoid stalemate, therefore it needs 6 moves.

Pg7 #2: 1.g8S d2 2.Sh6#

Sg7 #3: 1.Se6 d2 2.Sd4 K×f4 3.S×f3#

Bg7 #4: 1.f7 d2 2.Bd4 K×f4 3.Bf6+ Sd4 4.R×d4#

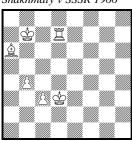
Rg7 #5: 1.Re7 d2 2.Re2 Sd4 3.Re×g2+ K×f4 4.Rd4+ Ke5 5.Re2#

Qg7 #6: 1.Qe7 d2 2.Re4 f5×e4 3.Q×e4 Sf5 4.Q×f3+ Kh4 5.Qf2+ Sg3 6.Q×g3#

Colouring pieces

It is your job to colour the pieces to get a legal position.

No. 245 Nicolay Burlaiev Shakhmaty v SSSR 1966



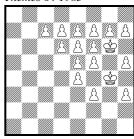
Colour the pieces. Last move?

No. 246 *Gideon Husserl Israel Ring Tourney 1966-71 1st Prize*



Colour the pieces. Last move?

No. 247 Andrey Kornilov Thèmes 64 1985



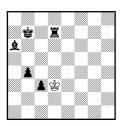
Colour the pieces. Last move?

No. 245: The e.p. trick again: bPd4×c3 e.p.+ c2-c4 b5-b4+.

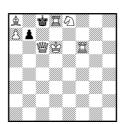
No. 246: A double check was given by wPc7×Sd8R.

No. 247 is exciting: 9 w. and 8 b. pieces and 8 w. and 7 b. captures. Last move not $g2\times Xh3+?$ (10 w. captures), but h2-h3+!. You will find further problems in *Die Schwalbe Dec. 1993* and *PDB* (K='Coloring problem').

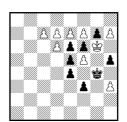
Solution no. 245



Solution no. 246



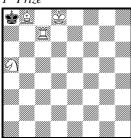
Solution no. 247



Rotations

Here two kinds of rotations are presented: serious ones and ...

No. 248 Adrian Storisteanu Rex Multiplex 1983 1st Prize



Mate in 2 b) Turn 90° (wKh5)

No. 249 a) Alexander Galitsky Shakhmatnyi Zhurnal 1900 b) J. R. Venning Melbourne Leader 1916



Mate in 3 b) Turn 180°

No. 250 Ralf Krätschmer Die Schwalbe 2010



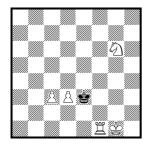
Mate in how many moves?

- b) Turn 90° (wKf8)
- c) Turn 180°
- d) Turn 270° (wKc1)

No. 248: a) the last move was bKa7-a8 b7-b8B+, so 1.Ra7+! K×b8 2.Sc6#. b) White moved last, therefore 1.K×h7! Sf6+ 2.Kh8 Rg8#. Same white moves in reverse order. Lovely.

No. 249: a) 1.Bf6! g7×f6 2.Kf8 f5 3.Sf7#; b) 1.Kc3! b1Q 2.Sc2+ Q×c2+ 3.K×c2#, $1...b1S+ 2.K \sim Sc3 3.B \times c3\#$.

No. 250: a) #1 $1.d3 \times e4$ #!; b) #2 1.Be5!; c) #3 1.Bb1! Rb7; d) #4 1.Be1! d2+/Sc3 – all variants are dual-free. (cp. the early example with duals P1265405)

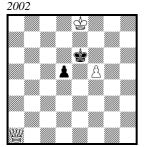


No. 251 Zvi Roth

Al-Hamishmar 1970 Commendation White retracts 1 move and mates in 1

- b) Turn 180°
- a) Backward 0-0 and 1.Rh3#; b) backward d5×e6 e.p. and 1.Rd8# (FIDE-Album).

No. 252 Werner Keym Allgemeine Zeitung Mainz



White retracts 1 move and mates in 1 *b) Turn 90*° (*wKh4*) c) Turn 180°

- d) Turn 270° (wKa5)

No. 253 Werner Kevm Stuttgarter Zeitung 2002



White retracts the last move and mates by a different move. How many retro moves are there?

- b) Turn 90° (wKc2)
- c) Turn 180°
- d) Turn 270° (wKf7)

No. 254 Nikita Plaksin Vladimir Levshinsky diagrammes 1987



Mate in 1 b) Turn 90° (wKe1) c) Turn 180°

No. 252: a) backward f4-f5+ and 1.Qe5#; b) backward e2-e3+ and 1.Qf3#; c) backward c3-c4 and 1.Qd4#; d) backward e5×d6 e.p.! and 1.Qc1#. Pleasant.

No. 253: a) there are five possible retro moves: backward wPa7-a8B# (before that e.g. g2-g1B) and 1.a7-a8Q#; backward wPb7 \times Q/R/B/Sa8B# and 1.b7 \times Q/R/ B/Sa8Q#. b) there are three possible retro moves: backward wPg7×Q/R/Sh8B# and 1.g7×Q/R/Sh8Q#; backward not wPg7×Bh8B#? nor wPh7-h8B#? (Black had no previous move). c) backward only wPe5×d6 e.p.# (before that d7-d5 e4-e5+) and 1.Bxd5#. d) there is no other mate except by wK-/×f7#. So the right numbers of retro moves are 5-3-1-0. Tricky. (cp. the more complicated example P1004344)

In **no. 254** only the white dark-squared bishop is missing. a) the last moves were d7d5 Rc6-e6+ Kd5-e4, White is to play: $1.e5 \times d6$ e.p.#; b) Black is to play: $1.K \times d3$ 0-0-0#; c) Black is to play: 1.Ke6 d7-d8S#. This problem presents the three special moves e.p. capture, castling and promotion. A perfect Valladao problem.

No. 255 Mannis Charosh Fairy Chess Review 1937



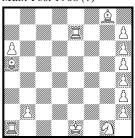
Mate in 0 moves

No. 256 Lord Dunsany Week-End Problems Book 1932



Mate in 4

No. 257 Werner Keym Main-Post 1968 (v)

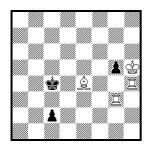


Add the black king.
Mate in 1

In no. 255–257 the illegal positions must be turned by 180°. In **no. 255** the Ba8 cannot come from f1 nor is it a promoted officer. Turn by 180°: mate!

In **no. 256** bK and bQ are not on their original squares. After turning the solution is 1.Sc6/Sd7 (cook) Sf3 ... 4.Sd3#. If the white rooks and knights change their places it is all ok: 1.Sg6! ... 4.Sd3# (*Werner Keym, Die Schwalbe 2012*).

No. 257: The wPs on the h-file seem to have performed 15 captures, among them two promoted officers (bPa and bPb). But this is impossible since there are only two white sacrificial pieces. So not +bKh8?? (Black has no previous move) and Bc3# nor Kd3!? and 0-0-0#, but after turning the board by 180° +bKf7 and g7-g8Q#.



No. 258 Viktor Chepizhny

Bohemian Jubilee Tourney 1962 1st Prize Helpmate in 2

- b) Turn 90° (wKe1), c) Turn 180° ,
- d) Turn 270° (wKd8)
- a) 1.c1R R×g5 2.Rc3 Bc2#; b) 1.b5 Bc3+ 2.Kc5 Ba5#; c) 1.b3 Rb4 2.f6 Bf7#; d) 1.g2 Bf4+ 2.Kf2 Bh2#. A most elegant helpmate problem.

No. 259a

Werner Keym
No. 259b

Allgemeine Zeitung Mainz
1968

Add 1 white pawn.

No. 460

Werner Keym
Allgemeine Zeitung Mainz
1968

Add the black king.

No. 259: In diagram position 259a the try is +Pb3? and 0-0-0#, in 259b +Ph3? and 0-0#, but square h1 is dark. So the board must be turned by 90° (anticlockwise: wKh5). Then the solution of 259a is +Pf2! and Rh4#, of 259b +Pf7! and f7-f8Q#. 'Very nice joke.'

Mate in 1

In **no. 260** there are two different tries: a) +bKc1? and 1.0-0#, but in this case the bK had to move to c1 via d1 or d2 and castling is not permitted; b) +bKf3? and 1.0-0#. This seems to be successful. But square h1 is dark. So the board must be turned by 90° (clockwise: wKa4). Then you add the black king on a6 (the square a6 was 'c1' before the rotation!) and mate by 1.b7-b8S#. Twice cant castling and one underpromotion. Many solvers were enthusiastic about this extraordinary problem and composed funny poems added to their solutions. My best retro miniature.

The most famous problem with rotation is no. 76.

Mate in 1

Half moves

The following half move problems are quite serious.

No. 261 Werner Kevm Basler Nachrichten 1968

Minimover

No. 262 Werner Kevm Die Welt 1969



White mates immediately

No. 263 Andrey Kornilov Shakhmaty v SSSR 1978



Mate in 1.5

No. 261: Not 1.Sb2#?, since Black did not move last and cannot move next. The stipulation 'Minimover' gives a hint. This problem must be shorter than a one-move problem. So White is just castling, the first part is finished (Ke1-c1, before that bKc2-d3), the second must follow: Ra1-d1#. A more serious stipulation may be 'White mates immediately' or 'Mate in ½ move'. Castling is very suitable for half move problems since the laws of chess prescribe that the king has moved first, then the rook, each piece touched by one hand!

The position of **no. 262** is illegal, because the wPs captured 15 pieces. Therefore do not play Rh1-f1? (= part of 0-0#), but remove Pe5 (= part of $d5 \times e6$ e.p.#), then the position is legal. Here, too, the stipulations 'Mate in ½ move' and 'Mate in less than 1 move' are possible. There is even a problem with a 3/4 move (P1066698).

No. 263: Tries are three half key moves, namely e.p. capture, castling and promotion (Valladao), a) not 1, removing c5? (= part of $b5 \times c6$ e.p.+) Rb5 2.R×b5# because the previous move c7-c5 locks up the wBb8 which is no promotee in view of 8 wPs; b) not 1.Ra1-d1? (= part of 0-0-0) Rd4 2.R×d4# because the wRa5 went from h1 to a5 via e1 and castling is not permitted; c) not 1.f7-e8S+? (= part of $f7 \times Xe8S$) e6 2.Sf6#, since there is no sacrificial piece X; the wPs captured 6 pieces, but not the bPs g and h, which died on g and h for lack of white sacrificial pieces. The solution elucidates the high originality of this problem: $1.8 \times e7 + ! B \times e7 2.f7 - f8\#!$ (= part of f7-f8X#). One might put it as follows: pawn remains pawn!

No. 264 Werner Keym Die Schwalbe 1971



Add the kings.
Who mates in ½ move?

No. 265 Werner Keym Die Schwalbe 1971 Ceriani Memorial



Who mates in ½ move?

No. 266 Werner Keym



Who wins?

No. 264: Not +wKc1/+bKd3 and Ra1-d1#?, not +wKg1/+bKf3 and Rh1-f1#?, not +wKf6/+bKg8 and 1.Rh8-f8#?, but +wKd6/+bKc8 and 1.Ra8-d8#!. The wPs captured 9 pieces, among them 2 promoted officers (f7 \rightarrow f1X, g7 \times Bf6 \rightarrow f1X), besides h5 \times Qg4, h2 \rightarrow h8X, b5 \times Xa4. So only b0-0-0 is permitted. 'An extremely beautiful problem of rare economy, an original task with all four half castlings, complete use of the board and fine concentration of the control by the sole bQ – and moreover perfectly retroanalytical content. This problem is a milestone ...'

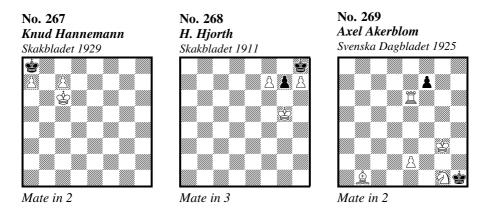
The position of **no.** 265 seems to be illegal. It becomes legal if you remote one white or black pawn as part of an e.p. capture. There are 8 (!) possible e.p. captures, but the positions before a) $1.a5 \times b6$ e.p.#?, b) $1.c5 \times b6$ e.p.#?, c) $1.c5 \times d6$ e.p.#?, d) $1.e5 \times d6$ e.p.#? and e) $1.d4 \times e3$ e.p.#?, f) $1.f4 \times e3$ e.p.#?, g) $1.h4 \times g3$ e.p.#? are illegal, since sacrificial pieces are missing or promotions impossible. Nothing else but removing the wPg4 (as a part of bPf4 \times g3 e.p.#!) results in legality. Genesis of the position: $h6 \times Rg7$, $h7 \rightarrow h1Q$, $a5 \times Qb6$, $a7 \rightarrow a3$, e2-e4, $d4 \times Be3$, $d2 \rightarrow d6$, $c6 \times Rd5$, wS $\times Pe7$ and g2-g4 f4 $\times g3$ e.p.#. Record: 8 times 'half en-passant capture'. Non plus ultra!

No. 266: There are 16 white pieces. The wPs captured 10 pieces, e.g. $g3 \times Xh4-h5$. The last move was 0-0, the first part (Ke1-g1, before that bQg2-f3) is already done, the second must follow: Rh1-f1. Solution: 1.Rh1-f1! Qg2+! $2.R \times g2 \ h2+! \ 3.\sim$ stalemate. 'Therefore: nobody wins! A witty point.'

You will find further examples in *PDB* (K='Finish or retract an unfinished move').

Unconventional first move

In the following directmate problems Black is on the move, which can be proved by retroanalysis. However, these are not difficult release problems (numerous such problems can be found in the *PDB* (K='Whose move')), but mostly easy two-move and three-move problems with positions which disguise the fact of Black's being to play in a clever manner.



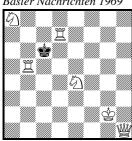
In the three classical problems no. 267–269 from Scandinavia you will easily see that Black did not move last – but only so if you should come to think at all.

No. 267: The try is 1.c8Q+? $K\times a7$ 2.Qb7#, the solution 1. $K\times a7$! c8R! (c8Q? stalemate) 2.Ka6 Ra8#.

No. 268, too, deals with promotions. The try is 1.f8S? g6 2.Kh6 g5 3.Sg6#, the solution, however, 1.Kxh7! (1.g6? Kh6 2.g5 f8Q,R#) f8Q 2.g6 Kf6 3.g5 Qg7#. As far as I know the author's solution was the sequence with the promotion 1.f8S. After the publication experienced solvers pointed at the obvious fact of Black's being on the move.

No. 269 is a problem with an unexpected variety: $1.f7 \times e6/f6/f5/K \times g1!$ Sh3/Sf3/Kf2/Rf6 2.e5/f5/ \sim /Kh1 Be4/Rh6/Rh6/Rf1#. Unfortunately there is no mate in 2 moves with White to play.

No. 270 Werner Keym Basler Nachrichten 1969



Mate in 2

No. 271 Werner Keym Weser-Kurier 1968



Mate in 2

No. 272 Werner Keym



Mate in 2

In no. 270–271 six squares around the black king are not occupied, but they are guarded by white rooks and white knights twice. So Black is on the move.

The solution of **no. 270** is $1.K \times d7!$ Qh7+ 2.Kc8/Kd,e8/Ke6/Kc6 Qc7/Rb8/Sc7/Qb7, Rc5# (mate dual) and $1.K \times b5!$ with echoes. There is no mate in 2 moves with White to play. The same phenomenon can be seen in the predecessor P1108448 and the successor P0007076.

No. 271 is one of my favourites. It is supposed to be the most elegant miniature showing the perfect disguise of Black's turn to move with the black king in the middle of the chessboard. Not 1.Rb6!? K×c4 2.Qd4#, but 1.K×e6! Rc7 2.Kd5 2.Qf5# and 1.K×c4! Qd4+ 2.K×b3/Kb5 Re3/Rb6#. In 2002, on the occasion of my 60th birthday, this problem (along with my photo see p. ii) was published in the newspaper *Rhein-Zeitung Koblenz*. 223 of 237 entries were incorrect (1.Rb6!?).

In **no. 272** there is an asymmetrical try (White to play) with a symmetrical final position: 1.Qf4? $K\times c5$ 2. $Q\times c7\#$. Solution: 1. $K\times c5$! Qf4 [thr. 2. $Q\times c7\#$] 2.c6 Qd4# asymmetrical.

No. 273 Hemmo Axt Die Schwalbe 1976 Fabel Memorial 3rd Prize



No. 274 Hans Rosset Die Schwalbe 1978 161st TT Prize



No. 275 V. Zatulni Tcherkaskaja Pravda 1981



Mate in 2 Mate in 2 Mate in 2

No. 273 is a miniature containing a remarkable variety of problem moves. There is a try with White to play and four dual-free variants. Not 1.Bd4? K×d6 2.Rf6#, but 1.K×b6! Sc4+ 2.Kc6/Ka6,Ka7 Se7/Ra5# and 1.K×d6! Bc7+ 2.Kc6/Ke6 Se7/Rf6#.

The theme of **no. 274** being a double 'star flight' cannot be achieved in a usual two-move problem with White on the move. The solution 1.K×d5! Rd7+ 2.K×c4/Kc6/Ke4/Ke6 Be2/Ba4/Qf3/Bg4# and 1.K×f7! Rd7+ 2.Ke6/Ke8/Kg6/Kg8 Bg4/Qe7/Qd3/Qa8# is completely dual-free. Try: 1.Rf4? K×d5 2.Qd6#. – Almost the same theme was achieved in the miniature P1145194 (with a mate dual).

No. 275 is highly original. Try with White to play: 1.Bh5? \sim 2.Sg5#. Solution: 1.K×g4 g8Q/R 2.Kh3/Kf5 Sf4,Qe6/Sd2,Qe6,Qg6#. 1.h2×g1Q/R Sf×g1+ 2.K×g4 g8Q,R#; 1.h1S Bh5 2.S×f2/S×g3 Sg5/Sf4#; 1.h1B! g8B!! 2.K×g4 Be6#. Such an echo underpromotion cannot be achieved in a usual two-move problem with White on the move.

'Plausible impossibilities should be preferred over implausible possibilities'.

(Aristotle)

No. 276 Werner Keym

Allgemeine Zeitung Mainz 1966



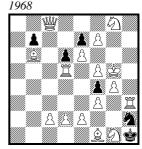
Mate in 2

No. 277 Werner Keym Die Welt 1968



Mate in 3

No. 278 Werner Keym Deutsche Schachblätter



Mate in 3 b) – Pe7

No. 276: The solution is not $1.a5 \times b6$ e.p.? $a7 \times b6 + 2.R \times b6 \#$ since bPb7-b5 could not have been the last move because of the wBa8, but 1.b4! Rb3 zugzwang $2.b4 \times a3$ Bb7#.

No. 277: The last move was not bPg7-g5? because of the wBh8 which then would have to be a promoted officer. This would cause 14 captures altogether (in view of 3 black pieces). Therefore not $1.h5 \times g6$ e.p.? $f7 \times g6 + 2.Kg4$ g5 3.Sg8#, but 1.g4! Bg2 $2.g4 \times h3$ g4 $3.h3 \times g2$ g5#. 'Small material, much content.'

No. 278: There are 16 white pieces. The wPs captured 10 pieces, among them the bBc8. So the last move in a) was not bPd7-d6, but wPg2-g4 Sg4-h2 Rg3-h3+. Therefore the solution is $1.64 \times g3$ e.p.! Qc4 2.g2 R×h2+ $3.K \times h2$ Qh4#. In b) there are only five black pieces and the wPs did not need to capture the bBc8. So the last move could be d7-d6. In this case the solution is not 1.e3? $K \times g1$!, but 1.e4! $64 \times e3$ e.p. 2.Se2 $e3 \times d2$ 3.Sg3#. Twice e.p. capture, but each time in a different way.

You will find problems with the unconventional first move especially in the chapter 'Nasty tricks in one-move problems'.

En-passant key: 'to be or not to be'

The en-passant capture is a curious move. A pawn proceeds to some certain square and captures a pawn on a different square provided that the latter has just made a double step. So the en-passant capture as a key is permitted only if it can be proved that the last move was the double step of the pawn (cp. p. 170). Such problems resisting the computer appeal to solvers.

No. 279 Friedrich Amelung Düna-Zeitung 1897

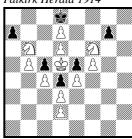


No. 280

J. Perkins
Chess 1950



No. 281/1 Thomas R. Dawson Falkirk Herald 1914



Mate in 2

Mate in 1

Mate in 2

No. 279 is the most economical dual-free rendering of the e.p. key in a directmate problem (cp. 290). It uses the typical position of wK, bP and wP side by side on the 5^{th} rank, which excludes the simple step of the bP (here g6+-g5) as the last black move. The retro play bKg7-h6? is illegal as well. So the last move was g7-g5, therefore $1.h5 \times g6$ e.p.! Kh5 $2.R \times h7\#$.

No. 280: 16 w. pieces are on the chessboard. The moves bBh2+-g1, bS+-b2 or bS+-h8 are illegal. So the last move was d7-d5, therefore $1.c5\times d6$ e.p.#.

No. 281/1 (FIDE-Album) is a famous retro problem (this is the original position, not the one with all the pieces shoved on to one file to the right). The wPs captured the 10 missing black pieces, among them the Bf8. So the last move was not e7-e5, but c7-c5 with the solution $1.b5 \times c6$ e.p.! $\sim 2.c7\#$. – **No. 281/2:** If you add the stipulation 'Chess 960' (Werner Keym, Die Schwalbe 2017), you get a surprising variation. The dark-squared bB never was on h8 (illegal). If it was on b8 originally, then the last move was e7-e5 (with $1.f5 \times e6$ e.p.!), if on f8, then c7-c5 (with $1.b5 \times c6$ e.p.!), if on d8, then either c7-c5 (with $1.b5 \times c6$ e.p.!) or e7-e5 (with $1.f5 \times e6$ e.p.!), i.e. PRA within PRA (see p. 106).

No. 282 Sam Loyd New York Chess Association 1894



Mate in 4

To no. 282 Critical position Next move: 17.b6×a7



No. 283
Wolfgang Hundsdorfer
Deutsches Wochenschach
1909 1st Prize



Mate in 3

Sam Loyd was a pioneer in so many fields of chess composition. In **no. 282** the wK is not on the 5th rank, yet it can be proved that f7-f5 was the last move. This is Loyd's own (ambiguous) 'proof game': 1.g4 e6 2.Bg2 Sc6 3.Sc3 Bc5 4.Sb5 Qg5 5.Sf3 Qe3 6.f2×e3 Sge7 7.Sh4 Sd4 8.e3×d4 a5 9.Be4 Ba7 10.Bg6 h7×g6 11.Kf2 Rh5 12.Ke3 Rc5 13.d4×c5 Sd5+ 14.Kd4 Sb6 15.c5×b6 Bb8 16.Kc5 Ra7 (critical position) 17.b6×a7 a4 18.Sd4 b6+ 19.Kb5 Lb7 20.Rf1 Bd5 21.Ka6 Bb3 22.a2×b3 Ke7 23.b4 Kf8 24.Ra3 Kg8 25.Rh3 a3 26.Sb3 a2 27.Kb7 a1R 28.Kc8 Ra5 29.Kd8 Rh5 30.Sa1 Kh7 31.b3 Kh6 32.Bb2 Kh7 33.Be5 g5 34.Sg6 Kh6 35.Rf6 Rh4 36. Bf4 g5×f4 37.Qh1 Kg5 38.Qe4 Rh8+ 39.Ke7 Rc8 40.Rh8 Rd8 41.Re8 Rc8 42.Kf8 Rd8 43.Kg8 Rc8 44.Kh7 Rd8 45.Rh8 Rg8 46.Sf8 Kh4 47.g5 Kg4 48.Qg6 Kh3 49.Qh6+ Kg4 and 50.Rf6-g6 f7-f5!, therefore 1.g5×f6 e.p.+! Kf5 2.Rg5+ Ke4 3.Qg6+ Kd4 4.c3,Qd3#. The retro move 50...f6-f5? would result in stalemate. Loyd considered no. 282 to be one of his best problems.

Many problems with en-passant keys are in the collection *Retrograde Analysis* by *T. R. Dawson* and *W. Hundsdorfer* (1915), e.g. **no. 283**. The Ps captured all missing pieces. The bR must go back to h8 and the bB to f8, earlier bPg7×Xh6 wXc3-h6 wKb2-b3 and the knot is resolved. So back 1...c7-c5! 2.g5-g6 Rc6-c2 3.g4-g5 Rg6-c6 4.g3-g4 Rg8-g6 5.g2-g3 Bd4-a7 6.h4-h5 Bg7-d4 7.h3-h4 Bf8-g7 8.h2-h3 g7×B/Sh6. Therefore 1.b5×c6 e.p.+! b5 (1...Qb5 2.Q/B×b5+) $2.K\times$ b4+ Rc3 $3.R\times$ c3#. Profound retroanalysis.

No. 284 Harold H. Cross Fairy Chess Review 1939



Is Black allowed to capture en-passant?

No. 285 Andrey Frolkin Shakhmaty v SSSR 1986 2nd Prize



Is Black mate?

To no. 285 Critical position Next move: e2×Sf3+



No. 284 (FIDE-Album): Black is allowed to capture en-passant: backward 1.d2-d4! d5×Se4 2.Sg5-e4 Rg2-g1 3.Sf3-g5 Rg1-f1 4.Rf1-e1 d6-d5 5.Se1-f3 h7-h6 6.Bc2-d1 Kd1-c1 7.Bf5-c2+. The retro move 1.d3-d4? d5×Se4 2.d2-d3 etc. would cause the loss of a tempo and an insoluble retro opposition between the rooks on f1.

No. 285 (FIDE-Album): The Bb1 must go to f1, the Bg1 to c1, the wK to e1 and the wQ to d1 in order to retract wPe2×Sf3 and bKg4-h5. This aim is reached by 45 unambiguous single moves in retro help play (!), which prove that the last move was not g3-g4?, but g2-g4!. Here are these moves from the critical position to the diagram position: 1.e2×Sf3+ Kh5 2.Bb5 a6 3.Kf1 a5 4.Kg1 a4 5.B×a4 b5 6.Kh2 b4 7.Kh3 b3 8.B×b3 c6 9.Ba2 c5 10.b3 c4 11.Bb2 c3 12.B×c3 e6 13.Rb2 e5 14.Bb1 e4 15.Be5 e3 16.Bh2 e2 17.Bg1 e1B 18.Qe2 d6 19.Qe7 d5 20.Qd8 d4 21.Re2 d3 22.Se3 d3×Re2 23.g2-g4+ (miraculous!) and Black can avoid the mate by h4×g3 e.p.!. A climax of modern retro composition.

No. 286 Werner Keym

Deutsche Schachzeitung 1971



Mate in 2 b) Pg7→e7

No. 287 Werner Keym Schach-Echo 1971



Mate in 3

No. 288
Werner Keym
Allgemeine Zeitung Mainz



Mate in 3

In no. 286–289 'normal' positions disguise the e.p. key. These problems should be published in the 'normal' chess column of a daily newspaper, not in a retro section.

No. 286: a) the last move could have been $a5 \times Xb4$, therefore no e.p. capture, but 1.b3! $\sim 2.Qa1\#$. b) the last move was c7-c5 Rb6-d6+, therefore 1.b5×c6 e.p.+!. Genesis of the position: the wPs captured 6 times (wPc×Xb); besides d7×Xe6, d2→d8X, bPa×Xb, a2→a8X. Malicious! (cp. the similar problem P0006283)

No. 287: The wPs captured 6 times; a bOfficer captured the Pa on the a-file. The last move was not b7-b6? (because of the bBb1) nor Ke4 \times Xf4? nor Q-f5? R-f6+ (for lack of a sacrificial piece), but bPe7-e5 Rd6-f6+ Q-f5, therefore 1.d5 \times e6 e.p.+! B \times b8 2.Q \times b8+ d6 3.Q \times d6#. 'Sharp-witted.'

No. 288: There are five tries and each has got precisely one refutation: 1.Ra8/B×b5+/Sb6+/Scd6/Sed6? b5×a4/K×d8/K×e8/b5×a4/K×d8!. Therefore many chess friends were at their wits' end because the high number of officers on the board encouraged them to make an effort at mating in a 'serious' manner. But in fact it is a well disguised retro problem. The last moves were b7-b5 Rc6×Xa6+. So the solution is 1.a5×b6 e.p.+! K×d8 2.b7 g6 3.Rd6# and 1...K×c8 2.Ra8+ Kb7 3.Bc6#. 'A brilliant problem, although it conflicts with the established views of composition: capturing key and checking key.' 'After two hours I gave up.' 'I got a headache.' 'A lucky find.' My best retro problem with up to 12 pieces (Meredith).

Retro chic is good. Retro chess is better.

No. 289 Jan Strydom Die Schwalbe 1992

Mate in 2



Wilhelm Maßmann Bodo von Dehn Die Schwalbe 1959 3rd HM

No. 290



No. 291
Bernd Schwarzkopf
Problemkiste 2005

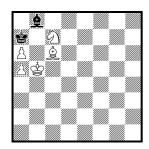


Mate in 4 Stalemate in 2

No. 289: Set play: $1...f4/e6/Se6+/R\sim/g4\times f3$ 2.Qe4/Sf6/B×e6/S×e7/Q×f3#, but 1...c4; tries: 1.Ra1/e6? $g4\times f3/S\times h5!$. Solution: $1.e5\times f6$ e.p.! [thr. 2.Qe5#] $e5/e7\times f6+/Se6+$ 2.Qe4/S×f6/Q×e6#. Genesis of the position: the wPs captured 6 times; besides bPh×Rg and h2→h5. The last move was not h4×Rg3? (too many captures), but f7-f5. A success as to both forward and retro play.

There is no dual-free miniature with the e.p. capture as a key if we disregard no. 291, 292 and the 'A posteriori' problem no. 385. **No. 290** is the only directmate miniature: 1.a5×b6 e.p.! Ka5 2.b7,Bd7,Be8,Sc8 (duals).

No. 291 is a dual-free stalemate problem: $1.h5 \times g6$ e.p.! Kh5 2.Qf4.



No. 292 Hans Gruber & Theodor Steudel

Süddeutsche Zeitung 1986

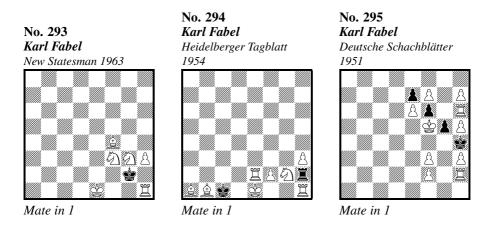
White retracts 1 move and mates in 1

Solution: backward Kc5×Pb5 and 1.a5×b6 e.p.#.

Is this a miniature, yes or no?

'Nasty tricks' in one-move problems

Castling, en-passant capture and the unconventional first move (Black on the move = Black \rightarrow) are in *Karl Fabel's* words the 'three nasty tricks'. Two or three of them occur in the problems of this chapter: as a try (?) or as the solution (!). Here the retroanalytical aspect is no end in itself, but simply helps to present the tricks in one-move problems. In a two or three move problem that is rather easy to implement. (cp. no. 97–105)



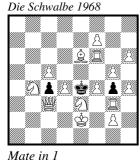
No. 293 is one of the rare miniatures including two of those ominous tricks. Obviously Black did not move last. Therefore not 1.Sh4#?, but $1.\text{K}\times\text{f}3!$ 0-0#.

In **no. 294** Black is to move as well. Therefore not 1.0-0#?, but $1.R \times h1\#!$.

No. 295: The wPs captured 12 b. pieces (bBf8 as well). Backward not $g7 \times Xf6$ nor g7-g5 (with $1.h5 \times g6$ e.p.#?). Black is to play: 1.g5-g4! $h3 \times g4#$.

The Codex for Chess Composition (see p. 170) as far as concerning our point runs as follows: 'If the first move does not lie with the conventionally party ..., this should either be indicated in the stipulation or deducible from retroanalysis.' According to that it does not follow that Black is allowed to mate. If that is intended, the stipulation should be 'Who mates in n moves?' or similar. As to **one-move problems**, however, there is an agreement that Black is allowed to mate. So 'Mate in 1 move' comprises four cases: 1) White moves first and mates; 2) White moves first and Black mates; 3) Black moves first (according to retroanalysis) and White mates; 4) Black moves first (according to retroanalysis) and mates.

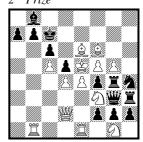
No. 296 Werner Keym



No. 297 Werner Keym Schach-Echo 1967



No. 298 Werner Keym Die Schwalbe 1968 2nd Prize



Mate in 1 Mate in 1

No. 296: The wPs captured 13 times. White's dark-squared white bishop is missing. Black did not move last, therefore not 1.Bd5#?. The last move was not d2-d4? (illegal position of the wPs), but f2-f4! Kf4-e4. The solution is $1.g4 \times f3$ e.p.+! $g2 \times f3\#$. White: #?, #!; Black: \rightarrow , e.p.?, e.p.!

No. 297 (FIDE-Album): The wPs captured 11 pieces, among them the promoted officer X from g1 (earlier bPh×Qg-g1X). Hence the last move was not g7-g5? Sg5-f3+ (not Sg5×Xf3+ for lack of a sacrificial piece) retro stalemate, but e2-e4! Ke4-f4. Therefore the solution is not $1.f5 \times g6$ e.p.#?, but $1.d4 \times e3$ e.p.! $f2 \times e3$ #. White: e.p.#?, #!; Black: \rightarrow ; e.p.!

No. 298: Genesis of the position: $f7\rightarrow f4$, wPg4×Bf5 (hence the last move was not d7-d5? (excluding the bB from c8) with $1.c5\times d6$ e.p.#?), $g7\rightarrow g2$, wPh×Sg, h7 \rightarrow h2, bQ/R/B/S captures wPa and wPb. The last moves were e2-e4 bPe3×Pf2, therefore $1.f4\times e3$ e.p.#!. 'Brilliant idea.' White: e.p.#?; Black: \rightarrow , e.p.#!

No. 299 *Werner Keym Die Schwalbe 1969*1st-3rd HM



Mate in 1 b) wRd8 (instead of S)

No. 300 Werner Keym



Mate in 1

No. 299: May White mate by 0-0-0 or $b5 \times c6$ e.p.? That's the issue. Genesis of the position: the wPs captured the 4 missing black pieces, among them the Bf8 (hence backward not e7-e6?) and the promoted officer X from g1 (earlier $bPh \times R/Sg \rightarrow g1X$), besides bPbxS/Ra. So the last move was c6-c5 or c7-c5. – a) backward c6-c5? Qc7-b6+ b6×S/Ra5 B-f3 K-g1 B-d5/e4+ is illegal, since the necessary retro moves a3×Bb4-b5, bBf8→b4 and e7-e6 lock up both black rooks within their cage; backward c7-c5! Qc6-b6+ b6×S/Ra5 Kd1-e1 (not B-f3 K-g1 since the wQc6, too, guards the squares g2 and h1) Kf1-g1 is possible. Hence not 1.0-0-0#?, but 1.b5×c6 e.p.#!. – b) backward c6-c5! Qc7-b6+ b6×Sa5 B-f3 K-g1 B-d5/e4+ is possible, because the cage is opened by wRh8-d8. Hence not 1.b5×c6 e.p.#?, but 1.0-0-0#!. a) White: \rightarrow , 0-0-0#?, e.p.#!; b) White \rightarrow , e.p.#?, 0-0-0#! – In my opinion this task (white e.p. capture being real, white castling being virtual) can be achieved in a one-move problem only by means of a cage with a wQ. The first rendering was P0004848, after that P1011952 and P0000830. In the twin no. 299 try and solution are changed by a small modification which in a quite unobtrusive manner seems to be deceivingly irrelevant (wSd8/wRd8). None of the 26 pieces may be on a different square. Perhaps my best retro problem.

No. 300 is a retro problem for beginners. Only White's wQ and wR are missing. Hence the last black move could not be bPg2×Q/Rh1R? nor Kg2×Q/Rg1?. Black is to play. As White threatens to mate by 1.0-0-0, Black plays 1.d7-d5! but now $1...c5\times d6$ e.p.#. White: 0-0-0#?, e.p.#!; Black: \rightarrow

No. 301 Werner Keym Schach-Echo 1967



Mate in 1

No. 302 Werner Keym Schach-Echo 1967



Mate in 1

No. 303 Werner Keym



Mate in 1

Problems no. 300–306 present the three tricks altogether.

No. 301: Here the retroanalysis is not difficult. The wPs captured 14 times. White's light-squared bishop is missing, hence backward bPd6×Be5? was impossible. The retro move e7-e5? Rd6-f6+ (not Rd6×Xf6+? for lack of a sacrificial piece) results in a retro stalemate since the bK has no previous move. So the solution is not $1.f5 \times 66$ e.p.#?, but Black is to play: $1.K \times 63!$ 0-0#. White: e.p.#?, 0-0#!; Black: \rightarrow

No. 302: The wPs captured 11 pieces on the files b-g, among them the promoted officer from h1 (earlier h7 \rightarrow h1X). So 1.0-0#? is a try. The last moves were wPa2-a4! bPa3 \times Sb2, which forces Black's e.p. capture. 1.b4 \times a3 e.p.! Qc3#. White: 0-0#?, #!; Black: \rightarrow , e.p.!

No. 303: The wPs captured 7 pieces, among them the promoted officer X from a1 (earlier $a7 \rightarrow a1X$, hence 0-0-0 not permitted); the bBc8 died on c8. The last move was not bPg3×Xh2? (too many captures) nor f6-f5/f7-f5? Qf7-g6+/Qf6-g6+? (no previous black move). So neither 1.0-0-0#? nor 1.g5×f6 e.p.#? is permitted. Black is to play: 1.h2×Sg1Q#!. White: e.p.#?, 0-0-0#?, Black: \rightarrow , #!

No. 304 Karl Fabel Nenad Petrovic problem 1953 Comm.



Mate in 1

No. 305 Werner Keym Die Schwalbe 1968



Mate in 1

No. 306 Werner Keym Die Schwalbe 2007

Fabel Memorial 2nd Prize



Mate in 1 b) Pd7→e7

No. 304: The wPs captured 8 times; besides $bK\rightarrow d1\rightarrow a1$ (0-0 not permitted) and wX×Bc8 (the bBa4 is a promoted officer). The last moves were not e6-e5? $c3\times Xb4+$? (too many captures) nor e7-e5? Rf6-b6+ (not Rf6×Xb6+? for lack of a sacrificial piece) retro stalemate. Tries: $1.B\times e5\#$?, $1.d5\times e6$ e.p.#?, 1.Ke2#?, 1.0-0#?. Black is to play: 1.d7-d6! Ke2# and $1.B\times b5!$ B×e5#. White: #?, #?, 0-0#?, e.p.#?, #?; Black: \to

In no. 305 and 306b the three nasty tricks occur in the solution. **No. 305** uses the same mechanism as no. 302. The wPs captured 11 pieces on the files b-g, among them the promoted officer X from g1 (earlier bPh \times Qg-g1X); besides h2 \rightarrow h8X. Try: 1.0-0#?, but Black is to play since the last moves were wPa2-a4! bPa3 \times Xb2, which forces Black's e.p. capture: 1.b4 \times a3 e.p.! 0-0#. White: 0-0#?, 0-0#!; Black: \rightarrow , e.p.! The first rendering of the three nasty tricks in a one-move problem is P1011955.

No. 306: The wPs captured 9 times. a) one of them captured the promoted officer X from a1 (before that $a7 \rightarrow a1X$, hence 0-0-0 is not permitted). The last moves were $f3 \times Sg2$ Sh4-g2 (earlier $e3 \times Xf4$ and $e5 \times Bf4$). The simple solution is 1.Ke2#. b) backward $f3 \times Sg2$? and earlier $e5 \times Bf4$ would cause too many captures. The last moves were f2-f4! $f3 \times Sg2$, earlier $bPa3 \times Bb2-b1X$ and castling is permitted. The solution is $1.g4 \times f3$ e.p.! 0-0-0#. a) White: \rightarrow , 0-0-0#?, #!; Black: \rightarrow , b) White: #?, 0-0-0#!; Black: \rightarrow , e.p.! A small modification of the position results in a great modification of the content. 'Most elegant and with greater retro depth than many other one-movers.'

Problems out of the ordinary

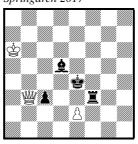
The following problems have unusual (supplementary) stipulations, contents, chess-boards and/or solutions.

No. 307 Werner Keym Stuttgarter Zeitung 2006



Mate in 1 (Give reasons)

No. 308 Christer Jonsson Springaren 2017



Helpmate in 2 b) Shift the pieces $(a1\rightarrow b2)$ c) Shift the pieces $(a1\rightarrow c3)$

No. 309 Werner Keym Stuttgarter Zeitung 2008



Remove 1 piece.
Mate in 2
How many solutions?

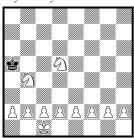
A mate in 1 or 2 moves with the board occupied by 7 or 8 pieces only – do those problems appear to be suitable for beginners?

No. 307: Even in a one-move problem psychology may play a part. The supplementary stipulation 'Give reasons' led many chess friends into temptation for a mate by Black: 1.Qc7#?. But that is not correct because the last moves could have been $bKd6 \times Pc6 d5 \times c6 e.p. + c7-c5 B-a3+$ (the well-known trick, cp. no. 123 and 218). So the solution is very simple: 1.Qb5#!. Anti-paradoxical, as one might put it. (cp. P0007173)

No. 308: These are the solutions: a) 1.Kd4 e4 2.Re3 $Q \times d5\#$, b) 1.Kg5 $Q \times e6$ 2.Kh4 $Q \times g4\#$, c) 1.Rh7 $Q \times f7$ 2.Kh6 Qf6#. It is interesting to examine the reasons for the solutions being different.

No. 309: If you remove the Sg2, there is an asymmetrical solution: $1.Rgg2! \sim 2.Qf8\#$. That is not the whole content, of course. There is a second solution, so if you remove the Pd5; then Black did not move last and is to play. $1.K\times e2!$ Qd8 2.Kf1/Kf3 2.Qd1# or as an echo $1.K\times g4!$ Qa5 2.Kf3/Kh3 Qh5#. No. 309 is related to no. 270.

No. 310 Thomas R. Dawson Asymmetry 1927



Add the white queen, then stalemate in 1 b) mirrored $(a1 \leftrightarrow h1)$

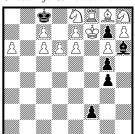
No. 311 Bedrich Formánek Chess Jokes 2000



Helpstalemate in 2*

No. 312 Pal Benko

Chess Life & Review 1976



Helpnotmate in 3 White to play

No. 310: The queen is always on the left side of the king. Hence a) Qa1! and 1.a2-a4, not Qd1? and 1.c2-c4, b) Qe1! and 1.f2-f4, not Qh1 and 1.h2-h4. Classical asymmetry.

No. 311: The solution is not difficult: $1.d1S! \ Q \times c5 \ 2.Sf2 \ Q \times f2$ stalemate. But the little star reminds us of the set play which usually is half a move shorter (here 1.5 moves). Therefore $1...d1Q! \ 2.Qc2 \ Q \times c2$ stalemate. A piquant idea: the white king being stalemated in set play and the black king right so in actual play. But stalemate is considered to be a draw, isn't it.

In **no. 312** White and Black collaborate <u>not</u> to checkmate. This following mate is threatening: 1.a7 f1Q/R#, 1...f1S 2.a8B/S \sim 3.Sb6/Bb7#. Therefore 1...f1B! 2.a8B! (echo promotion) Ba6 3.Bb7+ $B \times b7$. A genuine novelty!

No. 313 Wilhelm Kluxen Die Welt 1947



White moves and does not mate

No. 314 Karl Fabel Rätselstunde 1952



White moves and does not mate

No. 315
Karl Fabel

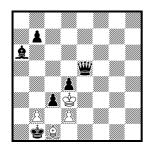


White moves and does not win

No. 313: Black's unique capture was bPba $7 \times Qc6$. The last move was d7-d5. So White can play $1.c5 \times d6$ e.p.! and does not mate.

No. 314: There is no mate after 1.Rg6-c6+! Rb7 \times h7; 1 white bishop is a promoted officer. An earlier example is P0005856.

No. 315: After 1.c4+! $R \times c4$ there are two ways: not 2.Sc7+? $R \times c7$ 3.Se7+ $R \times e7$ 4.e4+ $R \times e4$ 5.f3×e4# win, but 2.e4+! $R \times e4$ 3.Se7+ $R \times e7$ 4.Sc7+ $R \times c7$ stalemate.



No. 316 Werner Keym

Allgemeine Zeitung Mainz 2002 Has White been mated?

Not so at all. The last moves seem to be bPb4×c3 e.p.+ (the well-known trick) c2-c4 b5-b4+, but then the position is illegal since the black king is locked up. According to the laws of chess Black has to retract the not allowed en-passant capture (backward bPb4 and wPc4) and to move the Pb4 he has already touched, i.e. Pb4-b3. This position, however, is stalemate. So the result is a draw.

No. 317
Fritz Giegold

Deutsche Schachblätter 1952 2nd Place



Mate in 3

No. 318 W. Wolff

Fern vom Alltag 1922



Mate in 3 by the Ra5 which does not move.

No. 319 Werner Keym Die Schwalbe 1991

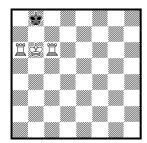


Helpmate in 2*
1 Bishop does not move

No. 317: 1.Bd4! (Pe4 is unpinned in advance) $K \times h4$ 2.f4 $e4 \times f3$ e.p. 3.Bf6# or 1...Kh6 2.Ra5 Kh7 3.R×h5#. *Giegold's* chess problems are famous puzzles. You will find amazing examples in *PDB* (A='Giegold').

No. 318: Conditional problems existed as early as in the Middle Ages (see *PDB* K='conditional problem'). $1.b5 \times c6$ e.p.! e4 2.Se3 K \times g5 3.K \times d6#. What a stunt. There is even a setting without the condition (P1284567).

No. 319 shows new effects. In the set play 1...Be4+ 2.Kh8 Be5# the existing bBa1 is immobile. In the solution 1.Bh8! Bf4 2.a1B! Be4# the new bBa1 is immobile, but enables the wBh1 to move. 'Two gags in one problem: stipulation and underpromotion.'



No. 320

Old Chinese Puzzle

White to play mates.

Each white piece moves exactly once.

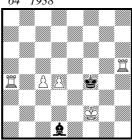
The 'normal' solution would not be so bad: 1.Ra8+ K×a8 2.Rc8#, but the king, too, must move. Therefore 1.Rd6! Kc8 2.Ka7 Kc7 3.Rac6#.

No. 321 Karl Fabel Am Rande des Schachbretts 1947



Mate in 1

No. 322 Mark I. Adabashev "64" 1938



White retracts 1 move, then mate in 1 b) all 1 rank up c) all 2 ranks up d) all 3 ranks up

No. 323 Werner Keym

a) Hannoversche Allgemeine Zeitung 2003 b) Weser-Kurier 1970



Mate in 1 White to play b) Se1→d2

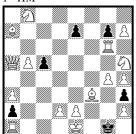
No. 321: In all proof games from the initial array to the diagram position White has got one move more than has got Black. So Black is to play. Therefore the solution is not $1.S \times f7\#$?, but $1.S \times c2\#$!. A classical parity problem (cp. *PDB* K='parity argument').

No. 322: a) Backward c2-c4 and 1.d4-d5#; b) backward $b4 \times Pc5$ and $1.d5 \times c6$ e.p.# (in this case the previous double step c7-c5 is supposed); c) backward $b5 \times c6$ e.p. and 1.d6-d7#; d) backward c6-c7 and 1.d7-d8S#. An evergreen!

In **no. 323** the solution of a) is trivial: 1.Sc2#; b) seems to be easy as well: 1.Ra4#?. But it is obvious that Black did not move last. Nevertheless the stipulation runs as follows: 'White to play'. That is possible only if White has just played Ke1-c1 as the first part of 0-0-0 and then plays Ra1-d1 as the second part. After that Black mates by 1...Qb2#!. Mean!

Variatio delectat – even with one-move problems!

No. 324 Werner Keym Die Schwalbe 1968 1st HM



Mate in 2 How many solutions?

No. 325 Thomas R. Dawson Falkirk Herald 1934 Ist Prize



Mate in 2 b) Black to play

No. 326 Edgar Fielder



May Black castle?

In **no.** 324 there are two tries which are intentionally provoked by the question 'How many solutions?': $1.b5 \times c6$ e.p.+? $K \times h2$ 2.Qe5# and 1.0-0-0+? $Kf2/K \times h2$ 2.B×c5/Rh1#. These tries, however, fail for retroanalytical reasons. All 16 white pieces are on the board. The wPs captured 9 times, the bBf8 died on f8. If the last move was c7-c5? Rb6-g6+ (not Rb6 \times Xg6+? for lack of sacrificial pieces), a previous black move would be missing. So Black is to play. White threatens by 1.0-0-0. Therefore Black's only answer is $1.K \times h2$! Kf2 2.~ Rh1#. This was the first two-mover to show en-passant capture and castling as the sole tries and Black to play as the sole solution – in a quite simple position.

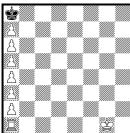
In **no. 325** the bPs captured 9 times, wBf1 died on f1. If White is to play, castling is permitted, therefore 1.0-0! \sim 2.Re1#. If Black is to play, either the wK or the wR must have moved and castling is not permitted, therefore 1.Ra6! \sim (not 0-0?) 2.Ra1#.

No. 326 (FIDE-Album): No, he has already castled! Here are the retro moves: 1... Kd8-e8 2.Q- Kc8-d8 3.Q- Kb7-c8 4.Q- Rb8-h8 5.-9.Q- Kg8 \rightarrow b7 10.Q- Rc8-b8 11.Qb8- Rf8-c8 12.b7-b8Q <u>0-0</u> 13.c6 \times Qb7 Qa8-b7 14.h5-h6 Qd8-a8 15.d5 \times Bc6 Bb7-c6 16.h4-h5 Bc8-b7 17.d4-d5 c6-c5 18.e3 \times Sd4 Se6-d4 19.f2 \times Re3 b7 \times Ba6. There is nothing on earth in chess that might be called impossible.

No. 327

Bader Al-Hajiri
(after W. Shinkman)

(after w. Sninkman) Website T. Krabbé 2007



Mate in 8 Chess 960

No. 328 Johannes Burbach Problemkiste 1991



White castles in 4

No. 329
Filip S. Bondarenko
Feenschach 1960



Win

No. 327: In Chess 960, often called Fischer Random Chess, the white king is located between the two rooks on one of the six squares (b1 ... g1). In case of castling on the left side, the king moves to c1 and the rook to d1 (on the right side K to g1 and R to f1) as usual. So this is the solution: 1.0-0-0! (Kc1 and Rd1) $K \times a7$ 2.Rd8 $K \times a6$ 3.Rd7 $K \times a5$ 4.Rd6 $K \times a4$ 5.Rd5 $K \times a3$ 6.Rd4 $K \times a2$ 7.Rd3 Ka1 8.Ra3#. Thus *Shinkman's* famous problem (with wKe1 and 1.0-0-0!), which unfortunately has got a cook (1.Kd2!), became correct. Amazing.

In **no. 328** the aim is castling, not mating (cp. no. 433). 1.Sd1! zugzwang Bf1 2.Sb2 [thr. 3.0-0-0] Be2 3.Sa4! zugzwang Bd1/Bf1 4.0-0/0-0-0. Try: 1.Sf1? Bd1 2.Sh2 Be2 3.? Asymmetry.

No. 329: 1.Qd8+! Rd6 2.Qb7+ Rc4-c5 3.Qa5+ 4.Qb3+ 5.Qd2+ 6.Qf3+ 7.Qg5+ e5 8.Qf7+ 9.Qd8+ 10.Qb7+ 11.Qa5+ 12.Qb3+ 13.Qd2+ 14.Qf3+ e4 15.Qg5+ 16.Qf7+ 17.Qd8+ 18.Qb7+ 19.Qa5+ 20.Qb3+ Rdc4 21.Qd2#. A merry-go-round!

'Who is not able to check, will never be able to mate.' *Teresa from Avila* knew about that as early as in the 16th century.

No. 330 Werner Keym Die Schwalbe 2009



To how many squares at most could each of the existing pieces move, if it never moved to a square twice?

No. 331 Werner Keym Die Schwalbe 1976

Die Schwalbe 1976 Version Die Schwalbe 1996



Mate in 2 Which piece can you put on a different square without modifying the solution?

No. 332 Dirk Borst Thomas Brand Hans-Peter Reich Ulrich Ring

Andernach Meeting 1997 Prize



Does the position remain legal, if any two pieces change their places?

No. 330: The last move was 0-0-0+ (1 square for wK, 1 for wR), earlier e.g. bKg1×Sh1. Genesis of the position: wS×Sb8, wS×Bc8, wS×Qd8, b0-0-0 (1 square for bK), wS×Rd8; bKc8 \rightarrow h1 (34 squares); bPf7 \rightarrow a2, then (with wKe1 Qb1 Ra1 Sd1) bPa2×Qb1Q und bQb1-c1-b1 \rightarrow g8-f7 \rightarrow a8 (46 squares); sum: 83 squares. At first the pawn on a2 moves to b1 and promotes to queen. After that this queen moves to c1 and b1 for the first time. Therefore I use the verb 'move' instead of 'occupy' (for German 'betreten'). Two castlings and a queen promotion in an attractive position. The first example is P1346726.

In **no.** 331 wBc1 died on c1, bBc8 on c8 and bBf8 on f8. Two promoted officers (one white, one black) were captured on the d- or e-file. Genesis: a) bOfficer×Pa, a7→a1X (w0-0-0 not permitted), wOfficer×Ph, h2→h8X or b) wOfficer×Pa, a2→a8X (b0-0-0 not permitted), bOfficer×Ph, h7→h1X (w0-0 not permitted). Solution: a) 1.0-0! 0-0-0/e7×d6/Rf5 2.Rc1/Sc7/Q×e7#, b) 1.Rf1! e7×d6/Rf5 2.Sc7/Q×e7#. The supplementary question was published in 1996. The answer is singular: whichever piece is put on a different square, the solution is modified, even in the case of Ra1 since then the part b) of the solution (1.Rf1) will be dropped because this will no longer be a problem with Partial Retrograde Analysis! 'Though this be madness, yet there is method in it.' (*Shakespeare*)

No. 332: Yes. This is the record with 28 pieces. The annual meetings of the friends of fairy chess at Andernach are always creative.

No. 333 Joachim Sontag Die Welt 1952



Mate in how many moves?
White to play

No. 334 Hans Klüver Funkschach 1926



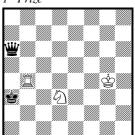
White moves and wins the queen.

No. 335

Henry Forsberg

W. Pauly Memorial 19

W. Pauly Memorial 1935 Ist Prize



Helpmate in 2 b) bRa6 c) bBa6 d) bSa6 e) bPa6

No. 333: There is no mate at all. White can neither do away with the stalemate position of the bK nor prevent Black from giving perpetual check or from producing stalemate himself: e.g. $1.Rb2 Sa2+ 2.Kb1/R \times a2 Sc3+/Rc2+$; 1.Rh2 Sa2+ 2.Kb1 Sc3+ 3.Kc1 Sa2+ or $3.Ka1?? R \times h2$ and now it is even White who will be mated. Crazy.

No. 334 is one of my favourites. Obviously White quickly conquers the queen by 1.Sc2!?. What will Black do against $2.S \times b4+$? Here is the unexpected answer: 1...Re6! and $2.S \times b4\#$ does not conquer the queen, but the king!! Solution: 1.e8S! [thr. $2.Sc7+ \sim 3.S \times a6$] Bd6 and only then $2.Sc2 B \times c5 3.Sc7+$ or $1...Rc6 2.Sc2 B \times c5 3.d4 \times c5$. 78 of 103 entries were incorrect.

No. 335 is a perfect quintuplet:

a) 1.Qf6 Sc5 2.Qb2 Ra4# key move by Q/R/B/S/P,

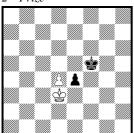
b) 1.Rb6 Rb1 2.Rb3 Ra1# 5 different mates,

c) 1.Bc4 Se1 2.Ba2 Sc2# singular position of the wK,

d) 1.Sc5 Sc1 2.Sa4 Rb3# Problem chess at its best.

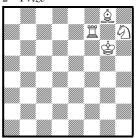
e) 1.Pa5 Rb3+ 2.Ka4 Sc5# (cp. no. 244)

No. 336 Andreas Witt Die Schwalbe 2004 W. Dittmann Jubilee 2nd Prize



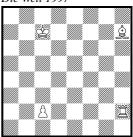
How many possible moves did Black have before his last move a) $d5 \times Qe4$, b) $d5 \times Re4$, c) $d5 \times Bd4$, d) $d5 \times Se4$, e) $d5 \times Pe4$, f) e5-e4?

No. 337 *Werner Keym Die Schwalbe 1993*2nd *Prize*



The centers of the squares occupied by the four pieces are the corners of a square (f7-g8-h7-g6). How can you form 12 squares varying in size in 36 moves and return to the initial square (f7-g8-h7-g6) in the 36th move?

No. 338
Andreas Witt
Die Welt 1997



The centers of the squares occupied by the four pieces are the corners of a square (c2-c7-h7-h2). How can you form a square of the same size in 5 moves on different squares of the chessboard?

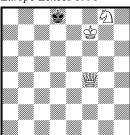
b) wSc2.

No. 336: Black had 3 possible moves before $d5 \times Qe4$ ($d5 \times Qe4$, Kf5-f6, Kf5-g5), 4 before $d5 \times Re4$, 5 before $d5 \times Se4$, 6 before $d5 \times Be4$, 7 before $d5 \times Pe4$ and 8 before e5-e4. A retro sextuplet for the anthology.

No. 337: 1) Kg5 Rf8 Be6 (5 area units), 2) Kg4 Re8 Bd5 (10), 3) Kg3 Rd8 Bc4 (17), 4) Kg2 Rc8 Bb3 (26), 5) Kg1 Rb8 Ba2 (37), 6) Kh1 Rb7 Bb1 (36), 7) Kh2 Rc7 Bc2 (25), 8) Kh3 Rd7 Bd3 (16), 9) Kh4 Re7 Be4 (9), 10) Kh5 Rf7 Bf5 (4), 11) Kh6 Rg7 Bg6 (1) 12) Bf7 Kg6 Rg8 (2). New idea with the old *Pythagoras* ($a^2 + b^2 = c^2$; $c = \sqrt{a^2 + b^2}$).

No. 338: a) is easy: 1.c3 2.Kc8 3.Bf5 4.Rh8 5.Bh3 (with changes of the moves), b) is insidious: 1.Se1 2.Kd8 3.Rh5 4.Bc2 5.Ba4. *Pythagoras* again!

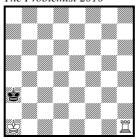
No. 339 Eric Angelini Europe Echecs 1990



Add 1 square to the board.

Mate in 2

No. 340 Alain Brobecker Stephen Emmerson The Problemist 2010



- a) White removes 1 square and mates twice as fast.
- b) White removes 2 squares and mates 8 times as fast.
 c) Black removes 2 squares and draws.

No. 341 Werner Keym Stuttgarter Zeitung 2004



Shortest mate on the a) 8×8 board b) 4×8 board (a1–d8) c) 3×8 board (a1–c8)?

No. 339: Add a square e9 and then play 1.Se9! zugzwang $K \times e9$ 2.Qc7#.

No. 340: There is a mate in 8 moves: 1.Rb1 2.Ka2 ... 5.Ka5 Ka8 6.Kb6 Kb8 7.Rc1 Ka8 8.Rc8#. a) Without the square c3 White mates in 4 moves: 1.Rh4 Kb3 2.Kb1 Ka3 3.Kc2 Ka2 4.Ra4#. b) Without the squares a4 and b4 White mates in 1 move: 1.Rh3#. c) Without the squares g1 and h2 Black draws.

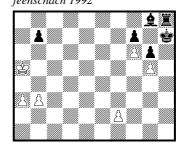
No. 341: a) A mate in 2 moves is possible on the 8×8 board (1.Bb6! b4 2.Qf1#); b) a mate in 3 moves on the 4×8 board (1.Qb1,Qb2,Bb6,Bb8! ...); in both cases the last moves could have been Kb7-a6 d5 \times Xc6+. In c), however, that was impossible since the d-file is missing. Hence the last move was b7-b5 and the e.p. capture is allowed: $1.a5\times b6$ e.p.#! – in 1 move! Cp. P1108931.

No. 342 Werner Keym Die Schwalbe 2005



Shortest mate on the 4×8 board (e1-h8) from the initial game on b) mirrored (e1 \leftrightarrow h1)

No. 343
Rolf Wiehagen
feenschach 1992



Helpmate in 5

No. 342: Genesis of the position: a) the dark-squared Bf8 is a promoted officer, the wPs captured 3 times, wOfficer×Ph, h2-h8B-g7-f8. Hence the last move was not h7×Xg6 nor g7-g6, but f7-f5 with a mate in 2 moves: 1.e5×f6 e.p.! e3 2.f7#. A try in 4 moves is 1.K×g6? f4 2.B×e4 f3 3.K~ f2 4.Bg6#. In b) this try (1.K×f6? g4 ... 4.Bf6#) exists as well. Here the genesis of the position: the dark-squared Be1 is a promoted officer, hence bPf7-f6, bPg7-g6, wPe→e6xR/Sf7-f8B, e7→e1X, wP×Xg/h, wBf8-h6→e1. So the last move was not g7-g5. Black is to play: 1.h3! Bg3 2.h2 B×h2 3.g4 Kg6,Ke6 4.g3 B×g3 5.f5 Be5#, i.e. a mate in 5 moves. These mirrored twins cannot be achieved on the standard chessboard. 'Original and tricky.'

No. 343: 1.b5 g4 2.b4 g5 3.b4xa3 g6 4.a2 g6xh7 5.a1S h8S#. A perfect rendering of the 100 Dollar Theme (cp. p. 35) – on a chessboard out of the ordinary.



No. 344
Thomas R. Dawson

Bolton Football Field 1911

Mate in 21

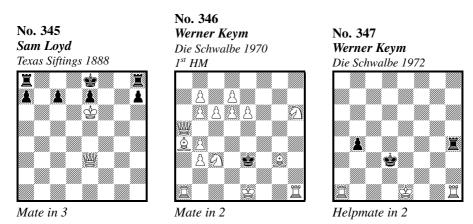
Move to the free square each time: S R S R B, R S R S B, S R S R K, S K R K, 20.Sf2 Ka3 21.Re3×c3#. This problem is called 'Revolver Practice'.

Partial Retrograde Analysis (PRA)

The castling convention and the en-passant convention are clear. 'Castling is permitted unless it can be proved that it is not permissible.' 'An en-passant capture on the first move is permitted only if it can be proved that the last move was the double step of the pawn which is to be captured.' (Codex for Chess Composition, article 16.1 and 16.2, see p. 170).

For a long time the cases in which several move rights (castlings and/or e.p. captures) are mutually dependent were unclear. In 2008 the Codex was modified (article 16.3): 'Partial Retrograde Analysis (PRA) convention. Where the rights to castle and/or to capture en-passant are mutually dependent, the solution consists of several mutually exclusive parts. All possible combinations of move rights, taking into account the castling convention and the en-passant convention, form these mutually dependent parts.'

No. 345–353 treat castlings, 354–359 e.p. captures, 360–366 both of them.



No. 345: According to 16.1 long castling is permitted, as the Rh8 can have moved last; according to 16.1 short castling is permitted, as the Ra8 can have moved last. However, a proof game from the initial position to the diagram position in which neither the Ke8 nor the Ra8 nor the Rh8 has moved is impossible. So Black does not have the right to castle both long *and* short, but either long *or* short. If 0-0-0 is permitted, then the solution is $1.Qd4! Rg8 2.Qd7 + Kf8 3.Q \times e7#$; if 0-0, then $1.Qg5! Kd8 2.Od5 + K \sim 3.O \times a8#$.

But the question remains: what if the Ke8 moved last? Are there three solutions (1.Qd4 and 1.Qg5 and 1.Qc5) in this case? No, since the assumption that the two castlings are not permitted does not correspond with the PRA convention which demands expressly 'to take into account' the castling convention, i.e. to exclude no (castling) right for no reason. In other words: one can prove that the two castlings exclude each other, but not that both of them are not permitted. So only the two above-mentioned partial problems (with the solution either 1.Qd4 or 1.Qg5) remain. Therefore no. 345 does not have two (independent) solutions, but **one solution** that consists of **two parts** which – and this is decisive – exclude each other. That's why no. 345 is a two-part PRA problem.

In short, the Partial Retrograde Analysis convention means: If several legal special move rights are mutually dependent, *each* of these rights should once be acknowledged; this also applies to the remaining rights.

Traditional problems with two solutions need the supplementary stipulation '2 solutions'. In PRA problems, however, the number of partial problems is deducible from retroanalysis, that means that the solver himself finds out the number of logical multiple possibilities.

The PRA convention does not prescribe the way in which the partial problems are to be determined. However, there is a formal method which functions well (see p. 114). It is highly suitable for complicated cases (e.g. no. 366).

In **no. 346** either 0-0-0 or 0-0 is permitted. The wPs captured 14 pieces, among them a promoted piece from h1 or a1, which eliminates one castling. If 0-0-0 is permitted, then the solution is not 1.Qe5+? because of Kf3! and White cannot mate since 0-0 is not allowed, but 1.Qc5+! Kd3/Kf3 2.0-0-0/Qf2#. If 0-0 is permitted, then not 1.Qe5+? because of Kd3! and White cannot mate since 0-0-0 is not allowed, but 1.Qg5+! Kf3/Kd3 2.0-0/Qd2#. PRA in try and solution!

This well-known mechanism of the 'promotion of an edge pawn' clearly shows that the PRA convention deals with *special move rights*, not with the *last move*. This move is certainly a possible aid to find out move rights in a position, but in some retro problems (e.g. no. 351–353) it does not play a part.

No. 347 is probably the most economical PRA problem. If 0-0-0 is permitted, then 1.Kc3! 0-0-0 2.Rc4 Rh3#; if 0-0, then 1.Kc2! Ra2+ 3.Kc1 0-0#.

No. 348 Werner Keym Die Schwalbe 2007 (c)



Helpmate in 2 b) $Bc3 \rightarrow d3$ c) $Bc3 \rightarrow b1$

No. 349
Valery Liskovets
StrateGems 2002



Helpmate in 3 2 solutions

No. 350 Luigi Ceriani The Problemist 1931



Helpmate in 3

No. 348: Genesis of the position: the bPs captured 8 times, either wPa \times Xb \rightarrow b8X and h2 \rightarrow h8X (0-0 not permitted) or a2 \rightarrow a8X (0-0-0 not permitted) and wPh \times Xg \rightarrow g8X, hence 0-0-0 and 0-0 exclude each other (cp. no 346). a) The first single move is different: either 1.0-0-0! Ba5 2.b5 Qc7# or 1.d3! B \times e5 2.0-0 Qg7#; b) here it is the second: 1.d5! c4 \times d5/e4 \times d5 2.0-0-0/0-0 Ba6/Qh7#; c) here it is the third: 1.B \times e4! B \times e4 2.0-0-0/0-0 Qb7/Qh7#. Non plus ultra.

No. 349: A double rendering of PRA and a star flight of the bK. If 0-0-0 is permitted, then these are the solutions: 1.Kd7! 0-0-0+ 2.Kc8 Rhe1 3.Rhc7 $R \times e8\#$ and 1.Kd5! 0-0-0+ 2.Kc4 Rhe1 3.Bb5 Re4#. If 0-0 is permitted, then 1.Kf7! 0-0+ 2.Kg8 Rae1 3.Rbg7 $R \times e8\#$ and 1.Kf5! 0-0+ 2.Kg4 Kg2 3.Bh5 h3#. Nice (a)symmetry.

No. 350: If 0-0-0 is permitted, then the solution is 1.R×h2! 0-0-0 2.R×e2 Rh1 3.Re7 Rh8#; if 0-0, then 1.0-0! a4 2.Kh8 Ra3 3.Rg8 Rh3#. The rendering of the mutually exclusive white/black castlings is achieved in a brilliant simplicity. *Ceriani* again!

No. 351 Werner Keym Die Schwalbe 2008

1st Prize



Mate in 3

No. 352 Werner Keym

Stuttgarter Zeitung 2016



White gives check in 2 moves

No. 353 Werner Keym



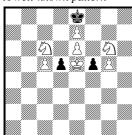
Mate in 2

In **no. 351** (FIDE-Album) each of the four castlings is permitted: $wS \times Bf8$, $bPd3 \times Xc2 - c1B \rightarrow a7$, the promoted officers Rb7 and Ra5 either came from a8 and h1 (then only b0-0 and w0-0 are permitted) or from h8 and a1 (then only b0-0 and w0-0 are permitted). In the first case the solution is 1.Rf1! Kd8 2.Q×c6 Kc8 3.Q×c7#, in the second 1.Rd1! Kf8/R×h6 2.Qg6/Qg6+ Kg8/R×g6 3.Q×g7/Rh8#. So no. 351 (with four castling rights) is 'only' a two-part problem. Tries are: 1.0-0? 0-0-0! and 1.0-0-0? 0-0!. After 35 years of efforts without result this is the first realization of a double paradox: if White can castle long, he is only successful when he gives up precisely this right. The same paradox shows off in the case of short castling.

No. 352: Two promoted officers, which are needed as sacrificial pieces on the e-file, came a) from a8 and h1 or b) from h8 and a1. In a) only b0-0 and w0-0-0 are permitted, therefore 1.Rf1! \sim 2.Rf8+ (not 1.Sf5? Kf8!). In b) only b0-0-0 and w0-0 are permitted, therefore 1.Rd1! \sim 2.Rd8+ (not 1.Sd5? Kd8!). This classical rendering of the paradox (cp. no. 351) is suitable to baffle chess players lacking the 'retro look'.

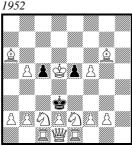
No. 353 is quite different: the bPa and the bPh promoted a) on a1 and g1 or b) on b1 and h1 and were captured as sacrificial pieces, moreover two captures by bPs on c and d; the wPs captured 4 pieces (e.g. wPh×Pg→g8Q). Solution: a) 1.0-0-0! 0-0-0/0-0 2.Qa8/Qh7#, b) 1.0-0! 0-0-0/0-0 2.Qa8/Qh7#. 15 times number 0 in the notation!

No. 354
A well-known pattern



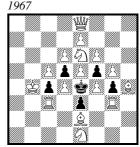
Mate in 2

No. 355 Karl Fabel Deutsche Schachblätter



Mate in 1 b) $Ba6 \rightarrow c6$, $Bg6 \rightarrow e6$

No. 356 Werner Keym Heidelberger Tagblatt



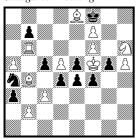
Mate in 1

No. 354: According to the en-passant convention a) $1.c5 \times d6$ e.p.? is not allowed since the last move is ambiguous (d7-d5 or f7-f5) and it is the same for b) $1.g5 \times f6$ e.p.? In these cases, however, the PRA convention works and the solution is a) $1.g5 \times f6$ e.p.! $\sim 2.f7\#$ or b) $1.c5 \times d6$ e.p.? $\sim 2.d7\#$. Hence there are not two (independent) solutions, but *one* solution which consists of *two* parts which exclude each other.

No. 355: The wBc1 died on c1 and one of the bishops is a promoted officer. So there is no sacrificial piece and the last move was not $b6/d6 \times Xc5$? nor $e6/g6 \times Xf5$?. The two e.p. captures exclude each other. The solution is either $1.b5 \times c6$ e.p.#. or $1.f5 \times e6$ e.p.# (PRA). In the twin setting b) Black did not move last and is to play: 1.c4 Sb4# or 1.e4 Sf4# (no PRA, but 2 variants)!

No. 356: There are 16 white pieces on the board. Hence the last move was not bPb5 \times Xc4? nor bPh5 \times Xg4?. So the mate by 1.Rc \times e3#? or 1.Rg \times e3#? is a try. Black is to play. The wPs captured 10 times. The last move was either d2-d4 (then 1.c4 \times d3 e.p.! B \times d3#) or f2-f4 (then 1.g4 \times f3 e.p.! B \times f3#).

No. 357 Werner Keym Stuttgarter Zeitung 2010



Mate in 2

No. 358 György Paros Festgrüße 1947



Helpmate in 2

No. 359 Werner Keym



Mate in 2

No. 357: Three e.p. captures exclude each other. The bPs captured 3 times, but not $d6 \times Xc5$? nor $d6 \times Xe5$? (too many captures). If $d5 \times c6$ e.p. and $d5 \times e6$ e.p. are not permitted, then the last move was g7-g5, therefore $1.h5 \times g6$ e.p.! $\sim 2.g7$ #. It is the same for e7-e5 ($1.d5 \times e6$ e.p.! $\sim 2.e7$ #) and for c7-c5 Rd6-b6+ ($1.d5 \times c6$ e.p.+! Sc5 $2.B \times c5$ #). The first dual-free realization of three possible e.p. captures in a directmate problem. – *Thomas R. Dawson's* early rendering has several duals (P0002175).

No. 358 is probably the earliest helpmate to show three mutually exclusive e.p. captures. If $d4 \times e3$ e.p. and $h4 \times g3$ e.p. are not permitted, the solution is $1.b4 \times c3$ e.p.+! $K \times d4$ 2.c6 Bd6#. Analogous procedure with $1.d4 \times e3$ e.p.! $B \times b2$ 2.f5 Be5# and with $1.h4 \times g3$ e.p.! $B \times b4$ 2.Rf1 Bd2#. Masterly designed. There is even a rendering in a one-move helpmate (P0005589).

No. 359: Bf1 died on f1, Be8 is a promoted officer from c8, not e8, since then 8 captures would be necessary, but the bPh could not promote on g1 (having only the wQ as a sacrificial piece) nor be a sacrificial piece. For the same reason the last moves were not c7-c5 Rd6-b6+ with $1.d5 \times c6$ e.p.+? Sc5 $2.B \times c5\#$. Hence the last move was either e7-e5 or g7-g5. Therefore the solution is either $1.d5 \times e6! \sim 2.e7\#$ or $1.h5 \times g6$ e.p.! $\sim 2.g7\#$. First realization of one virtual and two real e.p. captures.

No. 360 William A. Langstaff Chess Amateur 1922



Mate in 2

No. 361 Niels Høeg Deutsches Wochenschach 1907



Mate in 3

No. 362 Werner Keym



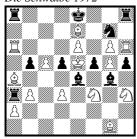
Mate in 3

No. 360: If 0-0 is allowed, then the last move was g7-g5 and the e.p. capture is allowed as well. Hence $1.h5 \times g6$ e.p.! 0-0 2.h7#. If $h5 \times g6$ e.p. is not permitted, then the bK or the bR must have moved last. In this case the solution is $1.Ke6! \sim 2.Rd8\#$. A classic two-part problem. There is an earlier, but less economical three-move problem of the same kind (P0002181).

No. 361 is the first four-part problem (with duals). If 0-0-0 permitted, but not 0-0, then 1.Sc6! R×a1 2.Sf6+,Sg7+ $\sim 3.Q\times h8\#$. If 0-0 permitted, but not 0-0-0, then 1.Sg6! R×a1 2.Sf6+,Sg7+ etc. If 0-0-0 and 0-0 permitted, then either 1.c5×d6 e.p.! Ra5+/R×a1 2.R×a5/Sf6+,Sg7+ $\sim 3.Ra8/Q\times h8\#$ or 1.g5×f6 e.p.! R×h5+/R×a1 2.Q×h5+/Sg7+ $\sim 3.R\times a8,Qh8/Q\times h8\#$. A similar problem with thematic tries (without duals) is P0000891.

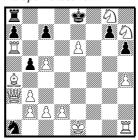
No. 362: Genesis of the position: bOfficer×Pa, a7 \rightarrow a1X, the wPs captured 8 pieces (X as well), not bPc6×Xd5? for lack of a sacrificial piece. If 0-0 not permitted, then 1.Bf6! R×a1 2.B×g6+ Kf8 3.R×h8#. If 0-0-0 not permitted, then 1.Bd6! R×a1 2.B×g6+ Kd8 3.R×h8#. If 0-0-0 and 0-0 permitted, then either 1.c5×d6 e.p.! Ra5+ 2.R×a5 g2×h1Q/g6×h5 3.B×g6/Ra8# or 1.g5×f6 e.p.! R×h5+ 2.R×h5 R×a1/g6×h5 3.Rh8/R×a8#. A dual-free economical four-part problem. A four-part problem of a different kind is no. 61.

No. 363 Werner Keym Die Schwalbe 1972



Mate in 3

No. 364 Luigi Ceriani Europe Echecs 1960



Mate in 2

No. 365 Karl Fabel

Die Schwalbe 1970



Mate in 3

No. 363: bPa3×Qb2-b1B, wPc×Xd, c7→c1R, wPd4×Xc5, wPf×Pe×Qd8B, wPh×Pg. If 0-0-0 not permitted, then 1.Bd6! S×e6 2.R×a8+ Sd8/Kd7 3.B×b5#. If 0-0 not permitted, then 1.Bf6! S×e6 2.B×b5+ Kf8 3.R×h8#. If 0-0-0 and 0-0 permitted, then (if the last move was b7-b5) 1.c5×b6 e.p.+! K×e7/R×a4 2.Bc5+/R×h8+ Kd8/K×e7 3.R×a8/Bc5# or (if d7-d5) 1.c5×d6 e.p.! S×e6/R×h6 2.B×b5+ Bc6 3.B×c6# or (if f7-f5) 1.g5×f6 e.p.! B×e6 2.Bb5+ Bd7 3.R×h8#. This is the sole dual-free five-part retro problem. There are predecessors with duals (P000488-0, -1, -3).

No. 364: The wBc1 died on c1, the Sa1 is an original knight. The wRa6 is a promoted officer or it came from a1 via e1. In the first case the bK has moved and s0-0-0 and e.p. capture are not permitted; therefore 1.0-0! (1.Tf1? $S \times c2+!$) $\sim 2.Rf8\#$. In the second case w0-0 is not permitted, but s0-0-0 und $c5 \times b6$ e.p. are permitted (the last move was b7-b5 $Rc6 \times Xa6+$); therefore $1.c5 \times b6$ e.p.+! $\sim 2.Qf8\#$. This is the first directmate PRA problem showing mutually exclusive w./b. castlings. Such problems need an e.p. capture (no. 364 and 365) or an additional castling (no. 331 and P0000902).

No. 365: The castlings exclude each other. The Ra6 is a promoted officer or it comes from h1 via e1. In the first case w0-0-0 is permitted (b0-0-0 and b5 \times c6 e.p. not permitted), therefore 1.0-0-0! (1.Rd1? prevents 3.Qe1#) R \times a6 2.B \times b5+ c6 3.Qe1#. In the second case b0-0-0 and c5 \times b6 e.p. (before that b7-b5 Rc6-a6+) are permitted (w0-0-0 not permitted), therefore 1.c5 \times b6 e.p.+! c6 2.B \times c6+ Kd8 3.R \times a8#.

No. 366 Gerd Rinder

Die Schwalbe 1972



Helpmate in 2

This is an outstanding retro problem. The wPs captured 3 pieces, among them a promoted officer from h1 or a1. a) If 0-0-0 is permitted, then 0-0 is not permitted and the last move was f2-f4 or d2-d4. So the solution is either $1.Pg4\times f3$ e.p.! $B\times g1$ 2.Qd3 $R\times h4\#$ or $1.Pc4\times d3$ e.p.! $B\times g1$ 2.Pe2 Sd2#; both times the move right 0-0-0 is *acknowledged*, but not executed! b) If 0-0 is permitted, then 0-0-0 is not permitted and the last move could be R-a1, hence no e.p. capture is allowed. Therefore the solution is $1.R\times g3!$ $S\times g3+$ 2.Kf3 0-0#. So no. 366 is 'only' a three-part problem.

The essential difference between the right to castle and the right to capture en-passant is well-known: the right to castle is defined in positive terms since castling is generally permitted; the opposite right is negative. Contrary to that the right to capture en-passant is defined in negative terms since the e.p. capture is generally not permitted; the opposite right is positive.

In the Codex it is not regulated how to find out the partial problems of a PRA problem. Here I am offering a formal method which is suitable for all cases, particularly for complicated ones as no. 366:

1) There exist four special move rights; the opposite rights are marked with '.

 $A = 0 \text{-} 0 \text{-} 0 \text{ is permitted} \\ B = 0 \text{-} 0 \text{ is permitted} \\ C = Pc4 \times d3 \text{ e.p. is not permitted} \\ D = Pg4 \times f3 \text{ e.p. is not permitted} \\ D = Pg4 \times f3 \text{ e.p. is not permitted} \\ D = Pg4 \times f3 \text{ e.p. is permitted} \\$

2) The calculation results into $2^4 = 16$ combinations of special move rights:

(ABCD), (ABCD'), (ABC'D), (ABC'D') – (AB'CD), **AB'CD'**, **AB'C'D**, (AB'C'D') – **A'BCD**, <u>A'BCD'</u>, <u>A'BC'D</u>, (A'BC'D') – A'B'CD, A'B'CD', A'B'C'D, (A'B'C'D').

- 3) The combinations that are not legal are eliminated. These are the eight ones in brackets.
- 4) The combinations that do not correspond with the castling or en-passant convention are eliminated. These are the five underlined ones.
- 5) The remaining combinations form the partial problems. They are the three ones put in bold.
- 6) The first partial problem **AB'CD'** has the solution 1.Pg4×f3 e.p.!, the second **AB'C'D** 1.Pc4×d3 e.p.!, the third **A'BCD** 1.R×g3!. Quod erat demonstrandum.

Retro-Strategy (RS)

'If in the case of mutual dependency of castling rights a solution is not possible according to the Partial Retrograde Analysis (PRA) convention, then the Retro-Strategy (RS) convention should be applied: which ever castling is executed first is deemed to be permissible.' (Codex for Chess Composition p. 170). What does that mean?



Sch

No. 368

Karl Henke Schachmatt 1948

Helpmate in 1.5

Helpmate in 2*

Helpmate in 3

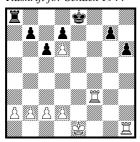
No. 369

For once we begin with helpmate problems because they are very suitable to show the special feature typical of RS problems. – **No. 367** is a basic example. White is to play, hence 0-0-0 and 0-0 exclude each other. If 0-0-0 is permitted (1^{st} partial problem), the solution is 1.Ra1 0-0-0 2.Ra8#. If 0-0 is permitted, there is no mate in 1.5 moves (2^{nd} partial problem). So a solution according to the PRA is not possible. That is why no. 367 (with the sole solution 1.Ra1! 0-0-0 2.Ra8#) is a correct RS problem.

No. 368: Here the white castlings exclude each other. If 0-0 is permitted, the solution is 1.Kc2! Ra2+ 2.Kc1 0-0#. But there is no mate in 2 moves, if 0-0-0 is permitted. In the set play, however, we see the opposite: 1...0-0-0+ 2.Ke2 Rd2#. Retro-Strategy in the solution and in the set play. – If you add a bPa3 you will get a PRA problem with the keys 1.Kc2! or 1.a2!.

No. 369 (FIDE-Album): The existing pawns were never able to capture. At some given time a king or a rook captured one of the opposite officers. Hence both castlings exclude each other. The solution is 1.Rd8! 0-0-0 2.Rd7 Rf1 3.Kd8 Rf8#. Try: 1.0-0-0? 0-0-0?? (not permitted) 2.Rd7 Rf1 3.Kd8 Rf8#. Here Black is in the position to castle first, but he lets White go ahead with castling.

No. 370 *Herbert Hultberg Tidskrift för Schack 1944*



Mate in 2

No. 371 Niels Høeg Die Schwalbe 1933



Mate in 3

No. 370: There are two cases. a) The Rf3 is a promoted officer, hence 0-0-0 is not permitted, the solution is 1.0-0! $(1.Rf1? 0-0-0!) \sim 2.Rf8\#$. b) The Rf3 comes from a1, hence 0-0 is not permitted, there is no mate in 2 moves. A typical RS directmate problem: White castles first and hereby prevents Black's castling.

No. 371 (FIDE-Album): The queen comes from d1 (then 0-0 not permitted) or it is a promoted officer (then 0-0-0 not permitted) – try yourself, please. Therefore $1.Q \times d6!$ Bb7 2.0-0! (2.Rf1? 0-0-0!) $\sim 3.$ Rf8#. Perfect both in content and form!

PRA and **RS** have common and different features: the same retroanalysis, partially the same solution. If in the diagram position two castlings exclude each other, this leads to two options:

- 1) Both retro geneses with their actual castling right are taken into account (principle of equality). Each genesis leads to a solution of one of the parts of the problem ('partial solution'), hence the term Partial Retrograde Analysis. The solutions of the two parts as a whole result in the complete solution. In the course of the solution castling is not obligatory. (cp. no. 345 and 351)
- 2) The one retro genesis whose castling right leads to a solution is taken into account (principle of priority); this genesis determines the game's history more or less, hence the term Retro-Strategy (e.g.: in no. 370 the move 1.0-0 determines the fact that bK or bR must have moved). In the course of the solution the performance of castling is obligatory. The other retro genesis where the castling right does not allow a solution is irrelevant.

The problems no. 372–374 are offers for retro connoisseurs.

No. 372 Valery Liskovets Shakhmaty v SSSR 1978



Mate in 3

No. 373 Henry Adamson The Problemist 1932



Mate in 2

No. 374
Michel Caillaud



Mate in 2

No. 372: The wRa3 comes from h1 (then 0-0-0 not permitted) or it is a promotee from b8 to f8 (then 0-0 not permitted). Solution: 1.Bf6! 0-0 2.Se7+ Kh7 $3.B \times f5\#$, $1...b7 \times c6$ 2.0-0-0! (2.Rd1? 0-0!) $\sim 3.Rd8\#$, 1...b3 2.B $\times f5$ 0-0 3.Se7#, $1...Kf8/R \times h3$ 2.R $\times a8/R \times h3$ etc. Tries: 1.0-0-0? f6!; $1.R \times a8$? $b7 \times c6$ 2.Bf6 0-0!. Singular RS problem with real white and black castlings!

No. 373 is the first RS problem (composed in 1916 according to *T. R. Dawson*). Solution: 1.0-0! (1.Rf1? 0-0-0!) $\sim 2.Rf8\#$ because w0-0 and b0-0-0 exclude each other. Genesis of the position: the bBf8 died on f8; the dark-squared wB is missing. Case a): the last move was f7×Pe6 (or f7×S/Q (= promotee), before that g6×h7-h8Q/S). If the Ra7 comes from h8 via e8, then b0-0-0 is not permitted; if it is a promotee from d1 or f1 (not g1 for lack of sacrificial pieces), then w0-0 is not permitted. Case b): the last move was d7×Xe6. Then Ba4 is a promotee from f1, earlier f2-f1B (w0-0 not permitted) or g2×Xf1B requiring more sacrificial pieces: the wPg and a promotee from f8 (f7-f8X and b0-0-0 not permitted). An excellent problem with a double RS. Another early RS problem is P0001348.

No. 374: Solution: 1.0-0-0! (1.Rd1? 0-0-0!) Rd8/Ra7 2.Sg7/Qb8#; w0-0-0 and b0-0-0 exclude each other. This RS problem is very original: both the queens are promoted officers from b8 and c1, either can serve as a shield against the other one's checking (e.g. wQd1/bQc1 or bQc8/wQb8). Genesis of the position: a7 \rightarrow a3, b7 \rightarrow b3, c7-c5, c2-c4, d2 \times Se3, h2 \times Qg3, wRh \rightarrow f6, g7 \times Rf6, wBc \rightarrow h4, bBf \rightarrow f4, g3 \times Bf4, bS \rightarrow h1, wBh \rightarrow h2, h7 \times Sg6 \times Qf5, bRh-f8, bBc \rightarrow g8, wS \rightarrow h5, g2-g3 (locks up the cage), wBf \rightarrow c2, b3 \times Bc2, b2 \rightarrow b7, bRa-d8 (b0-0-0 not permitted), b7-b8Q, wQ \rightarrow d1, c2-c1Q, bQ \rightarrow h4, wQ \rightarrow b5, bRd-a8 and w0-0-0 is permitted. Deep retroanalysis.

Partial Retrograde Analysis and Retro-Strategy

No. 375 Valery Liskovets Orbit 2008



Helpmate in 3 b) – Pb7 How many solutions?

No. 376 *Valery Liskovets Shakhmaty v SSSR 1980* 2nd *Special Prize*



Mate in 4RS + PRA

No. 377 André Hazebrouck Europe Echecs 1969



Mate in 3PRA + RS

No. 375: a) If 0-0-0 is permitted, the solution is 1.Kd7! 0-0-0+ 2.Kc8 2.Rhe1 3.Rc7 $R \times e8\#$ or, if 0-0 is permitted, 1.Kf5! 0-0+ 2.Kg4 Rae1 3.Rh5 Re4#: a typical PRA problem with 1 solution which consists of 2 parts (cp. p. 106). The setting b), however, has two solutions, if 0-0 is permitted: 1.Kf7! 0-0+ 2.Kg8 Rae1 Rag7 $R \times e8\#$ and 1.Kf5! 0-0+ 2.Kg4 Rae1 3.Rh5 Re4#. But there is no mate in 3, if 0-0-0 is permitted: a RS problem with 2 solutions.

No. 376: The Ba7 is a promoted officer. If it comes from a1, b0-0-0 and b0-0 are permitted. Try: 1.Rd1? $g6\times h5$ 2.Sd5/Sf5 0-0-0!/0-0!. Therefore 1.0-0-0! and the Ba7 comes from c1 which requires more sacrificial pieces (e.g. a promotee from a8 or h8). Hence either b0-0-0 or b0-0 is permitted. Solution: either $1...g6\times h5$ 2.Sd5 Kd7 $3.Q\times e7+$ or $1...g6\times h5$ 2.Sd5 Kd7 $3.Q\times e7+$ or $1...g6\times h5$ 2.Sd5 Kd7 $3.Q\times e7+$.

No. 377: Try: if 1.Rd1?/Rf1?, then 0-0!/0-0-0!. The bBf8 died on f8, Bh6 is a promoted officer. The wPs captured 3 pieces, among them a promotee from a1 or h1, hence the white castlings exclude each other. But each prevents the two black castlings (because of wPd7-d8X). So the solution is either 1.0-0-0! Kf8 2.Rhf1+ Kg8 $3.B \times e6\#$ or 1.0-0! Kd8 2.Rad1+ Kc8 $3.B \times e6\#$, 1... c6 $2.Q \times c6+$ Kd8 3.Sf7#, 1... Qb7 $2.Q \times b7$ Rd8 $3.S \times c7\#$. (cp. P1080375)

In my opinion the PRA and RS conventions are not sufficient to solve no. 376 and 377. So the stipulations 'RS + PRA' and 'PRA + RS' should be added.

No. 378 Werner Keym



Mate in 3 b) – *Bb5* c) + *bSh7* In a) no more than three castlings are compatible as a maximum: w0-0, w0-0-0, b0-0 with the following genesis of the position: d7×Pc6, h3×Sg4, Pf5×Be6, d4×Qe5, f3×Se4, wX×Pa, a2→a8X, the last move was h6×Xg5. Tries: 1.Bxg5? 0-0!; 1.Rd1? 0-0!; 1.Rf1? R×a6!. Solution: 1.0-0! [thr. 2.Qd3] Rf8/Kd8 $2.S\times g7+/Qd3+$ Kd8/Kc8 $3.R\times f8/Qd7\#$. However, there is a genesis of the position where b0-0-0 is permitted: f3×Se4, f7→f1X, a4×Xb5, a7→a1X, b5×Xc6, d7×Pc6, c4×Sd5×Be6, d4×Qe5, g2→g6, h6×Qg5, h2→h8Q (= Qa3), the last move was R-h8; here w0-0, w0-0-0 and b0-0 are not allowed. Tries: 1.B×g5? 0-0-0!; 1.Rf1? R×a6/0-0-0!. Solution: 1.Rd1! [thr. 2.Qf3] Rd8/Kf8 $2.S\times c7+/Qf3+$ Kf8/Kg8 $3.R\times d8/Qf7\#$.

So a) is a PRA problem with two parts: either 1.0-0! or 1.Rd1!.

b) The maximum of three castlings is compatible with the convention in either case. If w0-0/w0-0-0/b0-0 or w0-0/w0-0-0/b0-0-0 or w0-0/b0-0/b0-0-0 are permitted then the solution is 1.0-0! as in version a); in addition to that we see the variant 1...0-0-0 2.Sb4/Sc5 \sim 3.Qa8# – all that with b0-0-0 being permitted. If, however, w0-0-0/b0-0/b0-0-0 are permitted (last move $f6 \times Pg5$, earlier $d7 \times Bc6$) then w0-0 is not allowed and there is no mate in 3. In such a case the RS convention works: the castling which is executed first (w0-0) is permitted. By executing 1.0-0 the case of w0-0-0/b0-0-0 becomes obsolete and is eliminated. Solution: 1.0-0! Rf8/Kd8/0-0-0. So b) is a RS problem: 1.0-0.

In c) no castling whatsoever is permitted and both PRA and RS conventions are irrelevant. Genesis of the position: $g2\rightarrow g6$, $wX\times Pa$, $a2\rightarrow a8X$, $h6\times Xg5$, $h2\rightarrow h8X$, $d7\times Xc6$, $f3\times Se4$, $f7\rightarrow f1X$, $c4\times Xd5\times Be6$, $d4\times Qe5$. The try with $1.B\times g5?$ in version a) and b) now turns out to be the solution in c): $1.B\times g5!$ [thr. $2.Qe7\times \#$] $S\times g5,Sf6/K-2.Sf6+,S\times f6/Qxe7+\sim/K\sim3.R\times h8/Q7\#$. So c) is a 'normal' retro problem without PRA or RS: $1.B\times g5+$.

The deceivingly 'simple' positions with their slight modifications demand different tricky retrograde analyses and show a varied mainly dual-free play with virtual or real castling. My best retro problem with four castlings.

Special Partial Retrograde Analysis (SPRA)

In problems with the supplementary stipulation 'SPRA' the en-passant capture is permitted, unless the opposite can be proved.

No. 379
Karl Fabel
problem 1953

Mate in 1 SPRA

No. 380 Thomas R. Dawson Retrograde Analysis 1915



Mate in 2 SPRA

No. 381 Gerd Wilts Die Schwalbe 2005



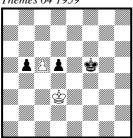
Mate in 1 SPRA

No. 379: Solution: either 1.0-0-0#! or $1.d5 \times e6$ e.p.#!. In the second case the last move was e7-e5 and 0-0-0 is not permitted since the Bh4 is a promotee from g1 or e1. Without 'SPRA' that does not work since it cannot be proved that the double step (e7-e5) was the last move. A two-part SPRA problem.

No. 380 shows a double setting. The wPs captured 6 pieces, among them a promoted officer from h1 or a1 (earlier h7 \rightarrow h1X or a7 \rightarrow a1X). Therefore either 1.0-0-0! \sim 2.Rde1,Rhe1# or 1.0-0! Bb1 2.Rfe1#. If the last move was d7-d5 or e7-e5, then earlier h7 \rightarrow h1B/X and a7 \rightarrow a1X (0-0 and 0-0-0 not permitted) and the solution is either 1.c5 \times d6 e.p.! \sim 2.Sc5# or 1.f5 \times e6 e.p.+! g6 2.B \times g6#. A four-part SPRA problem (as no. 381).

To me **no. 381** is the perfect SPRA problem. Castling is permitted according to this retro play: 1...h6-h5 2.Qh5-g6 h7-h6 3.f2-f3 c6-c5 4.Re3-e2 c7-c6 5.Qd1-h5 Rb1-b2 and a bR gets to h8 via f6 and f8; solution: 1.0-0-0#!. If the last move was c7-c5 or f7-f5 or h7-h5, this retro play fails (for lack of one tempo). Instead the move wRc/d1-a1 (0-0-0 not permitted) makes the previous move bRb1-b2 or bQb1-a2 possible. In this case the solution is $1.b5 \times c6$ e.p.#! or $1.g5 \times f6$ e.p.#! or $1.g5 \times h6$ e.p.#!.

No. 382 Josef Moravec Thèmes 64 1959



End of the game? White to play SPRA

No. 383 Nikita Plaksin Shakhmaty v SSSR 1978 9th TT 1st Prize



Mate in 1

No. 382: White loses by 1.Kc3? Ke6, draws by $1.c5 \times d6$ e.p.? and wins by $1.c5 \times b6$ e.p.!. Small, but nice.

The vague term **Retro Variants** is no longer used in the Codex. Most of the retro problems which were published with the supplementary stipulation 'Retro Variants' or 'RV' before 2008 are PRA problems after the modification of the Codex in 2008 and now need no supplement. In few former problems, however, an en-passant key is intended, although the double step of the pawn cannot be proved according to the Codex (e.g. no. 379–381). Such problems are solvable by means of a special convention as proposed by *G. Rinder* in 1970. I call it the Special Partial Retrograde Analysis (SPRA) convention. That is a PRA convention with the special feature that an en-passant capture is permitted unless it can be proved that it is not permissible. Here the right to capture en-passant is analogous with the right to castle. The SPRA should be expressly stipulated.

Variants which occur in the retro play without exerting any effect on the forward game may be regarded as retro variants in a wider sense. Such problems need no supplement. **No. 383** is a fine example. The solution is not $1.S \times f7\#?$, but $1.Rf \times g7\#!$, since White moved last. The retro play implies two variants:

- a) 1.Bg1-h2 d2-d1B 2.Rh2-g2 d3-d2 3.Rh4-h2 h2-h1S 4.Ra4-h4 h3-h2 5.Ra8-a4 h4-h3 6.a7-a8R . . . 9 . . . d7-d6 10.a2-a4 a3×Xb2
- b) 1.Rg1-h2 h2-h1S 2.Sd2-f1 h3-h2 3.Sc4-d2 d2-d1B 4.Sb6-c4 d3-d2 5.Sa8-b6 h4-h3 7.a7-a8S . . .

In each variant the promotions are separated according to some retro moves.

A posteriori (AP)

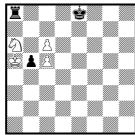
The en-passant capture as a key is permitted only if it can be proved that the last move was the double step of the pawn which is to be captured (p. 170). In general such a prove is due to the retroanalysis of a position, i.e. the past. However the past can be influenced by the future, i.e. by a castling in the forward play.

No. 384 John F. Keeble The Problemist FCS 1936



Helpmate in 2.5 AP

No. 385 Werner Keym Tomislav Petrovic Hannoversche Allgemeine Zeitung 1999



Helpmate in 1.5 AP

No. 386 Nenad Petrovic problem 1954



Helpmate in 3* AP

No. 384 is the first AP realization: $1.e5 \times d6$ e.p.! 0-0-0! $2.d6 \times e7$ Rf8 $3.e7 \times f8Q$,R#. After the e.p. key Black castles and hereby 'proves' a posteriori (after the event) that the last move was d7-d5 and the e.p. capture was permitted. Hence the e.p.capture is legalised by the execution of castling. By the way no. 384 is the first helpmate Valladao (p. 28).

No. 385 is the sole AP miniature: $1.c5 \times b6$ e.p.! 0-0-0 2.b7#.

The prize winner **no.** 386 made the AP idea popular. Set play: $1...Rg1\ 2.B\times b4$ Rg7 3.Ka5 Ra7#. The solution is $1.c4\times b3$ e.p.! 0-0! 2.Sd5 Rb1 3.Sb4 a2×b3#; 1...Ke2? would render the e.p. capture illegal.

Since 1997 the Codex has recommended to add the supplementary stipulation 'AP'. Some composers note it every time, some in directmate problems only, some never ('in order not to betray anything').

No. 387 Gerd Wilts Rochade Europa 1998 (v)



Helpmate in 2 AP

No. 388 Luis Garaza problem 1966



Mate in 2 AP

No. 389
Valery Liskovets



Mate in 1 AP

No. 387: Here two castlings are necessary for the legalisation of the e.p. capture. The wPs captured 5 times, the Bf1 died on f1. The last move was not wS×Xc5? nor a2/c2×Xb3? since then a promoted officer from f1 (w0-0 not permitted) would be needed as a sacrificial piece. If Ke1, Rh1, Ke8 and Rh8 have not made any move, the last moves were c2-c4! c3×Xb2. Therefore 1.b4×c3 e.p.! 0-0! (first prove) 2.0-0! (second prove) Rg4#.

No. 388 is the first correct realization in a directmate problem. If Ke1 and Ra1 have not made any move, the last moves were e7-e5 e6 \times Xf7. Genesis of the position: bOfficer \times Ph, h7 \rightarrow h2, wOfficer \times Pd, d2 \rightarrow d5, c5 \times Sd4, c2 \rightarrow c7, a4 \times Bb5, finally e6 \times Qf7 and e7-e5. Hence 1.d5 \times e6 e.p.! d3 2.0-0-0#!. 2.Kd2#? would render the e.p. capture illegal.

No. 389: The wPs captured 11 pieces, among them the promoted officer X from b1 (earlier bPa×Rb-b1X). The last move was not $e6/g6 \times Xf5$? nor h2-h1B? nor h3×Sg2? because of too many captures. Hence Black is to play and 1.Bh2#? and 1.0-0-0#? are tries. The last move was either Kd1-e1 Kf1-g1 (then no mate in 1) or h2-h4 h3×Sg2 (then 0-0-0# possible). Therefore White 'proves' by castling that only h2-h4 was the last move and hereby forces $1.g4 \times h3$ e.p.! 0-0-0#. For further (complex) AP problems see *PDB* (K='A posteriori').

No. 390 Norman A. Macleod Thèmes 64 1982



Helpmate in 2 b) AP

No. 391 Werner Keym Die Schwalbe 1972



Win AP Black to play

No. 392 Gerd Rinder Die Schwalbe 1973



Draw AP

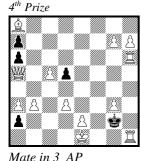
No. 390 is bizarre. a) The solution is 1.Kc3! 0-0-0 $2.R \times c4 R \times d3\#$. b) After castling in a) the AP solution is $1.b4 \times c3$ e.p.! e4 $2.K \times c4$ Ra4#.

No. 391 is even more bizarre. It is not an endgame study, but an AP problem with the stipulation of a study 'Win'. The bPs captured the 5 missing white pieces, among them the Bc1. Hence the last move was not d2-d3? nor $c2\times Xd3$? (too many captures). Therefore White 'proves' by castling that the last move was not K-e1 nor R-a1, but d2-d4 and hereby forces Black's key move: $1...d4\times c3$ e.p.! $2.b2\times c3+K\times c3$ 3.a8Q b2 (3... Kb2 4.Qh8+ Kc2 5.B×b3+) 4.Qh8+ Kb4 5.Qh4+! (5.Q×b2#? is too early because the castling has not yet been executed!) 5... Kc3 (5...c4 6.Qe7+Kc3 7.Qa3+ Kd4 8.Q×b2+) 6.Qf6+ Kb4 7.Qf4+ Kc3 8.Qd2+ Kd4 9.Q×b2+, and the queen conquers Sg1, Pf3 and Pe2. After that White will castle and win.

No. 392 is extremely bizarre. Retroanalysis: The bPs captured 9 times. The last move was not $b7 \times Xc6$? (too many captures) nor $g7 \times Xf6$? (locks up Bd8), but K-e8 or R-a8 or b7-b5. Black tries to castle in order to prove a posteriori that the last move was only b7-b5. Hereby White will be forced to capture e.p. with a win for Black. 'Solution': $1.c5 \times b6$ e.p. $a7 \times b6 + 2.K \times b6$ a1R 3.Kb7 R1×a6 4.Rc8! and castling is prevented. That means: no castling, no e.p. capture. Hence the diagram position is a stalemate position. If the solver had known that before, he would not have had any reason for racking his brains for a second!

In the AP problems no. 384–392 an en-passant capture is legalised by subsequent castling. The following AP problems show something different (and controversial).

No. 393 Nikita Plaksin Andrey Lobusov Die Schwalbe 1975



No. 394 Mordechai Bronstein Die Schwalbe 1977



Helpmate in 3 AP

No. 395
Gerd Rinder



Mate in 2 AP

No. 393: White proves by castling that the Rh1 has never moved so that Black's last move was not Kg1-g2, but d7-d5 (before that $Rc6 \times Xh6+$). Hence the solution is $1.c5 \times d6$ e.p.+! $K \times g3$ 2.0-0! Kg4/a1Q,R 3.g7-g8Q,R/Qg5#. 2.Qg5#? is too early because the castling has not yet been executed! (cp. no. 391). Retroanalysis: The bPs captured the 3 missing white pieces, hence $Pc6/e6 \times Xd5$? was not possible. The Ba8 is not a promoted officer since 8 wPs are on the board.

There is also a selfmate problem showing the same idea (P1348653).

No. 394: The solution seems to be 1.Kc4? b3+ 2.Kd4 0-0-0+ 3.Kc3 Rd3#, but castling is not permitted since the last move was K-e1 or R-a1. Therefore White proves by castling that he is on the move: 1...0-0-0! 2.Kc4 b3+ 3.Kc3 Rd3#. Such ideas can be realized in cooperative play, but what about adversary play? See next problem.

No. 395: This solution is simple: 1.Sf6+! Kd8/Kf8 2.Qc7/Bd6#. But Black, too, claims the right to move first – by subsequent castling: $1.B \times b7+!$ Ke3! 2.0-0-0! $(2.B \sim ? Bb8)$, no castling and no first move) Sb6#. Not $1.B \times d7$? because of $Q \times a8+$ and no castling. Somehow strange, all that!

Loyd's idea: with/without previous play

Sam Loyd was the first to compose a problem, which has got a shorter solution, if the course of the game is taken into account, and a longer solution, if the diagram position is considered to be the initial position.

No. 396 Sam Loyd Missouri Democrat 1859



Mate in how many moves? With/without previous play Incorrect

No. 397 Sam Loyd Missouri Democrat 1859 Version Erich Zepler 1926



Mate in how many moves? With/without previous play

No. 398 Werner Keym Die Schwalbe 1972



Mate in how many moves? With/without previous play

No. 396 probably is the first problem with Partial Retrograde Analysis (p. 106): either b0-0-0 is permitted (then 1.Qb7!) or b0-0 (then $1.Q \times g7!$). Without previous play both castlings are permitted and three moves are necessary: 1.Rg1 (and cook 1.Sh7) 0-0-0/0-0/Kf8 2.Qc7#/Q×g7+/Q×g7+ *S. Loyd* did not succeed in eliminating the cook.

No. 397 is correct: a mate in 2 moves by 1.Qa3! (if 0-0-0 is permitted) or by 1.Q \times g7! (if 0-0 is permitted) and in 3 moves (0-0-0 and 0-0 are permitted) by 1.Rg1! 0-0-0/0-0 2.Qa3/Q \times g7 \sim /K \times g7 3.Qa8#/Sf7#.

No. 398: The bPs captured 5 pieces, among them a promoted piece from h8 or a8 (earlier wPa×Xb and h2 \rightarrow h8X or wPh×Xg and a2 \rightarrow a8X). In the first case the solution is $1.d5\times e6!$ 0-0-0 2.Ra8#, in the second $1.f5\times e6!$ 0-0 2.Sh6#. Without previous play both castlings are permitted and three moves are necessary: $1.S\times e5!$ 0-0-0/0-0 2.Ra8+/Rg7+ Kb7/Kh8 3.d6/Sg6#. Hence the castlings are actually executed in the two-movers and in the three-mover. This happens to be the first and only realization of *Loyd's* idea showing real castlings in all variants up to now.

No. 399 Werner Keym Weser-Kurier 1970



Mate in how many moves? With/without previous play

No. 400 Werner Keym Die Zeit 2009



Mate in how many moves? With/without previous play

No. 401 Valery Liscovets feenschach 1986



Mate in how many moves? With/without previous play

It is quite easy to compose problems without real castlings. In **no. 399** the solution is either 1.Qc7! (if 0-0-0 is permitted) Kf8 2.Qf7# or $1.Q \times g7!$ (if 0-0 is permitted) Kd8 2.Qd7#. Without previous play three moves are necessary: 1.Qc5! Kd8 2.Qd6+ Kc8/Ke8 3.Rc5/Qe7#. (cp. P0000876)

No. 400 is a two-mover if 0-0 is permitted: $1.Q \times g7!$ Kd8 2.Qd7#; it is a three-mover if 0-0-0 is permitted: 1.Qg5! Kf8 2.Qe7+ Kg8 3.Qf7#. Without previous play (0-0-0 and 0-0 are permitted) four moves are necessary: 1.Qc5! Kd8 2.Qe7+ Kc8 3.d6 Re8 $4.Q \times e8#$. A really unexpected outcome. – No. 499 is similar.

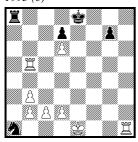
No. 401: Loyd's idea can be realized with the en-passant capture as well. The last move was neither $d7 \times Xc6$? nor $f7 \times Xg6$? (too many captures). If $1.g5 \times f6$ e.p.? is not permitted, then the solution is $1.c5 \times d6$ e.p.#!; if $1.c5 \times d6$ e.p.?, then $1.g5 \times f6$ e.p.#!. Without previous play two moves are necessary: $1.B \times c6$! $b7 \times c6/d5 \times c4/f5 \times g4/B \times g7 + 2.S \times c6/Rd7/Rf7/Q \times g7$ #.

Don't forget: The Partial Retrograde Analysis (PRA) convention deals with mutually dependent special move rights (p. 106), not with the last move. Therefore as to problems no. 396–400, if you take into account the previous play, only one castling is not permitted, not both.

Twins with/without promoted pieces

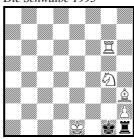
Twins with the special stipulation 'Promoted pieces in the diagram position are a) permitted, b) not permitted' have the same positions, yet different geneses and solutions.

No. 402 Werner Keym Allgemeine Zeitung Mainz 1993 (c)



Mate in 3
Promoted pieces in the diagram position are a) permitted
b) not permitted

No. 403 Werner Keym Die Schwalbe 1993



Mate in 2
Promoted pieces in the diagram position are
a) permitted
b) not permitted

No. 404 Werner Keym Hannoversche Allgemeine Zeitung 1995



Mate in 2
Promoted pieces in the diagram position are a) permitted
b) not permitted

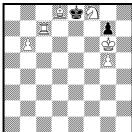
The idea of such a twin occurred to me in 1993. **No. 402** is the first realization. In case a) the last move was a2-a1S; both castlings are permitted, therefore 1.0-0! [thr. 2.Re5+ 3.Rf8#] 0-0-0 2.R×a1 \sim 3.Ra8#. b) The last move was either bK-e8 or bR-a8 (earlier a2×Xb3, bSb3-a1 and wRa1→b5 via e1), 0-0 and 0-0-0 are not permitted. Therefore 1.Rf5! S×c2+ 2.Kf2 \sim 3.Rh8#. Theme: castling.

No. 403 is a rendering in a miniature. [There is even a rendering with five pieces only, if in no. 248 the stipulation is appropriately modified.] In case a) the last move was $g2 \times B/Sh1R$, therefore 1.Rf6! $R \times h2$ 2.Rf1#. b) White moved last, therefore 1.R $\times h2$! Sf2+ 2.Rg2 $R \times g2$ #. Theme: whose move?

No. 404: In case a) the last move was h2-h1S and castling is permitted, therefore 1.0-0-0! $S\times f2, R\times e6/S\times g3$ 2.Re1/Rd4#. b) The following moves occurred: $h2\times Xg3$, bSg3-h1 and wRh1 \rightarrow e6 via e1, hence 0-0-0 is not permitted. The last move was neither Kd/f4-e4? nor Kd/f4 \times Qe4? because of illegal checks by bRe5 or wQe4, nor c6 \times Qd5? for lack of a sacrificial piece, nor e7 \times Qf6? (locking up wBd8), but only d7-d5 (before that Rc6-e6+), therefore 1.c5 \times d6 e.p.+! c6 2.B \times c6#. Theme: castling or en-passant capture.

No. 405 Anatoli Vassilenko

Die Schwalbe 1996 Ceriani Memorial 2nd Section 2nd Prize



Mate in 2 Promoted pieces in the diagram position are a) permitted

b) not permitted

No. 406 Werner Kevm Die Schwalbe 1996 3rd Prize



Who mates in 2 moves? 1 promoted piece exists in the diagram position.

No. 407 Andrey Frolkin Evgeny Reitsen Alexander Shvitchenko Die Schwalbe 1996 2nd Comm.



What was the last move? Promoted pieces in the diagram position: a) 1 white

- b) 1 black
- c) 1 white and 1 black

d) 0

No. 405: In case a) the last moves were Ke7-e8 d7-d8B+; the solution is 1.Rc8! K×f8 2.Bf6#. b) White moved last, hence 1.K×d8 Kf7 2.g6 Se6# or 1.K×f8 Re7 2.Kg8 Re8#. Each of the three officers mates once. Elegant rendering of the theme of the (not) permitted promoted pieces.

No. 406 is different. 8 wPs are on the board, so only bS or bB or bQ can be a promoted piece. a) If the knight is a promotee, then the last move can be $b2 \times Qa1S$ (not e7-e5? because of Bh4), earlier a2×Xb3 and 0-0 is permitted; therefore 1.0-0+! $K \times g3 \ 2.B \times e5\#$. b) If the bishop is a promotee, then the last moves were e7-e5 Rd6g6+; therefore 1.f5×e6 e.p.+! d6 2.B×d6#. Try: 1.0-0+? K×g3 2.B×e5# but 0-0 is not permitted because the Ra1 moved to g6 via e1 for lack of a sacrificial piece (bBf8 died on f8). c) If the queen is a promotee, then White moved last, therefore 1.B×g3+! K∼ 2.Q×h1#. A singular retro triplet with 'four nasty tricks': castling, e.p. capture, promotion, unconventional first move.

No. 407: a) $h7 \times Sg8B+!$; wBg8 is a promotee, bSg8 was a promotee (e7 \rightarrow e3 \times Xd2d1S), hence neither bQ nor bR is a promotee. b) Bh7×Bg8+!; bBg8 cannot be a promotee from d1, so it is bQ or bR. c) $h7 \times Bg8B+!$; wB and bQ or bR are promotees. d) Bh7×Sg8+! and no promotee at all; bSg8 was a promotee; wBa3 can never be a promotee. Very clever.

Narrow corridors

No. 408 Karl Fabel Basler Nachrichten 1964



Mate in 1

No. 409 Luigi Ceriani Sahovski Vjesnik 1951 Ist Prize (c)



Helpmate in 2.5

No. 410 Michel Caillaud

Zadachy i Etyudy 2006 Igor Vereshchagin Tourney 1st Prize



Mate in 2

The problems no. 408–412 show bishop corridors. **No. 408** (FIDE-Album): Genesis of the position: d7-d6, sBc8-g4, f7-f5, g7-g6, sBf8 \rightarrow e3, bRa8 \rightarrow f3, bRh8 \rightarrow g3, f2 \times Bf3, g2 \times Rf3, h2 \times Rg3, the wBf1 and the bBg4 cannot leave the corridor from f1 to h5, one B moves to h1 (evasive move) so that the other can pass by; hence 0-0 is not permitted. The solution is 1.Kf2#.

No. 409: Genesis of the position: wBh2 is a promoted officer; wS×Bc8, bS×Bc1, a7×Sb6, c7×Qd6, f2-f4, e2-e3, wBf1-e2, wRh1 \rightarrow f6, e7×Rf6, g7-g6, a2 \rightarrow a7×Sb8B and a) bRh8-g8 (b0-0 not permitted), bBf8 \rightarrow h8! (evasive move), wBb8 \rightarrow g1, g2-g3, wBe2 \rightarrow g2, h3×Bg2, h2-h4, wBg1-h2, g2-g1S \rightarrow , bBh8 \rightarrow a7 or b) wKe1-d1 (w0-0-0 not permitted), bBf8 \rightarrow e1! (evasive move), wBb8 \rightarrow g1, bBe1 \rightarrow a7, g2-g3 etc. The castlings exclude each other (Partial Retrograde Analysis). If w0-0-0 is permitted, then 1.0-0-0! Q×e3 2.Re1 Qe7 3.c8Q/R#; if b0-0 is permitted, then 1.Sg5 0-0 2.c8Q Kh8 3.Q×f8#. This is one solution which consists of two parts which exclude each other. Grandiose!

No. 410: Genesis of the position: c2-c3, wQ \rightarrow c6, d7 \times Qc6, a7-a6, bQ \times Pa \rightarrow a7, bBc8 \rightarrow f3, h7-h5, bRh8 \rightarrow c8, bSg8 \rightarrow d8, e7-e6, bBf8 \rightarrow e3, d2 \times Be3-e4, h2-h3, wBc1 \rightarrow h2, g2-g3, wSg1 \rightarrow , wTh1-g1 (0-0 not permitted), bBf3-h1 (evasive move), wBf1 \rightarrow g8, g7-g6, bBh1 \rightarrow f5, e4 \times Bf5 \times g6. Therefore 1.Ra5!. What a masterpiece! (cp. P0007780)

No. 411 Werner Keym Hannoversche Allgemeine Zeitung 2004 (v)



May White castle?

- b) $Pd5 \rightarrow c5$
- c) $Pd5 \rightarrow d6$

No. 412 Joaquim Crusats Problemas 2015



White retracts 7 moves, Black 6, then mate in 1 Proca Retractor

No. 411: Genesis of the position: a) $a7 \times Sb6$, $bRa8 \rightarrow f3$, $g2 \times Rf3$, $wBf1 \rightarrow h5$, $g6 \times Bh5$, $a2 \rightarrow a6$, $b6 \times Ra5$, $c7 \times Sb6$, d7 - d5, bBc8 - g4, $h2 \times R \times B \times S \times S \times Qc7$, f7 - f5; 0-0 is permitted. b) 0-0 is not permitted, since the wQ is needed as a sacrificial piece for a bP. c) first genesis: $a7 \times Sb6$, $bRa8 \rightarrow f3$, $g2 \times Rf3$, $wBf1 \rightarrow h5$, $g6 \times Bh5$, $a2 \rightarrow a6$, $b6 \times Ra5$, $c7 \times Sb6$, $bS \times Qd1$, $h2 \times R \times B \times S \times S \times Qc7$, d7 - d6, a6 - a7, bBc8 - g4, wK- or wR- (0-0 not permitted), f7 - f5; second genesis: $bS \times Qd1$, f7 - f5, g7 - g6, $c7 \times Sb6$, $h2 \times R \times B \times S \times S \times Qc7$, d7 - d6, $bBc8 \rightarrow g4$, $bRa8 \rightarrow f3$, $g2 \times Rf3$ and there is a corridor for the wB or the bB, wRh1- (0-0 not permitted), one B - h1 (evasive move), $wB \rightarrow h5$, $g6 \times Bh5$, $bB \rightarrow g4$, wR - h1. That results in four cases: neither K nor R moved (a), K moved (b), either K or R moved (c), R moved (c). Cp, P1067371.

No. 412: The bPs captured 4 pieces, among them bPh×Pg-g1B, the wPs captured three times. The aim is backward 1.Sd7-b6? $\sim 2.\text{Sb6-a8}$, then 1.c8S#, but this fails because of 1...b6-b5!; earlier a7×Bb6 and there is a corridor for the wB and the bB, one B-a1 (evasive move), 0-0-0 not permitted. Solution: backward 1.Kd2-e1! Rb2-a2 2.Rd1-a1 R- 3.Kc1-d2! ~ 4.0 -0-0! $\sim 5.\text{d2-d4} \sim \text{and 6.Sd7-b6} \sim (\text{now 6...b6-b5?}$ is illegal since Black's good evasive move (bB-a1) is no longer possible because of 0-0-0!) 7.Sb6-a8, then 1.c8S#. Further retro play: bBb8- (Black's bad evasive move), bPb6-b5, bPa7×Bb6, wBc1→b6, wPb2×Bc3, bBf8→c3, e7×Xd6 etc. An excellent logical Proca retractor (see p. 137) with an amazing use of the bishop corridor, never seen before.

Retractors

No. 413 Thomas R. Dawson Chess Amateur 1920



White retracts 1 move, then mate in 2

No. 414 Nenad Petrovic problem 1972 1st Prize



White retracts 1 move, then mate in 2

No. 415 Werner Keym Stuttgarter Zeitung 2005



White retracts 1 move, then mate in 2 b) Bh8→f8

Here you will find retractors with only 1 single retro move (no. 413–419), help retractors with more retro moves (no. 420–422), defensive retractors of the type Høeg (no. 423–428), Proca (no. 430–436) and neither of them (no. 429). In the large field of retro problems the defensive retractor has a special feature and charm: there is adversary play as in the chess game. The players retract alternately and oppose one another with the object of mating the opponent after the next retraction (whenever the forward stipulation is 'mate in n moves').

No. 413: This is *T. R. Dawson's* most famous retractor: backward h2-h4 and forward 1.h2-h4! $g4\times h3$ e.p. $2.B\times g6\#$. – There are even two miniatures with this idea: P0000030 and P1108952, moreover a well-known related two-mover (P0005851).

No. 414 shows a similar idea in a fine setting: backward Kh2-g3! (the previous move was Rf8/g8-h8+, hence 0-0 is not permitted), then 1.Kg1! \sim 2.Rc8#. Tries: backward Kh2 \times Pg3? (Ph4 \times Xg3++) or Kf2-g3/Kg2-g3?, then 1.Kg1/Kh1 0-0!.

No. 415: a) Backward $e5 \times f6$ e.p., then 1.Ba2+d5 $2.e5 \times d6$ e.p.# or 1... Ke7 2.Bf6#. b) Backward $e7 \times Sd8R$, then $1.e8Q+K \times f6$ 2.Qe7# or 1... Kd5 2.Qe4#. Two e.p. captures and two promotions in a miniature.

No. 416 Horst Stempel Hamburger Problem-



White retracts 1 move, then mate in 1

No. 417 Valerian Onitiu Die Schwalbe 1934 1st Prize



White retracts 1 move, then mate in 1

No. 418 Josef Haas Die Schwalbe 1986



White retracts 1 move, then mate in 2

No. 416: Genesis of the position: Bc1 died on c1, b7-b6, bBc8→d1, g7-g5, wPa captured Q, R, R, S and S on light squares and promoted to B on f8, d7×Qe6. The last moves were Bh1-a8! Ke4-f5 Rg2-e2+ Kf3-e4+. So the solution is backward Bh1-a8, then 1.Bh1-e4#. Astonishing! This is one of the rare problems in which the retro move (from a8 to h1) is executed for retroanalytical reasons only. In order to give mate the bishop could move to b7, c6 etc.

No. 417: Backward 1.0-0-0! g7-g5 2.Be4-h7 g5-g4 $3.Bc6\times Pe4$ e5-e4 4.Ba4-c6 e6-e5 $5.Bd1\times Pa4$ a5-a4 6.Be2-d1 a6-a5 7.Bf1-e2 a7-a6/Kg4-h4 $8.e2\times Xf3$; earlier bPc7 \rightarrow c1 \rightarrow Bg1/g3, bPh6 \times Bg5. So the solution is backward 0-0-0, then $1.h5\times g6$ e.p.#!. A well-earned first prize.

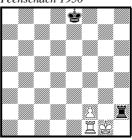
No. 418 drove many strong solvers to despair. Backward b3×Xa4? (then 1.Qxa4+2.Qd7#) would result in 7 captures (Pg3 comes from g2 and Pe5 from h2), but there are 10 black pieces. Hence backward not e4-e5? nor d3×c4?. Tries: backward Rc2-b2?/Sd3-c5?/Rf7×Pf5?, then 1.Kxg8 0-0-0+!; backward c2-c4?, then 1.K×g8 Qa2+! (0-0-0+? 2.Rf8#). Here is the incredible solution: backward Rf7×Bf5! (before that g6-g5+ which is why the wK moved from e1 to h7 via f7/f8 making 0-0-0 impossible), then 1. K×g8 \sim 2.Rf8#. 'My favourite problem.' (*J. Haas* himself)

No. 419 Josef Haas Mannheimer Morgen 1973



Black retracts 1 move, then helpmate in 1

No. 420 Julius Dorn-Lüttgens Feenschach 1950



White and Black retract 1 move, then helpmate in 1

No. 421 Kurt Smulders Probleemblad 1972



White and Black retract 1 move, then helpmate in 1

The most famous **help retractor** is *J. Sunyer's* problem with only the kings on the board (no. 39b).

No. 419: Thematic try: backward Bb7 \times Qh1?, then 1.0-0-0 Q \times b7#, but 0-0-0 is not permitted since the wPs captured 7 times and the wPd promoted to queen on d8/e8/f8. The solution is backward e4 \times d3 e.p.! (which obstructs the way of four (!) long distance pieces), then 1.0-0-0 Qc3#. Typical style of *J. Haas*.

No. 420: Backward 0-0 Rh8×Qh2, then 1.0-0 Qh7#. A little gem.

No. 421: Backward $d7 \times Re8Q + e2 - e1B$, then 1.e2-e1R $d7 \times c8S\#$ Allumwandlung!

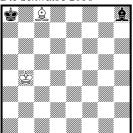
No. 422 Janko Furman Feenschach 1971 (c) 2nd Prize



Black and White retract 1 move, then helpmate in 2.5 AP

Solution: backward b0-0 w0-0-0, then $1.c5 \times b6$ e.p.! Qd7 2.0-0 0-0-0 3.a8Q# (Valladao). Retroanalysis: wPa×B (on a light square) and wPb6×Ba7 (on a dark square); Bf1 died on f1; the bPs captured Q, S, S (on light squares) and B (on the dark square d6), hence the last move before b0-0 w0-0-0 cannot be $e6 \times Q/S/Bd5$, but only b7-b5 (before that $b6 \times Ba7$). So both white castlings, which make Ke1, Ra1 and Rh1 immobile, are necessary for legalising the e.p. capture (AP), both black castlings are necessary for the mate of the bKc8. A great achievement.

No. 423 Henrik Juel Werner Keym Die Schwalbe 2018



White retracts 2 moves, Black 1, then mate in 1 Høeg Retractor b) Kb4→d3

No. 425 Thomas R. Dawson Magyar Sakkvilag 1926



White retracts 2 moves, Black 1, then mate in 1 Høeg Retractor

No. 426 *Jan Knöppel* Stella Polaris 1975 1st Prize



White retracts 2 moves, Black 1, then mate in 1 Høeg Retractor

In **Defensive Retractors of the type Høeg** (so called after *Niels Høeg* in 1924) the opponent decides whether the retraction made shall be an uncapture, and if so which piece shall be uncaptured.

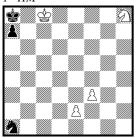
No. 423: a) White retracts Kc3-b4 and Black must add Rb4, Black retracts Rd4-b4+ and White adds Qb4, White retracts c7-c8B, then 1.Qb8#. In short: backward 1.Kc3 \times Rb4! Rd4 \times Qb4+ 2.c7-c8B, then 1.Qb8#. b) Backward not 1.Kc3 \times Rd3? (Rd4 \times Qd3 2.c7-c8B, then 1.Qa6#) because of 1.Kc3 \times Pd3! (e4 \times d3 e.p. 2.d2-d4 e5-e4+), but 1.Kd4 \times Sd3! Se5 \times Qd3+ 2.c7-c8B, then 1.Qa6#.

No. 424 is a symmetrical example with only one piece: *Niels Høeg*, *On retraction chess problems 1927, bKh1. Add the wK, Black and White retract 1 move, then mate in 1, Høeg retractor.* Solution: add wKf1; backward Kh2×Qh1 Qe4×Bh1 (Qe4×Q/Rh1? illegal), then 1.Qh4#. Try: add wKh3?, backward Kg1×Qh1 Qe4×Q/Rh1+ (last move e.g. h2-h1Q/R+). Cp. no. 214.

No. 425: White retracts c7-c8Q!. If Black retracts Bb4-a3, White adds a knight on a3 and retracts Sc5-a6; thereafter Black may add Q/R/B/P (but not a S giving an illegal check) on a6, then 1.Sc5-b3#. If Black retracts Bc5-a3, White adds a knight on a3 again and retracts Sb4-a6; thereafter Black may add Q/R/B/P (but not a S giving an illegal check) on a6, then 1.Sb4-c2#.

No. 426 (FIDE-Album) shows the typical Høeg retractor being rich in variants. The wPs captured the missing black pieces, hence there is no capture left for the wK on c4 or a wP on e4. Backward 1.Kd3-c4 e5-e4+ 2.Se6-c7, then 1.Sg7#; 1...d5×Qe4 2.Qe7-e4+, then 1.Qh7#; 1...d5×Re4 2.Sb5-c7, then 1.Sd6#; 1...d5×Be4 2.Bf3-e4+, then 1.Bg4#; 1...d5×Se4 2.Bh2-g3, then 1.Sd6#. Perfect.

No. 427 Per Grevlund feenschach 1974 1st HM



White retracts 7 moves, Black 6, then mate in 1 Høeg Retractor

No. 428 Werner Keym Die Schwalbe 2015



White retracts 2 moves, Black 1, then mate in 2 Høeg Retractor

No. 429 Werner Keym Die Schwalbe 2006 (c)



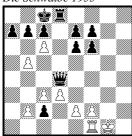
White retracts 3 moves, Black 2, then mate in 1 Defensive Retractor 2 solutions

No. 427 shows the 100 Dollar Theme (p. 35) 'backward': 1.h7-h8S a2-a1S ... 5.h3-h4 a6-a5 6.h2-h3 b7 \times Sa6 (not 6...b7 \times Qa6? 7.g2 \times Q/Bf3!) 7.g2 \times Xf3 (not 7.f2-f3? retro stalemate), then 1.Sc7#.

No. 428 (FIDE-Album): the wPs captured 4 times, wOfficer×Q/S. Backward not 1.Qb2-c1? because of +bQc1!, but 1.Rb2-b1! with three cases. a) 1.Rb2-b1??, then the previous move was either b7-b5 (then $1.a5 \times b6$ e.p.! $a7 \times b6 + 2.S \times b6\#$) or d7-d5 (then $1.e5 \times d6$ e.p.! $e7 \times d6$ 2.S×d6#), a two-part PRA problem [-1 & #2]. – b) 1.Rb2×Qb1?, then the previous move was either b7-b5 (then no mate in 2) or d7-d5 (then $1.e5 \times d6$ e.p.! 2.#), hence 1...b7-b5 2.Ba4-c2 (then $1.c6 \times b7\#$) or 1...d7-d5 2.Be4-c2 (then $1.c6 \times d7\#$) [-2 & #1]. – c) 1.Rb2×Sb1! Sa3-b1! 2.Qb1-c1 (no more piece can be added), the previous move was either b7-b5 (then $1.a5 \times b6$ e.p.! $a7 \times b6 + 2.S \times b6\#$) or d7-d5 (then $1.e5 \times d6$ e.p.! $e7 \times d6$ 2.S×d6#), a two-part PRA problem again [-2 & #2]. Probably the first Høeg Retractor with PRA.

Nr. 429: I. backward 1.Ra2-b2! g5-g4 2.Qb5-b1 g6-g5 (g7-g5 illegal) 3.Qg5-b5! (before that g7-g6 4.Ra5-a2 S-g3 5.Re5-a5+), then 1.Q×g3#; 2.Qb4/b6-b1? g7-g5!. II. backward 1.Rc2-b2! g5-g4 2.Qb6-b1 g6-g5 (g7-g5 illegal) 3.Qc7-b6! (before that g7-g6 4.Qc8-c7 S-g3 5.c7-c8Q+), then 1.Q×g3#; 2.Qb4/b5-b1? g6-g5 3.Qd6/e5-b4/b5 illegal. 1.Qa2-b1? g5-g4 2.Q-a2 g7-g5!. Genesis of the position: wPa×Xb×Xc-c8X, e3×S/Xf2, e2-e4, d4×X/Se3, the wPs captured two pieces on c and d, wOfficer×Ph; the specification Høeg or Proca is not necessary. Mutual decoy by means of threatening retrostalemate, differentiated through either a pawn's single or double step. 'Sophisticated combination of square strategy and retroanalysis. Excellent correspondence of both solutions.'

No. 430 Bruno Sommer Die Schwalbe 1953



White retracts 2 moves, Black 1, then mate in 1 Proca Retractor

No. 431 Wolfgang Dittmann feenschach 1979 Ist Prize



White retracts 7 moves, Black 6, then mate in 2 Proca Retractor

No. 432 Janko Furman feenschach 1974 1st/2nd Prize



White retracts 5 moves, Black 4, then mate in 1 Proca Retractor

In **Defensive Retractors of the type Proca** (so called after *Zeno Proca* in 1924) the player making the retraction decides which piece (if any) shall be uncaptured.

No. 430: Genesis of the position: c2-c3, f2 \times Sf3, bPh7 \times Bg6 \times Xf5(= promotee from h8) \times Se4 \times Sd3 \times Qc2, d2-d3, wBc1 \rightarrow f6, g7 \times Bf6, bBf8 \rightarrow b4, a3 \times Bb4, wRa1 \rightarrow e6, d7 \times Re6, f3 \times Se4, Bc8-d7, e4 \times Rd5, Bd7-c6, d5 \times Bc6, Qd8-d4 and now b4-b5, 0-0-0, 0-0. As you see, White is pressed for time. Solution: backward 1.0-0! 0-0-0 2.b4-b5, then 1.Rh8#.

No. 431: Backward 1.Kd2×Be1! e2-e1B+ 2.Kc3-d2 e4×d3 e.p.+ 3.d2-d4 e5-e4+ 4.Kd3×Pc3! b4×c3 e.p.+ 5.c2-c4 b5-b4+ 6.Kc4×Rd3! (genesis of the position: Bc8 died on c8, bBa6 comes from d1 or f1, bPs captured 8 times, bOfficer×Pa, wPb2 remained on the b-file; not 6.Kc4-d3? c6×Rb5+!, earlier b6×Rc7-c8R) 6...c6×Pb5+ 7.Kc5-c4, then 1.b5-b6#. Splendid!

No. 432: Backward $1.e5 \times f6$ e.p. f7-f5 $2.f5 \times g6$ e.p. g7-g5 $3.g5 \times h6$ e.p. h7-h5 4.0-0-0! forces 0-0! $5.b3 \times Bc4$ (then 1.c8Q#!) 5...Bf1-c4 $6.a2 \times Qb3$ Bd4-g1 $7.b2 \times Sc3$ Sg1-h3 8.e4-e5 Bf6-d4 9.e3-e4 Be7-f6 10.e2-e3 Bf8-e7 11.f4-f5 Bh3-f1 12.f3-f4 e7-e6 13.f2-f3 Bc8-h3 14.g4-g5 (precisely suitable) $14...d7 \times Q/Sc6$ 15.Q/S-c6 in a legal position. In case of 4...Sh3-f4? (then 1.bBe3#) White has not enough tempo moves to resolve the position. 3 e.p. captures, 2 castlings, 1 promotion. Superb!

Cp. the Proca miniature no. 108 with 1 e.p. capture, 1 castling, 1 promotion.

No. 433 Günther Lauinger Hanspeter Suwe Wolfgang Dittmann 0-0 1979 1st/2nd Prize



White retracts 3 moves, Black 2, then White castles Proca Retractor

No. 434 Wolfgang Dittmann The Problemist 1980 2nd HM



White retracts 7 moves, Black 6, then mate in 1 Proca Retractor

No. 435 Günther Weeth Werner Keym



White retracts 11 moves, Black 10, then mate in 1 Proca Retractor

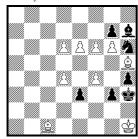
No. 433 is probably the first Proca with the stipulation 'Castling'. Backward $1.Rh4 \times Rh1! \sim (Rh-/\times h1+, Pg2\times h1R+, Ph2-h1R+, Sf1-/\times d2+) 2.Ra4\times Bh4 \sim (R-/x+, Pg3-/x+, Sg3\times f1+) 3.Ra1-a4 (not 3.Ra1\times Xa4? since the wPs captured 12 times) – and now 1.0-0-0. I would have expected 0-0.$

If in a chess game an identical position occurs three times, a player can demand a draw. Identical position means the same kind of pieces on the same squares with the same move rights. In problem chess this 'draw by repetition' works automatically. In general the player who starts the draw pendulum forces the opponent to perform an unfavourable move. For this manoeuvre retractors are very suitable.

No. 434: Solution: backward $1.a5 \times b6$ e.p.! b7-b5 2.Kc4-c3 (= 1^{st} time) Sc7-a8 3.Kc3-c4 (prevents Sb5/d5-c7) Sa8-c7 4.Kc4-c3 (= 2^{nd} time) Sc7-a8 5.Kc3-c4 and now 5...Sa8-c7 would be the 3^{rd} time, which is not permitted; therefore $5...Sa8 \times Q/R/B/Sc7$ 6.Kc4-c3 forces Rf8 \times Sg8/Rf8-g8 $7.Sh6-g8/K\sim$, then $1.e7 \times f8Q,R\#$. This is the so-called 'draw pendulum' (cp. P1346005). *Difficult*.

No. 435: Solution: backward 1.g3-g4 (hence bBh2 is a promotee from g1) Bg1-h2 2.Rc8-a8 B- 3.Rg8×Bc8 B- 4.Rg7-g8 B- 5.Rg5×Pg7 (prevents earlier h2×Pg3) B- 6.Ra5-g5 Bh2-g1 7.Ra4×Pa5 Bg1-h2 starts the pendulum (7...a7/a6-a5?) is illegal because it locks up the bR, which is needed as a sacrificial piece on b4 or g3) 8.Ra3-a4 Bh2-g1 9.Ra4-a3 Bg1-h2 10.Ra3-a4 forces h2×Sg1B! (not 10...Bh2-g1? which results in 11.Ra4-a3 = 3^{rd} time) 11.Ra4-a3, then 1.Se2#. A shortened or 'amputated' pendulum. *Very difficult*.

No. 436 Joaquim Crusats Roberto Osorio Andrey Frolkin Die Schwalbe 2017 W. Keym JT Prize



White retracts 23 moves, Black 22, then mate in 1 Proca Retractor

The aim is backward f3-f4, then 1.Bg4#. Therefore the bSh6 must be forced to move.

Solution: backward $1.c5 \times Pd6$ e.p.! (a) d7-d5 $2.d5 \times Pe6$ e.p. e7-e5 $3.e5 \times Pf6$ e.p. f7-f5 4.e4-e5! (b) Bg8-h7 5.Bd2-c1 Bh7-g8 6.Ba5-d2 Bg8-h7 7.Bc7 \times Pa5! Bh7-g8 8.Bb8-c7 Bg8-h7 9.b7-b8B Bh7-g8 10.b6-b7 Bg8-h7 11.b5-b6! (1st time) (c) Bh7-g8 12.Kg1-h1 Bg8-h7 13.Kh1-g1 (2nd time) Bh7-g8 14.Kg1-h1 a6-a5! (1st time; 14...Bg8-h7? 15.Kh1-g1! forces a7-a5... 20.#) 15.Kh1-g1 Bg8-h7 16.Kg1-h1 Bh7-g8 (2nd time) 17.Kh1-g1 Bg8-h7 18.Kg1-h1 a7-a6! (avoids 3^{rd} time) 19.Kh1-g1 Bh7-g8 20.Kg1-h1 Bg8-h7 (2^{nd} time) 21.Kh1-g1 Bh7-g8 22.Kg1-h1 S \sim h6 (avoids the 3^{rd} time) and at last 23.f3-f4, then $1.B-/\times$ g4#.

- (a) $1.g5 \times Pf6$ e.p.? f7-f5 $2.f5 \times Pe6$ e.p. e7-e5 $3.e5 \times Pd6$ e.p. d7-d5 ... fails because $7.Bc7 \times Pa5$ is illegal (too many captures).
- (b) 4.Kg1-h1? White starts the pendulum and seems to be successful. 4...Bg8-h7 5.Kh1-g1 Bh7-g8 (2^{nd} time) 6.Kg1-h1 Bg8-h7 7.Kh1-g1 e4-e3 (avoids 3^{rd} time) ... 11.Kh1-g1 S \sim h6 (avoids 3^{rd} time) 12.f3-f4, then 1.B(\times)g4#. However, Black has a special defense: he retracts 4...e4-e3! If the pendulum is started from this position on, the bB can occupy the same square for a 3^{rd} time, reach a position with the same pieces on the same squares, but without the same move rights and thereby prove that he has the right to play e4 \times d3 e.p. In this case White would be forced to retract 5.d2-d4 or f2-f4; then Black would have the advantage to start the (new) pendulum! This defense is parried by 4.e4-e5, it is true, but by playing 4...Bg8-h7 Black can start a pendulum.
- (c) White uses the same trick as Black in (b): at the right moment he retracts b5-b6 and thereby claims the right to play $b5 \times a6$ e.p. which would force Black to retract a7-a5; thus White gets the advantage to start the (new) pendulum this time with success!

An outstanding, most original chess problem! Extremely difficult.

50 move rule

No. 437 Nikita Plaksin Shakhmaty v SSSR 1980 Special Prize



To no. 437 Critical position Next move: f3-f4



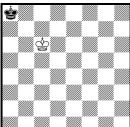
Draw

There are three special rules for a draw: repetition rule (see p. 138), dead position rule (see p. 141) and 50 move rule. The latter means: the game may be drawn if each player has made at least the last 50 moves without the move of any pawn and without any capture. In retro problems this 'draw by 50 move rule' works automatically.

No. 437: The shortest proof game from the critical position to the diagram position needs less than 50 moves if wKe1 and wRa1 may make moves; in this case Black will easily win. White, however, castles and thereby proves that wKe1 and wRa1 have not yet moved; in this case the shortest proof game needs exactly 50 moves and White can draw: 1.f3-f4 (move of a pawn) ~ 2./7.Rf2→g7 Bh7 8./10.R→b7 11.Bb8 12./14.R→c3 Ra7 15...Rb7 16.Ba7 Rb8 17...Rg8 18.Bb8 Rg7 19...Bg8 20./22...R→g5 23...Bh7 24./26...Rb7 27.Ba7 Rb8 28.Rca3 Rg8 29.Bb8 Rg7 30.Ra7 Bg8 31.Rb7 Rh7 32.Ba7 Rh5 33.Rb8 Bh7 34.Rg8 Rg3 35.Rg7 Bg8 36.Rh7 Rf3 37.Rh6 Kg7 38.Bb3 Kf8 39.Ba4 Ke8 40.Rh7 Kd8 41.Rg7 Bh7 42.Bb8 Kc8 43.Rg8+ Kb7 44...Rf2 45./47...Rh→f3 48...Bg3 49.Re8 Bg8 50.Rf8 Qg7 (= no. 437) and 51.0-0-0! draw (= 50 moves one after the other without capture/pawn's move). A chess problem out of the box indeed! Genesis of the critical position: b2→b5, a5xSb4, Ra8→b3, Bc1→b8, a2→a8X, Sg8→h4, h7×Qg6×Xf5, Rh8→a2, wS-h8, bS-a8, b7-b6, Bc8→g8, g7-g6, Bf8→h2, Ke8→f6, e2-e3, Bf1-c4, f2-f3, bRb-b2, Rh→f2, Qd8→e5. You will find further examples in *PDB* (K='50 move rule').

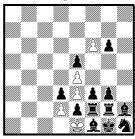
Dead position rule

No. 438 Andrew Buchanan The Problemist 2001



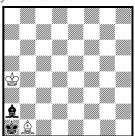
Who moved last?

No. 439 Andrew Buchanan Retro mailing list 2007



Black to move. Last move?

No. 440 Nikita Plaksin feenschach 1993



White retracts 1 move, then stalemate in 1

According to the Laws of Chess (1997) the game is drawn when a position is reached from which a checkmate cannot occur by any possible series of legal moves, even with the most unskilled play. This immediately ends the game (Art. 9.6). The game is said to end in a 'dead position'. This 'dead position rule' works in retro problems as well (see p. 170). *Andrew Buchanan*, who was the first to see the chance of applying this rule to problems, created the term 'Dead Reckoning'.

No. 438: There was a dead position in the case of $bKa7 \times B/Sa8$ or $bKb8 \times B/Sa8$. There was a dead position as well in the case of $bKa7 \times Q/Ra8$ or $bKb8 \times Q/Ra8$ because the bK is forced to capture Q/R; hence the position before the capture (i.e. bKa7,bKb8 and wQ/Ra8) was already drawn. Therefore White moved last (i.e. $wK \times Q/R/Pc6$, not $wK \times B/Sc6$ because of dead position!).

No. 439: In ordinary retro problems the last move can only be an e.p. capture if this move is giving check (see no. 145 and p. 38, type A and type B). No. 439 shows a baffling exception in type B by means of the dead position rule. White's last move was f5-f6 or $g5 \times f6$ or $g5 \times f6$ e.p. The position with wPf5 was 'dead' because each move (f5-f6 or $f5 \times g6$) must result in a draw. The position with wPg5 and bXf6 (last move X-f6) was 'dead' as well because the move $g5 \times Xf6$ is forced and results in a draw. The position with wPg5 and bPf5 (last move f7-f5), however, was not a forced draw because the moves 1.e4xf5 g6xf5 2.g6 f4 etc. (no draw) had been possible. You will find further and more complex examples in *Buchanan's* articles and in *PDB* (K='dead position').

No. 440 is a fore-runner which I happened to discover. White does not retract Ka3-a4? (this position would be 'dead'), but Ka $3 \times Pa4!$, then $1.B \times a2$ stalemate (= draw)!

Special Illegal Clusters

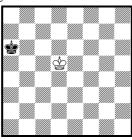
The stipulation 'Illegal Cluster' means that certain pieces have to be added to the incomplete diagram position in such a way that an illegal position arises which becomes legal by the removal of any one of the pieces (except the kings). So the first aim of an IC is to produce illegality. Illegal Clusters do not know any weasels per definitionem.

No. 441 Thomas R. Dawson The Problemist 1933



Add 6 bPs for an Illegal Cluster

No. 442 Hans Gruber feenschach 1979



Add 1 wS and 4 wPs for an Illegal Cluster b) w $K\rightarrow d7$

No. 443 Hans Heinrich Schmitz feenschach 1981 2nd Prize



Add 24 pieces for an Illegal Cluster

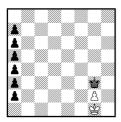
No. 441: The position of the solution (see below) is illegal because the bPs captured 15 times, however, there are 2 white pieces. This position becomes legal if one wP or one bP is removed. – **No. 442:** In the position of the solution in a) as well as in b) the check by the (promoted) knight is illegal. – In **no. 443** (FIDE-Album) 24 pieces have to be added. That is still the current record.

Solution no. 441

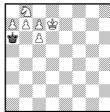
Solution no. 442a

Solution no. 442b

Solution no. 443









You will find many Illegal Clusters in *PDB* (K='Illegal Cluster'), but only few with an empty chessboard as no. 444–446. The first realization was P1108914.

No. 444: Werner Keym, Die Schwalbe 2008. Construct an Illegal Cluster with wKRPPPP and bK. If you remove a certain piece, you will obtain a position with the two last single moves being unambiguous.

Solution: wKg1 Rf1 a2 b2 e2 f2 bKa1. Last moves without Pe2: 0-0+ Kb1×Sa1.

No. 445: Werner Keym, Die Schwalbe 2008. Construct an Illegal Cluster with wKRBSSSSSS and bKB. The white pieces stand on light squares.

Solution: wKc8 Re2 Bb3 Sa2 Sa4 Sc2 Sf3 Sh3 Sh5 bKd6 Bg4. The position before bKe6×Pd6+ e5×d6 e.p.+ d7-d5 is illegal because of the illegal check by Bb3. Without Re2 the last move was bKe6×S/Rd6+. Quite complicated.

No. 446 (FIDE-Album): *Werner Keym*, *Die Schwalbe 2014. Construct an Illegal Cluster with wK and bK and a) wRBSP, b) P instead of S, c) S instead of B, d) B instead of R. Each occupied square must have two occupied squares adjacent to it. The black king must stand as far away as possible from its original square e8.*

Solution below: a) without Rb7 the last moves were wPc5×b6 e.p.+ b7-b5 c4-c5+ (e.p. capture); b) without Bh1 or Ph2 the last move was 0-0-0+ (castling), the mirrored position with wKg1/bKc1 is legal (0-0+ Kc2-c1); c) the position before wPb7×Q/R/B/Sa8R+ is illegal (promotion with capture), the mirrored position with wKd5/bKa7 is legal (wPb7×Xa8R+ Ka6-a7); d) the position before wPb7-b8B is illegal (promotion without capture). This is a complete Valladao. It is extremely difficult to find the solution d) because of its hexagonal form.

Solution no. 446a Solution no. 446b Solution no. 446c Solution no. 446d

Shortest Proof Games

Since 1980 short proof games (SPG) have generally ranked in retro columns. Their seemingly inexhaustible themes and tasks are fascinating for composers and solvers. You will find thousands of them in *PDB* (K='unique proof game'). Unique or unambiguous means that the whole sequence of moves is running without any dual.

No. 447 Geza Schweig Tukon 1938



Proof game in 4.0

No. 448 Tibor Orban Die Schwalbe 1976 Commendation



Proof game in exactly 4.0

No. 449 Werner Keym Die Schwalbe 1992



Proof game in 6.5

No. 447 and 448 are two famous puzzles which will attract attention at every chess club. The 'wrong' knight in **No.** 447 is amazing: 1.Sc3 d6 2.Sd5 Sd7 3.S×e7 Sdf6 $4.S\times g8\ S\times g8$. – In **no.** 448 a solution in 3 moves is simple (1.e4 e6 2.Bb5 c6 $3.B\times c6\ d7\times c6$ or 2.Bc4 c6 $3.B\times e6\ d7\times e6$), but the stipulation is 4 moves. 1.e4 e6 2.Bb5 Ke7! 3.Bxd7 c6 4.Be8! K×e8. 'A devilish trap.' – **No.** 449 presents the raid of a bishop having the effect of a billiard ball: 1.d4 Sh6 $2.B\times h6\ g5\ 3.B\times f8\ Sc6\ 4.B\times e7\ S\times d4\ 5.B\times d8\ Sb3\ 6.B\times g5\ Sc1\ 7.B\times c1.$



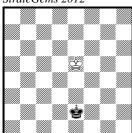
No. 450 Gerd Wilts

Probleemblad 2004

Proof game in a) 7.5 b) 12.0

a) 1.f4 Sa6 2.f5 Rb8 3.f6 $S \times f6$ 4.e4 $S \times e4$ 5.Bc4 $S \times d2$ 6.Se2 Se4 7.Qd4 f6 8.Sd2; b) 1....5.d4 f6 6.Bd3 Kf7 7.Se2 Ke6 8.d5+ $K \times d5$ 9.Bb5+ Ke5 10.Qd4+ Ke6 11.Sd2 Kf7 12.Bc4+ Ke8. Both times the play is unambiguous, although in b) it is much longer than in a).

No. 451 François Labelle StrateGems 2012



Proof game in 19.5

No. 452 Dmitri Pronkin Die Schwalbe 1985 1st Prize



Proof game in 12.5 2 solutions

No. 453 Andrey Frolkin Die Schwalbe 1987



Proof game in 18.5

No. 451 (FIDE-Album) is the first unambiguous SPG with the two kings only. 1.c4 e5 2.Qb3 Qh4 3.Q×b7 Q×h2 4.Q×b8 Q×g1 5.R×h7 R×b8 6.R×g7 R×b2 7.R×f7 R×a2 8.R×d7 R×d2 9.R×a7 K×d7 10.R×c7+ Kd6 11.R×c8 Q×g2 12.R×f8 Kc5 13.R×g8 R×g8 14.B×g2 R×g2 15.Sc3 R×f2 16.K×f2 K×c4 17.Kf3 K×c3 18.B×d2+ K×d2 19.Ke4 K×e2 20.K×e5.

No. 452 (FIDE-Album): I 1.b4 Sf6 2.Bb2 Se4 3.Bf6 e7×f6 4.b5 Qe7 5.b6 Qa3 6.b6×a7 Bc5 7.a7×b8B Ra6 8.Ba7 Rd6 9.Bb6 Kd8 10.Ba5 b6 11.Bc3 Bb7 12.Bb2 Kc8 13.Bc1; II 1.Sc3 Sf6 2.Sd5 Se4 3.Sf6+ e7×f6 4.b4 Qe7 5.b5 Qa3 6.b6 Bc5 7.b6×a7 b6 8.a7×b8S Bb7 9.Sa6 0-0-0 10.Sb4 Rde8 11.Sd5 Re6 12.Sc3 Rd6 13.Sb1. A fantastic double setting: the wBc1/wSb1 is captured on f6, the wPb promotes to B/S on b8, B/S moves to c1/b1.

No. 453: 1.d4 a5 2.Qd3 Ra6 3.Qg3 Rf6 4.Be3 Rf3 5.e2 \times f3 g6 6.Se2 Bh6 7.Sc1 Bg5 8.Be2 Sh6 9.0-0 0-0 10.Rd1 Kg7 11.Rd3 Kf6 12.Ra3 Ke6 13.b3 Kd5 14.c4+ Kc6 15.Sc3 Kb6 16.d5+ c5 17.d5 \times c6 e.p.+ Ka6 18.c5+ b5 19.c5 \times b6 e.p.#. Here we admire two castlings and two e.p. captures. Such a task has not yet been achieved in a classical retro problem (release problem).

Shortest proof games behave in relation to classical retro problems in the same way as moremovers in relation to studies. Some themes and tasks can only be realized by means of the stipulation requiring a definite number of moves (e.g. no. 453 and 454 or Babson task).

No. 454 Unto Heinonen Springaren 1996



Proof game in 19.0

No. 455 Michel Caillaud Die Schwalbe 1981 1st Prize



Proof game in 30.0

No. 456 Silvio Baier FIDE World Cup 2015



Proof game in 32.5

In **no.** 454 (FIDE-Album) the white rooks change their places as well as do the black rooks.1.b4 c5 2.b5 Qc7 3.b6 Qg3 $4.h2\times g3$ h6 $5.R\times h6$ a $7\times b6$ 6.Rc6 R \times a2 7.Sa3 R \times c2 8.Bb2 Rc4 9.Sc2 Rch4 10.e4 g6 11.Bc4 Bh6 12.Se2 Be3 13.d2 \times e3 e6 14.Qd3 Se7 15.0-0-0 0-0 16.R \times c8 Sbc6! 17.Ra8 Rh8 18.Ra1 Ra8 19.Rh1 Sb8. This double change of places has not yet been achieved in a classical retro problem (release problem).

No. 455 (FIDE-Album): 1.b4 c5 2.b5 Sc6 3.b5×c6 b6 4.c7 Bb7 5.c8R Bf3 6.g2×f3 Rb8 7.Bh3 Rb7 8.Be6 Rc7 9.Sh3 Rc6 10.Rg1 Rd6 11.Rg4 Rd3 12.Ra4 Rd5 13.d4 Sh6 14.Qd2 Sf5 15.Qh6 Rd6 16.Bf4 Rc6 17.Sd2 Rc7 18.0-0-0 Rb7 19.Rg1 Rb8 20.Rg6 h7×g6 21.Qh7 Ra8 22.Qg8 Rh4 23.Bg3 Re4 24.Bb3 Re6 25.Sf4 Rc6 26.Sh5 Rc7 27.f4 Rb7 28.Rc6 Qc7 29.Re6 Kd8 30.Re3 Kc8. 13 moves of the bRa8 for 1 tempo!

No. 456 (FIDE-Album): 1.Sf3 d5 2.Rg1 Bh3 3.g2×h3 d4 4.Rg6 d3 5.Ra6 g5 6.c4 g4 7.c5 g3 8.c6 g2 9.Qa4 g1=B 10.Bg2 Bg7 11.Kf1 Bc3 12.Se1 Sf6 13.f4 Be3 14.d2×e3 d2 15.e4 d1=B 16.Be3 Bb3 17.Bb6 c7×b6 18.c7+ Sc6 19.c8=B Qc7 20.Be6 f7×e6 21.Sa3 0-0-0 22.Rd1 e5 23.Rd4 Be6 24.Qd1 Sb8 25.Rda4 Rd3 26.f5 Sd5 27.f6 Qd8 28.f7 Kc7 29.f8=B Bc8 30.Bh6 Rf8+ 31.Bf3 Rf5 32.Bc1 h6 33.Sb1. There are fine echoes: 1 promoted wB and 1 promoted bB were captured, Bc1 and Bc8 are promoted officers, Qd1, Qd8, Sb1, Sb8 go and return to their original squares.

No. 457 Reto Aschwanden Messigny 2004 Ist Prize



Proof game in 18.0

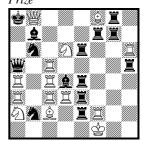
No. 458 Nicolas Dupont Gerd Wilts Probleemblad 2009



Proof game in 31.5

No. 459 Dmitri Pronkin Andrey Frolkin Die Schwalbe 1989

Die Schwalbe 196 Prize



Proof game in 57.5

No. 457: 1.d4 Sa6 2.d5 Sc5 3.d6 a6 4.d6×c7 d5 5.f4 Bh3 6.c8B Qb6 7.f5 Qb3 8.f6 b6 9.f6×g7 f5 10.Bb7 Sf6 11.g8B Bh6 12.Be6 Be3 13.Bec8 0-0 14.Be6+ Kh8 15.Bg8 R×g8 16.Bc8 R×g2 17.Be6 Rxh2 18.Bg8 R×g8. Amazing moves of the promoted bishops: Bc8-b7-c8-e6-g8, Bg8-e6-c8-e6-g8. White homebase position.

No. 458 (FIDE-Album: 12 points): 1.e4 a6 2.Bb5 a6×b5 3.h4 Ra6 4.h5 Rg6 5.h6 Sf6 6.h6×g7 h5 7.a4 h4 8.a5 h3 9.a6 h2 10.a7 h2×g1S 11.Ra6 Sh3 12.Rc6 d7×c6 13.e5 Kd7 14.e6+ Kd6 15.e6×f7 e5 16.f4 e4 17.f5 Ke5 18.g8B Bc5 19.f8S e3 20.Bc4 Be6 21.a8R Sbd7 22.Ra1 Qa8 23.Sh7 Rd8 24.Bf1 Se8 25.f6 e2 26.f7 e2×d1B 27.f8Q Bh5 28.Qf3 Bb3 29.Qd1 Kf4 30.Sg5 Se5 31.Sf3 Rdd6 32.Sg1. Incredible: Ra1, Qd1, Bf1 and Sg1 are promoted pieces. First realization.

No. 459 (FIDE-Album): 1.a4 h5 2.a5 h4 3.a6 h3 4.a6×b7 h3×g2 5.h4 d5 6.h5 d4 7.h6 d3 8.h7 d3×c2 9.d4 a5 10.Bh6 c1R 11.e4 Rc5 12.Se2 Rh5 13.e5 c5 14.e6 Sc6 15.b8R a4 16.Rb4 a3 17.Ra4 c4 18.b4 c3 19.b5 c2 20.b6 c1R 21.b7 Rc4 22.b8R Qa5+ 23.Rbb4 Bb7 24.Sc3 0-0-0 25.e6×f7 e5 26.Rc1 Bc5 27.f8R a2 28.Rf3 a1R 29.Sa2 g1R 30.Rfa3 Rg6 31.f4 Re6 32.f5 g5 33.f6 g4 34.f7 g3 35.f8R g2 36.Rf5 g1R 37.Bf8 Rg7 38.Sg3 e4 39.Bd3 e3 40.0-0 e2 41.Rcc3 e1R 42.Bc2 R1e3 43.d5 Rdd7 44.d6 Rdf7 45.d7+ Kb8 46.Qd6+ Ka8 47.Qc7 Sge7 48.d8R+ Sc8 49.Rdd3 Rhg8 50.h8R Rae1 51.Rh6 R1e2 52.R1f2 Rce4 53.Kf1 Bd4 54.Rfc5 Se5 55.Sf5 Sc4 56.Sd6 Sb2 57.Rbc4 Sb6 58.Qb8+. The length record for an unambiguous SPG improved from 15 moves (*Dawson* 1913) to 41.5 (*Fabel* 1954) and 47.0 (*Caillaud* 1982) and (finally?) to 57.5. End of the story?

Further favourite retro problems of mine

No. 460 Michel Caillaud StrateGems 1999 Ist Prize



Release the position!

Auxiliary diagram to no. 460



No. 461 Harry Goldsteen (after A. Frolkin) Probleemblad 1989



Mate in 1

No. 460 and 461 are ideal retro problems. No. 460 (FIDE-Album: 12 points): wPs captured 2 times, $a7 \rightarrow a1X$, $g7 \times Sf6$, $wX \times Ph$. Backward 1.Sb4-a6 d7-d6 2.Sd3-b4 Rd2-e2 3.Sc1-d3 Re2-d2+ 4.Sb3-c1 Ba2-b1 5.Sa5-b3 Bb1-a2+ 6.Sc4-a5 Ba2-b1 7.Sd6-c4 Bb1-a2+ 8.Sf5-d6 Rg5-g4 9.Sh6-f5 Rg4-g5+ 10.Sf5 \times Ph6! Rg5-g4 11.Sd6-f5 Rg4-g5+ 12.Sc4-d6 Ba2-b1 13.Sa5-c4 Bb1-a2+ 14.Sb3-a5 Ba2-b1 15.Sc1-b3 Bb1-a2+ 16.Sd3-c1 Rd2-e2 17.Re2-e1 h7-h6! 18.Re1-f1 Sf1-h2 19.g5-g6 Bh2-g3 20.Bg3-f2 Sf2-d1 (= auxiliary diagram for those who prefer to play forward). 8 retro shields for 1 tempo (h7-h6). Cp. P1067419 with 10 retro shields.

No. 461: 1.e7×f8Q,R#. Backward 1...Sh7-f8+ 2.Be8×Rf7 Rf8×Sf7 3.Se5-f7 Rf7-f8+ 4.Sc4-e5 Rf8×Sf7 5.Sh6-f7 Rf7-f8+ 6.Sa3-c4 Rf8×Sf7 7.Sg5-f7 Rf7-f8+ 8.Sb5-a3 Rf8×Sf7 9.Se5-f7 Rf7-f8+ 10.Sc7-b5 Rf8×Sf7 11.Sb5×Qc7 Qc8-c7 12.Qd8-d7 Qc7×Sc8+ 13.Bd7-e8 Re8-f8 14.Sh3-g5 Rf8-e8 15.Sg5-f7 Rf7-f8+ 16.Qf8-d8 Qd8-c7 17.Be8-d7 Kc7-b8 18.Sa3-b5+ Bb8-a7 19.Sa7-c8 Kc8-c7 20.Sb5-a7+ (= diagram to no. 461).

To no. 461



No. 462 Luigi Ceriani Fairy Chess Review 1948



Which was the first move of the black queen?

No. 463 Andrey Frolkin Die Schwalbe 1978 163rd TT 1st Entry Prize



Which queen is not a promoted piece?

To no. 463 Critical Position Next move: d7xQc6



No. 462: Genesis of the position: wSb1-a3, wRa1-b1, wSa3→a1, bSg8-h6, bRh8-g8, bSh6→h8, g2-g3, wBf1→g6, h7×Bg6, f2-f4, wRh1→h7, a7-a5, bRa8→h6, wSg1→e6, wSe6×Qd8! (why this?), wSd8→e4, sKe8-d8! (because the bK must occupy the free square d8 to avoid the check of the knight moving to h5 via f6!), wSe4-f6-h5, e7×Qf6, bBf8→a7, bRg8→b3, bSb8→e8, d7-d6, a2×Rb3, a5→a2×Rb1Q! and the first move of this 'new' queen was Qb1-a2!. A humorous classic. – An economical rendering is P1346004 and a double setting P0005016.

No. 463: The last moves were c7-c8Q+ b2-b1Q! (not e7-e6? which would lock up the sacrificial piece bBf8). In the critical position the move d7×Xc6 opens the cage on the 8th rank and locks up the pieces on the a- and b-files. If the white knights were captured on the b-file, then the original white queen remained as the sole sacrificial piece for sPd7. After d7×Qc6 follows bBc8→d5, then e7-e6. Thereafter the 3 white pawns on the f-file and wPe captured 4 times. These 4 pawns and wPd promoted to 5 white queens on d8 and e8. So all 7 queens are promoted pieces! Quite astonishing!

'Retroanalysis is higher mathematics of human logic, abstraction and imagination'.

(Emanuel Lasker)

No. 464 Niels Høeg Retrograde Analysis 1915



Last moves?

No. 465 Andrey Frolkin Die Schwalbe 1986



Before at least 71 single moves an e.p. capture was executed

To no. 465 Critical Position Next move: h5xg6 e.p.



No. 464 (FIDE-Album): All 16 white pieces are on the board, the wPs captured 6 times, hence there is no sacrificial piece for any officer. Solution: backward 1.Rd8-d7+! forces d7-d6 $2.f5 \times e6$ e.p.+ (the well-known e.p. trick, cp. no. 123, 218 and 307) 2...e7-e5 3.f4-f5+ Kd6-c7 (what else?) $4.b5 \times c6$ e.p.+ c7-c5 5.b4-b5+ Ke6-d6 $6.g5 \times f6$ e.p.+ f7-f5 7.g4-g5+. No. 464 presents three white en-passant captures which has remained unsurpassed up to now. A classic.

No. 465: This is the shortest game from the critical position (the last moves were bPg7-g5 Sg5-h3+ a7-a6 Rh3-h2 Sh2-g4 Qh4-f4 Sf4-g2+) to the diagram position: $1.h5\times g6$ e.p. Kh6-h5 2.g6-g7 a6-a5 3.g7-g8S a5-a4 4.Sg8-e7 b7-b6 5.Se7-g6 b6-b5 6.Sg6-h4 b5-b4 7.Sh3-g5 Kh5-h6 8.Rh2-h3 Kh6-h5 9.Sg5-f7 Sg4-h2 10.a3×Pb4 Sh2-g4 11.b4-b5 $\sim 12.b5$ -b6 $\sim 13.b6$ -b7 $\sim 14.b7$ -b8B $\sim 15.Bb8$ -d6 $\sim 16.Bd6$ -f8 $\sim 17.Bf8-g7 \sim 18.Bg7-h8 \sim 19.b3-b4 \sim 20.b4-b5 \sim 21.b5-b6 \sim 22.b6-b7 \sim 23.b7-b8B \sim 24.Sf7-d6 \sim 25.Sd6-b5 \sim 26.Sb5-c3 \sim 27.Sc3-e2 \sim 28.Bb8-d6 \sim 29.Bd6-f8 Sg4-h2 30.Bf8-g7! Sh2-g4 31.Bg7-h6 Sg4-h2 32.Bh6-g5 Sh2-g4 33.Sf1-h2 a4-a3 34.Rg1-f1 a3-a2 35.Se2-g1 h7-h6 36.Sh4-g6+ Sg2-h4+. So the e.p. capture was executed at least 71 single moves before. That is the record for an ambiguous sequence of moves.$

No. 466 Nenad Petrovic

Die Schwalbe 1986 173rd TT 2nd Entry Prize



Before at least 159 single moves castling was executed

To no. 466 Critical Position Next move: 1.0-0



No. 467 *Thomas Volet Die Schwalbe 1980 1st Prize*



On how many squares were captures made?

No. 466: This is the shortest game from the critical position to the diagram position: $1.0\text{-}0 \sim 2.\text{Sh}1\ \text{Qg}3\ 3.\text{h}2\times\text{g}3\ 6.\text{Kg}4\ \text{h}3\ 7.\text{Kf}4\ \text{Rf}6+\ 8.\text{Ke}4\ \text{Re}5+\ 9.\text{Kd}4\ \text{Re}4+\ 10.\text{Kc}5$ Rf5+ 11.Kb6 Rhh5 12.Ka7 b6! 13.K \sim Ba6 14. \sim Bc4 15.Rg1 Ba2 16.b3+! Kb4 17.Bb2 h2 18.Bf6 h2 \times Rg1R! (therefore w0-0) 19.Bh4 f6 20. \sim g5 21. \sim g5 \times Bh4 22. \sim h3 23.Qc1 h2 24.Qb2 Rb1 25.Qe5 Rb2 26. \sim Bb1 27. \sim Ra2 28.Qb2 Ra8 29.Qc1 Ba2 30.Qg1 h2 \times Qg1R 32. \sim Rb2 33. \sim Bb1 35. \sim Rba6 36. \sim Rfa5 40. \sim Kd1 41.Rd3 Ke1 42.Rd4 Kf1 43.Ra4 Kg1 44.Ra2 Rea4 45.Rb2 Ba2 46.Rb1+ Kh2 47.Rg1 Bb1 49. \sim Rb2 50. \sim Ba2 52. \sim Rf1 53. \sim Bb1 55. \sim Rb2 56. \sim Ba2 58. \sim Rbe1 59. \sim Bb1 62. \sim Rhb2 63. \sim Ba2 65. \sim Rbd1 66. \sim Bb1 68. \sim Rb2 69. \sim Ba2 71. \sim Rbc1 72. \sim Bb1 74. \sim Rb2 75. \sim Ba2 76. \sim Rcb1 77. \sim Rdc1 78. \sim Red1 79.Kb8 Rfe1 80.Rf1. We admire some subtle reasons for castling: wKg1 \rightarrow a7, b7-b6 (the cage is closed for wK and opened for bB), bBc8 \rightarrow a2, b2-b3, wBc1 \rightarrow h4, wQd1 \rightarrow e5 \rightarrow c1 \rightarrow g1. So castling was executed at least 159 single moves before. That is the record for an ambiguous sequence of moves.

No. 467: Backward 1... Kg4×Ph3 2.h2-h3+ Kf3×Pg4 3.g3-g4 Ke4×Pf3 2.f2-f3+ Kd5×Pe4 5.e3-e4+ Kc4×Pd5 6.d4-d5 Kc5-c4 7.d3-d4+ Kb6×Pc5 8.c4-c5+ Ka5×Pb6 9.b5-b6 Kb6×Pa5 10.a4-a5+ S-e2,Bh3-g2 11.b4-b5 Sb5-a7 12.e2-e3,g2-g3 Ka7-b6 13.d2-d3 Kb8-a7 14.c3-c4 Kc8-b8 15.c2-c3 Kd8-c8 16.a3-a4 Qc8-d7 17.a2-a3 Rd7-e7 18.Re7-f7. The black king captured pawns on 8 squares. An epochmaking task.

No. 468
Dmitri Baibikov
Phénix 2015



Last 60 single moves?

To no. 468 Critical position Next move: c4-c5



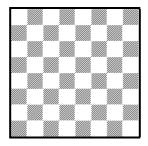
No. 468 (FIDE-Album: 12 points): Backward 1...Qb8×Sb7# 2.Qh4-f2 (a)(b) g3-g2 3.Qh8-h4 g4-g3 4.h7-h8Q g5-g4 5.h6-h7 g6-g5 6.g5×Sh6 Sf5-h6 (c) 7.g4-g5 Se3-f5 8.g3-g4 Sc4-e3 9.Sa4-b6 Sb6-c4+ 10.Sc3-a4 h3-h2 11.Se4-c3 h4-h3 12.Sf6-e4 h5-h4 13.Sg8-f6 h6-h5 14.g7-g8S h7-h6 15.h6×Sg7 Sf5-g7 16.h5-h6 Se3-f5 17.h4-h5 Sc4-e3 (d) 18.h3-h4 Sa5-c4 19.Sd8-b7 Sb7-a5+ 20.Sf7-d8 f4-f3 21.Sh6-f7 f5-f4 22.Sg8-h6 f6-f5 23.g7-g8S f7-f6 24.f6×Sg7 Sf5-g7 25.h2-h3 Se3-f5 26.f5-f6 Sc2-e3 27.f4-f5 Sa1-c2 28.f3-f4 a2-a1S 29.f2-f3 a3-a2 30.a2×Rb3 Ka4-b4 (e) 31.c4-c5 (diagram to no. 468) etc.

Here are the amazing tries: (a) 2.Qg3-f2? f4-f3 3.Qg8-g3 f5-f4 4.g7-g8Q f7-f5 5.f6×Sg7 Se6-g7 6.f5-f6 Sd8-e6 7.Sa5-b7 Sb7-d8+ 8.Sc4-a5 h3-h2 9.Se3-c4 h4-h3 10.Sg4-e3 h5-h4 11.Sf6-g4 h6-h5 12.Sg8-f6 g3-g2 3.g7-g8S g4-g3 14.g6-g7 g5-g4 15.h5×Sg6 Sf4-g6 16.h4-h5 Sd3-f4 17.f4-f5 Se1-d3 18.f3-f4 Sc2-e1 19.f2-f3 Sa1c2 20.h3-h4 a2-a1S 21.h2-h3 a3-a2 22.a2×R/Sb3 Ka/c4-b4 23.Sc/a4-b6+ and illegal check by bRc6. - (b) 2.Qe3-f2? h3-h2 3.Qf4-e3 h4-h3 4.Qg5-f4 h5-h4 5.Qg8-g5 h6-h5 6.g7-g8Q h7-h6 7.h6×Sg7 Sf5-g7 8.h5-h6 Se3-f5 9.h4-h5 Sc4-e3 10.Sa4-b6 Sb6-c4+ 11.Sc3-a4 f4-f3 12.Se4-c3 f5-f4 13.Sf6-e4 g3-g2 14.Sg8-f6 f6-f5 15.g7g8S g4-g3 16.g6-g7 g5-g4 17.f5×Sg6 Sf4-g6 18.h3-h4 Sd3-f4 19.h2-h3 Se1-d3 20.f4-f5 Sc2-e1 21.f4-f3 Sa1-c2 22.f2-f3 a2-a1S retro stalemate. - (c) 6... Sf7-h6? 7.g4-g5 Sd8-f7 8.Sa5-b7 Sb7-d8+ 9.Sc4-a5 h3-h2 10.Se3-c4 h4-h3 11.Sf5-e3 h5-h4 12.Sh6-f5 f4-f3 13.Sg8-h6 h6-h5 14.g7-g8S h7-h6 15.h6×Sg7 Sf5-g7 16.g3-g4 Se3f5 17.h5-h6 Sc2-e3 18.h4-h5 Sa1-c2 19.h3-h4 a2-a1S 20.h2-h3 a3-a2 21.a2×R/Sb3 Ka/c4-b4 22.Sa/a4-b6+ and illegal check by bRc6. – (d) 17...Sc2-e3? 18.h3-h4 Sa1-c2 19.h2-h3 a2-a1S retro stalemate. - (e) 30...Kc4-b4? 31.Ka5-a6 Sd8-b7+ 32.Ka6-a5 Sb7-d8+ 33.Ka5-a6 with forced repetition of moves.

No. 468 surpasses the previous record (P0006113) by 5 single moves. Clear position without obviously promoted pieces, wonderful play on the whole board, unpromotion of knights, retro unpin. To me this problem is one of the top ten of classical retro problems.

There are two other **great retro records** set up as late as in the 21st century:

- 33 successive checks during the last 66 single moves (=P1185294)
- 185 moves in a dualistic shortest proof game (=P1345778)



If in this book you miss your favourite retro problem, you may use this diagram for it.

* * *

The classical dual-free **length records without retro aspect** are:

- 226 moves in a directmate problem (=P1298048) set up in 1982
- 28 moves in a helpmate problem (=P0559197) set up in 1934
- 223 moves in a selfmate problem (=P1176536) set up in 2006

My favourite 12 points problems

The following six problems obtained the maximum number of 12 points in the **FIDE-Albums** which shows a very rare achievement. The albums are official collections of excellent chess problems. The first albums comprise the problems published in 1914–44 and 1945–55, then in a period of three years (1956–58, 1959–62... 2010–12). Three judges per section select the best problems for the album.

No. 469 Valentin Rudenko Viktor Chepizhny Loshinsky Memorial 1982 Ist Prize



Mate in 2

No. 470 Michael Keller Probleemblad 1980 Ist Prize



Mate in 3

No. 471

Hans Peter Rehm

Loshinsky Memorial 1982

(v) 1st Prize



Mate in 6

No. 469: Set play: $1...K \times d7/S \times d7$ $2.Rd4/R \times c4\#$. Thematic try: 1.Bd4? $K \times d7$?/ $S \times d7$? $2.R \times e7/Re6\#$, 1...Re8!. Solution: 1.Rd5! $K \times d5/Rb3$ $2.Rd4/R \times c4\#$. Perfectly changed and transferred mates.

No. 470 presents reciprocally changed mates. Set play: $1...Q\times 62.Bh4+S\times h43.f4\times e5\#$ or $1...S\times e62.f4\times e5+S\times e53.Bh4\#$. Solution: 1.Qa6! [thr. $2.Sd5+B\times d53.g5\#$] $Q\times e62.f4\times e5+Q\times e5/S\times e53.Sd5/Bh4\#$ or $1...S\times e62.Bh4+Sg5/S\times h43.Sd5/f4\times e5\#$. Problem chess at its best.

No. 471: 1.Qh8! Re5 2.Qh6 Reb5 3.Be5 $B \times e5$ 4.Qg5 Bd6 5.Se5 $B \times e5/R \times e5$ 6.Q \times f5/Q \times f4# or 1...Be5 2.Qh5 Bd6 3.Se5 $R \times e5$ 4.Qg5 Reb5 5.Be5 $B \times e5/R \times e5$ 6.Q \times f5/Q \times f4#. Logically successive foreplans, interferences of rook and bishop. Logic pure.

No. 472 Yehuda Hoch Mandil Memorial 1980



Win

No. 473 Zivko Janewski Fadil Abdurahmanovic Mat 1987 1st Prize



Helpmate in 2 4 solutions

No. 474 Andrey Selivanov Uralski Problemist 2000 Ist/2nd Prize



Selfmate in 5

No. 472: Try: 1.R×f6+? Ka7 2.Qg7+ Qc7 3.Rf7 Rc1+ 4.K×g2 Rc2+ 5.Kf3 Rc3+ 6.Ke4 Rc4+ 7.Kd5 Rc5+ 8.Ke6 Rc6+ 9.Kf5 Rc5+ 10.Kg6 Rc6+ 11.Kh7 K×a6 12.R×c7 R×c7 13.Q×c7 stalemate. Solution: 1.a5+! K×a6 2.R×f6+ Ka7 3.Qg7+ Qc7 4.Rf7 Rc1+ 5.K×g2 Rc2+ 6.Kf3 Rc3+ 7.Ke4 Rc4+ 8.Kd5 Rc5+ 9.Ke6 Rc6+ 10.Kf5 Rc5+ 11.Kg6 Rc6+ 12.Kh7 Ka8 13.Qg8+ (13.R×c7? R×c7 14.Q×c7 stalemate) Qc8 14.Rf8 Rc7+ 15.Kh8 Ka7 16.Qg1+ (16.R×c8? R×c8 17.Q×c8 stalemate) 1:0 Thematic try, systematic manoeuvre, avoidance of stalemate, chameleon echo.

No. 473: I 1.Qd5 Bc2 2.S×d6 Bd3#; II 1.Bd7 c7 2.Bb5 d7#; III 1.b5 Kf2 2.R×d6 K×f3#; IV 1.Bd5 B×d5 2.Q×d6 B×f3#. Direct white battery, direct self-pin and black unpin, mate with pinning of three black pieces. Impressive!

No. 474: 1.Ke1? f5? 2.Qd5+ Ke3 3.Bc4 f4 4.Bf1 f3 5.Qd1 f2#, 1...f6! 1.Be6! (zugzwang)

1...f7×e6 2.Qg5 e5 3.Bg3 e4 4.Be1 e3 5.Qg1 e2#

1... f6 2.Bh3 f5 3.Bg4+ f5×g4 4.Qe1 g3 5.Bg1 g2#

1...f5 2.Qd1+ Ke3 3.Ke1 f4 4.Bh3 f3 5.Bf1 f2#

Three echo model mates in a miniature. Wonderful!

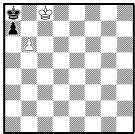
'In a good chess problem, correctness is essential, beauty necessary, and difficulty desirable'.

(Konrad Erlin)

1 position – 1000 problems

In 1932 nobody would have foreseen that an extremely simple position with only two kings and two pawns would stimulate so many problemists to compose more than 1000 problems with new kinds of stipulations (see PDB K='Vielväterstellung').

No. 475 Albert Kniest Deutsche Märchenschachzeitung 1932



Helpmate in 2

Solution: 1.a6 b7+ 2.Ka7 b8Q#

No. 476: Julius Dohrn-Lüttgens & Erich Gleisberg, Schachmatt 1949. Black makes 8 moves in a row and helps White to mate in 1.

1.a5 ... 5.a1B 6.Be5 7.Bb8 8.Ba7 b7#.

No. 477: Robert J. Darvall, Fairy Chess Review 1949. Who wins?

White moved last. So Black wins by $1.a7 \times b6$.

No. 478: Bror Larsson. Feenschach 1954. White retracts 1 move, then mate in 1. Backward Kc7×Sc8, then 1.b7#; not Kc7-c8? (Black had no previous move)

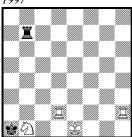
No. 479: Werner Keym, The Problemist 1976. How many last moves are there? 10 by Pa5/Pc5×Q,R,B,S,Pb6; 2 by Pa5/Pc5×Pb6 e.p.; 12 by 26 moves! Kc7/Kd7/Kd8×Q,R,B,Sc8; 2 by Kd7/Kd8-c8. Neither Pb5-b6? nor Kc7-c8?, since there would be no previous move for Black.

No. 480: Frank Müller & Werner Keym, Die Schwalbe 2018. Add 5 equal a) white, b) black pieces for an Illegal Cluster.

a) White rooks on a6, b8, c6, c7, d7. Without Ra6 or Rc6 or Rd7 the last move was Rb7×Sb8+. Without Pa7 the last move could be Rb7×Bb8+. b) Black pawns on a2, a3, a4, a5, a6. The black pawns captured 15 times, however, there are 2 white pieces.

Chess jokes

No. 481 Werner Keym Allgemeine Zeitung Mainz 1997



Add a piece on h1 so that every chess player can mate in 2

No. 482 Joaquim Crusats Problemas 2017



Add the black king, then mate in ½ move 2 solutions

No. 483 Werner Keym Stuttgarter Zeitung 2018



Mate in 2 Equal rights for the queen

No. 481: There will be a mate in 3 moves with wQh1 (not $1.Q \times b7$? stalemate, but 1.Ra2+ etc.) and in 2 moves with wRh1 (1.Ra2+ K \times b1 2.0-0#) or with wBh1 ($1.B \times b7$ K \times b1 2.Rd1#). Not every chess player, however, does know the castling convention in problem chess (castling is permitted unless the opposite can be proved). So wBh1 is the sole solution!

No. 482: The queen is partly a rook, partly a bishop. Solution I: +bKd5, +wRd1 (the rook remains on d1) and +Bf3#, the bishop moves from d1 to f3 (= $\frac{1}{2}$ move!). Solution II: +bKh5, +wBd1 (the bishop remains on d1) and +Rh1#, the rook moves from d1 to h1 (= $\frac{1}{2}$ move!). Quite convincing, isn't it?

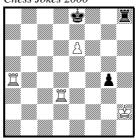
No. 483: In ultra-modern chess equal rights mean that not only the king has got the right to castle, but the queen as well! So the solution is 1.'0-0'+ (= Qb1 and Rc1) Kd2/Kd4 2.Qc2/Qe4#. Politically correct!?

No. 484 Valery Dubrovski Redkie shanry plyus 1996



Mate in 2 Retro castling

No. 485 Bedrich Formánek Chess Jokes 2000



Helpmate in 1.5 b) $Rh8 \rightarrow a8$

No. 486
Werner Keym



Black retracts 1 move, then helpmate in 1 a) First solution? b) Second solution?

No. 484: Solution: 1.0-0-0! [thr. 2.Qa5#] Bb4 2.Qb2# or $1...B \times b3$ 2.'0-0-0'# by retro castling (Rd1 \rightarrow a1 and Kc1 \rightarrow e1). White knows how to use his head.

No. 485: a) Castling is permitted since the last move could have been Ph5×Xg4+. Therefore the solution is 1.Rh3! 0-0 2.R×g4#. b) The bRa8 has been 'moved' from h8 to a8, hence castling is not permitted. That is why the solution is not 1.Rb3? 0-0-0 2.Rc4#, but only 1.Rd7! Kf8 2.R×a8#. Quite logical or what?

No. 486: a) The first solution is backward $Kg2 \times Rh1$, then 1.Kf3 0-0#. b) The second solution is $Kg1 \times Rh1$ (before that e.g. Rh-h1+), then 1.Kg2 Bd5#. If you begin with solution b), then the rook must have moved (Rh-h1+) and castling and solution a) are no more permitted. Orthodox – beyond any doubt?

No. 487 Werner Keym Die Schwalbe 1969



Add a white rook and mate immediately

No. 488 Rudolf L'hermet 150 Exzentrische



White retracts 1 move, then mate in 1

No. 489
Karl Fabel



White retracts 1 move, then mate in 2

No. 487: Here it is Black to play unless a white rook is added on h1. In this case the last move was 0-0 (before that Kg2/3-f3) and the first part Ke1-g1 has already been done. So the second part must follow: Rh1-f1#.

No. 488: That was a game at odds. White started the game without wRa1; Rg2 is a promoted piece. Therefore White retracts the move '0-0-0' (without wRa1) and puts the king on e1. Then follows 1.0-0#.

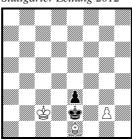
No. 489: That was a game at odds as well. White started the game without wRa1 nor wRh1; Rh3 is a promoted piece. Therefore White retracts the move '0-0' (without wRh1) and puts the king on e1. Then he plays 1.'0-0-0' (without wRa1) and puts the king on c1 followed by 1... Ka1 2.Ra3#.

No. 490 Hieronymus Fischer Vossische Zeitung 1921



Mate in 1

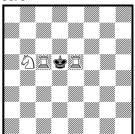
No. 491 Werner Keym Stuttgarter Zeitung 2012



Add 1 piece, then mate in 1

No. 492 Sam Loyd

American Chess Journal 1876



A mate in the middle of the board, with only 1 knight and 2 rooks

No. 490: Since there are 8 black pawns, neither Rf4 nor Rh4 can be a promoted piece. However, the original Rh8 could never leave the NE cage. Hence the position is illegal. So either of the rooks must be put on h8. In the case of Rf4 the solution is 1.Be6#, in the case of Rh4 it is 1.Sh6#.

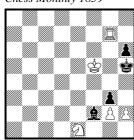
No. 491: This problem was part of the following story: On New Year's Eve a problemist presents his latest composition on a great magnetic board at the chess club, but nobody finds the solution. At midnight the chess players go outside to watch the fireworks. In the meantime the problemist puts the position with the five pieces on several boards on the tables and removes the pieces from the magnetic board. After the chess players have returned to their boards, some of them quickly find the solution. How come? — Unlike the magnetic board the ordinary boards do not have numbers nor letters on the border. So what is meant by the 'right' position of the board is ambiguous. By adding a white bishop on 'd1' (in no. 491) it can be proved that the board must be turned by 180°. Then the solution will be easy: 1.K×d8 b7-b8Q#. A similar idea is shown in problem P1347825 with only four pieces.

No. 492: It is clear that this is a mate in the middle of the board, but it is clear as well that this is an illegal position which can never occur in an actual game. For such a joke *Loyd* did not care about convention.

Strange chess stories

Charles XII at Bender

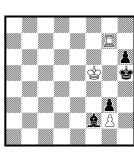
No. 493a Sam Loyd Chess Monthly 1859



No. 493b



No. 493c



Mate in 3

Mate in 4

Mate in 5

The story introduces an imaginary incident during the siege of Charles the Twelfth of Sweden by the Turks at Bender in 1713. Charles beguiled this period by means of drill and chess, and used frequently to play with his minister, Christian Albert Grothusen. One day while so engaged, the game had advanced to the stage represented in No. 493a and Charles (White) had just announced a mate in three. Scarcely had he uttered the words, when a Turkish bullet, shattering the window, dashed the white Knight off the board in fragments. Grothusen started violently, but Charles, with the utmost coolness, begged him to put back the other Knight and work out the mate, observing that it was pretty enough. But another glance at the board mad Charles smile: 'We do not need the Knight. I can give it to you, and still mate in four!' (No. 493b). Who would believe it, he had barely spoken when a second bullet flew across the room, and the Pawn at h2 shared the fate of the Knight. Grothusen turned pale. 'You have our good friends the Turks with you,' said the King, unconcerned, 'it can scarcely be expected that I should contend against such odds; but let me see if I cannot dispense with that unlucky Pawn. I have it!' he shouted, with a tremendous laugh, 'I feel great pleasure in informing you that there is undoubtedly a mate in five' (No. 493c). (from: Sam Loyd and his chess problems).

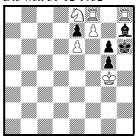
No. 493a: 1.R×g3 B×g3/B×e1 2.Sf3/Rh3+ B~/Bh4 3.g4# **No. 493b:** 1.h2×g3 Be3 2.Rg4 Bg5 3.Rh4+ B×h4 4.g4#

No. 493c: 1.Rb7 Be3 2.Rb1 Bg5 3.Rh1+ Bh4 4.Rh2 g3×h2 5.g4# or 1... Bg1 2.Rb1

Bh2 3.Re1 Kh4 4.Kg6 \sim 5.Re4#

Specialities for New Year's Eve

No. 494 *Karl Fabel Die Welt 31-12-1952*



Mate in 3 with the rook that stands on h8

It's New Year's Eve, and Mr White and Mr Black are enjoying a quiet game of chess. There's a rather nice aroma coming from their grog. Black, who's a problemist, is as usual in a poor position, but he always keeps his hopes up right to the end. Then White announces, 'Mate in 3 moves' and immediately shows how: $1.R \times h7 + K \times h7 + L \times h7 + L$

Solution: Black's 'creative' solution is: $1.Rhg8\ B \times g8\ 2.f \times g8R!$ (the pawn promotes to the rook that had previously been on h8) Kh7 3.Rh8#, and this rook is back on h8. Let's drink to a Happy New Year!

[This idea was already presented in 1914 (P1182118) and in a miniature in 2018 (P1346725).]

A New Year's Eve wager

No. 495 Werner Keym Stuttgarter Zeitung 31-12-2005



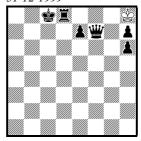
Mate in 3 without moving the queen

A New Year's Eve game down at the chess club is just coming to an end. Suddenly White wagers a bottle of cognac that he can mate in 3 without moving the Queen. The only mating sequence Black can see is 1.e8Q+ Kd5 2.Qb7+ c6 3.Qb×c6#, so he accepts the wager. White proudly shows what he has thought up: 1.e8Q+ Kd5 2.c4+ d4×c3 e.p. 3.Qe8-e4#. But Black objects, because he can plainly see that Qe8-e4 is a Q-move. White replies that he said 'without moving the Queen', meaning the Q already on b4. Opinions are divided on the matter. At this point a spectator intervenes and wagers that White can indeed mate in 3 without any Queen-move at all. Who wins the cognac, White, Black, or the spectator?

Solution: The spectator. White can mate himself in 3! 1.e8Q+ Kd5 2.c4+ d4xc3 e.p. 3.0-0-0+ Sd3#. Hey presto, a Valladao for New Year's Eve!

A 'compromise' on New Year's Eve

No. 496 Werner Keym Stuttgarter Zeitung 31-12-1999



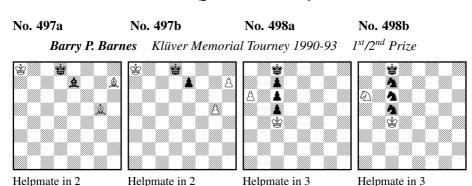
Snapshot of a typical New Year's Eve game. Quite a few glasses have been emptied, and Black is just about to give mate when he brushes a pawn off the board with his sleeve. Now the argument starts up: was it a white pawn or a black pawn, and which square was it on? Eventually White suggests a compromise: 'First of all you decide on the colour, and then I'll decide on the square.' Black is happy with this. Was he right to be?

Solution: No, he wasn't. With a white pawn on c7 White can achieve stalemate: $1.c7 \times d8Q + Kb7$ ($K \times d8$? stalemate) 2.Qc7 + Ka6/Ka8 $3.Qb6 + /Qb8 + K \times Q$. With a black pawn on d7 he can prove that Black's last move (0-0-0#) was illegal. This is because the white king can only have got into the corner via d8, so the black king must have moved. According to the 'touch-move' rule Black must take back 0-0-0 and play a king-move instead. Stalemate again! A fine way to start the third millennium!

Sherlock Holmes travels to Rotterdam

Sherlock Holmes and Dr Watson were travelling by train from Basel to Rotterdam for the problemists' congress. They had not been in Germany long when Watson spied a slip of paper on the floor. Written on it was: Ka8 Bg5 Bh7 Kd8 Be7, helpmate in 2, 1st move 1.Ke8. Watson took out his pocket set and soon said, 'There's something amiss here. 1.Ke8 is wrong; the correct solution is 1.Kc8! Bf4 2.Bd8 Bf5 mate.' Holmes said nothing.

A few hours later, when they were already in Holland, they came back from the restaurant-car and Watson found another slip of paper with a chess problem on it: $Kc4\ Pa6\ Kc8\ Pc5\ Pc6\ Pc7$, helpmate in 3, 1st move 1.Kb7. 'Again there's something wrong,' said Watson immediately. '1.Kb7 is a move into check and so impossible. Maybe it's another mistake?' And before long he said: 'Yes indeed, you can mate by 1.Kb8! $a7+2.Kb7\ K\times c5\ 3.Ka6\ a8Q$. Curious. What is your view, Holmes?'

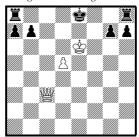


'It's not curious to me,' replied the latter. 'The first slip of paper comes from Germany. B is Bauer (pawn) in German, and it works with three pawns: 1.Ke8 g6 2.Kf8 h8Q mate. The second is from Holland. P means Paard (knight) in Dutch, and the key is correct: 1.Kb7 K×c5 2.Ka8 Kb6 3.Sb8 S×c7 mate.' 'But what's it all about?' asked a perplexed Watson. 'I think I know,' answered Holmes. 'A chess problemist gave the slips of paper to the guard as a way of testing us. B is for Bishop and Bauer, P is for Pawn and Paard. So this may well be Barry P. Barnes, whom we shall meet in Rotterdam. He has composed two 'international twins' for us. Rather nice.' And as usual the famous detective was right.

(Abridged version of *B. P. Barnes*' original English text)

Calculation and thought

No. 499 Werner Keym Stuttgarter Zeitung 2009



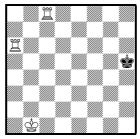
Mate in twice 2 moves

Down at the chess club they are holding a solving contest with a rather special problem. The first person to solve it will win a magnum of champagne. An old fox, who's a keen solver, and a young whippersnapper, who uses his mobile phone even for playing chess, simultaneously hand in different but not incorrect solutions. Eventually the contest controller gives the judgment of Solomon: 'The bottle goes to everyone present!' Great rejoicing at the club: they're all happy. How come?

Solution: The decision is a wise one, since both solvers are right, even if only partially. The mobile spits out the moves 1.Qc5! Kd8 2.Qe7+ Kc8 3.d6 Re8 4.Q×e8#, i.e. mate in 4 (= twice 2) moves (cf. no. 400). The problemist, however, sees that Black may castle either long or short. If 0-0-0 is permitted, then 1.Qc7! Kf8 2.Qf7#; and if 0-0, then $1.Q \times g7!$ Kd8 2.Qd7#. Both of these are twice 2 moves!

A Problem for Musicians?

No. 500 Werner Keym Die Schwalbe 2009 (v)



Mate in 2 moves Why would an inversion or a reflection of this position be musicologically unsound?

At the conclusion of a chess evening a lover of both problems and music shows an easy twomover. The mating sequence is quickly found: 1.Rg8 Kh4 2.Rh6#. 'That's simple,' says the problem-lover, 'but there is another puzzle. If you invert or reflect this position, you can certainly still mate in two, but the musicological significance is lost. Is that simple as well?'

Solution: The four men stand on B1, A6, C8, H5, which gives B-A-C-H and the year of his birth 1-6-8-5. If you invert the position you get BACH and 8314, and if you reflect it you get GHFA and 1685. Both of these are musicologically unsound.

'Chess, like love, like music, has the power to make men happy'. (Siegbert Tarrasch)

Ten 100 Euro tasks

As far as I know the following tasks have not yet been achieved. I am offering 100 Euro for the first realization of each of these ten tasks.

a) without retro aspect

- 1) 100 Dollar theme with only one promoted piece (p. 35)
- 2) Babson task in helpmate with 4 solutions and 4 different keys (cp. no. 88)
- 3) Babson task without duals in all full length variants (mainline and sidelines) (cp. no. 94–96)
- 4) Valladao task and AUW in helpmate and endgame study (cp. no. 114–116)
- 5) Keym task: Valladao task and AUW and Excelsior walk in directmate and helpmate (cp. no. 116 and 117)
- 6) Oudot task: dual-free one-line helpmate with promotions of three black pawns to queens

b) with retro aspect

- 7) Illegal Cluster without any piece on the chessboard nor any additional condition (cp. 444–446)
- 8) four castlings or en-passant captures (2+2 or 1+3 or 0+4) in a classical release problem (not in a proof game as no. 453)
- 9) interchange of white rooks and interchange of black rooks in a classical release problem (not in a proof game as no. 454)
- 10) dual-free walk of a king to the four corners in a proof game

Do you remember the song of *The Everly Brothers*?

'Problems, problems, problems, all day long. Will my problems work out right or wrong?'

The editor's choice

A Wichard von Alvensleben diagrammes 1990



Mate in 2 b) All men 1 rank down

B Vladimir Korolkov Zigurds Pigits Magyar Sakkélet 1958



Helpmate in 2*

C Wichard von Alvensleben

Hannoversche Allgemeine Zeitung 2008



White retracts 1 move and then does not mate b) $Kfl \rightarrow g1$

A: a) Try: 1.Qg3? (thr. 2.Sd4#) Qa1!; solution: 1.Bh8! (thr. 2.Sg7#) B×e5/B×f5 2.e×d8S/e8Q,R#. b) Try: 1.Bh7 (thr. 2.Sg6#) Sf8!; solution 1.Qg2! (thr. 2.Sd3#) B×e4/B×f4 2.Qb2/Bb2#. Mate change between the twin positions effected by different setting, not by the key move, to be sure. A task brilliantly performed. One ought to study the changes carefully as they are effected by shifting the position in a subtle way with pawns d7 and e7: the black pawn loses its option of the double step, whereas the white pawn is deprived of its option of promotion.

B (FIDE-Album): Set play: 1...0-0-0 2.Qf2 R×d3#. Solution: $1.Q\times a1+!$ Kd2 2.Kb2 Rb4#. The black piece on the first move of the solution captures the white piece which mates in set play.

C: a) If the last move was Kg2-f1# there would be a forced mate by 1.Kg2-f1/g1#. Therefore White retracts Kg2×Bf1! (previous move: Be2-f1+ or Pf2-f1B+) and then 1.Kg2-g1+! does not result in a mate. b) If the last move was Kg2-g1# there would be a forced mate by 1.Kg2-f1/g1#. Therefore White retracts Kg2×Sg1! (previous move: Se2-g1+ or Pf2×Xg1S+) and then 1.Kg2-f1+! does not result in a mate. Reciprocal change of both the mating move and the non-mating move connected with black underpromotions.

Finally a special 'cluster problem' by myself (P1348873).

Godehard Murkisch

Codex for Chess Composition

This codex deals with general principles of chess composition activities such as composition, solving and publication. The codex is intended to be descriptive, rather than prescriptive . . .

Article 15 – First move

If the first move does not lie with the conventional party ..., this should either be indicated in the stipulation or deducible from retroanalysis.

Article 16 - Castling and En-passant capture

- (1) Castling convention. Castling is permitted unless it can be proved that it is not permissible.
- (2) En-passant convention. An en-passant capture on the first move is permitted only if it can be proved that the last move was the double step of the pawn which is to be captured.
- (3) Partial Retrograde Analysis (PRA) convention. Where the rights to castle and/or to capture en-passant are mutually dependent, the solution consists of several mutually exclusive parts. All possible combinations of move rights, taking into account the castling convention and the en-passant convention, form these mutually dependent parts. If in the case of mutual dependency of castling rights a solution is not possible according to the PRA convention, then the Retro-Strategy (RS) convention should be applied: whichever castling is executed first is deemed to be permissible.
- (4) Other conventions should be expressly stipulated, for example if in the course of the solution an en-passant capture has to be legalised by subsequent castling (a posteriori (AP) convention).

Article 17A - Dead Position Rule

Unless expressly stipulated, the rule of dead position does not apply to the solution of chess compositions except for retro-problems.

Annotation: Article 15 was resolved in 1974 at Wiesbaden, article 16 (except for the sentence 'If in the case ... permissible.') in 2008 at Jurmala, this sentence in 2009 in Rio de Janeiro, article 17A in 2015 at Ostroda.

Glossary

(v): later version of a problem(c): later correction of a problem

PDB (Chess Problem Database Server): a free easy-to-use source of about 400,000 problems. See http://pdb.dieschwalbe.de and enter PROBID = 'P1012377 for a single problem (= no. 1 by W. E. Candy) or K = 'symmetrical position' for a theme.

Pieces: king (K), queen (Q), rook (R), bishop (B), knight (S), pawn (P).

Officers: Q, R, B, S.

Allumwandlung: promotion to Q and R and B and S.

Letztform: best and unsurpassable realization **Miniature:** problem with at most 7 pieces

Zugzwang: compulsion to move (with a negative result)

Directmate problem: White moves first and gives mate in n moves against any

defense. A mate in 2 moves comprises 3 single moves.

Selfmate problem: White moves first and forces Black to give mate in n moves. A selfmate in 2 moves comprises 4 single moves.

Helpmate problem: Black moves first and helps White to give mate in n moves; a helpmate in 2 or 2.0 moves comprises 4 single moves. A helpmate in 2.5 moves comprises 5 single moves; in this case White moves first.

Unconventional first move: if the first move does not lie with the conventional party, this should either be indicated in the stipulation or deducible from retroanalysis.

The **real play** comprises the moves executed in the course of the solution. The **virtual play** comprises possible moves, especially in (thematical) tries and in set play. In the **set play** Black moves first in a directmate or selfmate problem, White in a helpmate problem. A star * points to the set play.

Retrograde analysis or **retroanalysis:** process of proving what the 'history' (i.e. the last one or more moves) of a given position must have been.

The **genesis of the position** states the important moves from the initial position to the diagram position; these moves need not be unique.

A virtual retro move results in a **retro stalemate**, if this move leads to an illegal position where one party has got no previous move so that the initial game array cannot be reached.

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The funny side of chess!

Patient: Will I live to be eighty, Doctor?

Doctor: How old are you now?

Patient: Sixty-two.

Doctor: Do you drink? Patient: Not very much.

Doctor: Do you smoke?

Patient: Not at all.

Doctor: Do you do any womanizing?

Patient: Certainly not, doctor.

Doctor: Do you like playing chess, by any chance?

Patient: No, doctor, I don't.

Doctor: Then why do you want to live till eighty?

Retro-



analyst

Chess World Championship: a proposal out of the box

The Chess World Championship match should be decided neither by rapid chess nor by blitz chess nor by Armageddon, but instead by classic chess.

Proposal

The competition consists of two parts: prologue and match.

- 1. Prologue
- 1.1 Who plays White in the first game is decided by lot.
- 1.2 There are then 4 rapid chess games. If one player gets 2.5 points, the prologue is over.
- 1.3 Otherwise, the result is 2:2, and now 2 blitz chess games will follow. If one player gets 1.5 points, the prologue is over.
- 1.4 Otherwise, the result is 1:1, and now further blitz chess games will follow. The first win of a game will end the prologue.
- 1.5 We now have a prologue winner and a prologue loser.
- 2. Match
- 2.1 There is an odd number of classic chess games (e.g. 13).
- 2.2 The prologue loser plays White in the odd-numbered games $(1, 3, 5, \dots 13)$.
- 2.3 If the prologue loser gets 7 points, he will be the champion.
- 2.4 If the prologue winner gets 6.5 points, he will be the champion.

Comment

- The conditions for the champion and the challenger are equal.
- The prologue will take 2-4 days.
- The advantage for the prologue loser is that he has White in the first and the last game.
- The advantage for the prologue winner is that he wins the championship in case of tie.
- The championship match is decided by at most 13 classic chess games and there may be much excitement towards the end: in the 13th game the prologue loser has White and must win, whereas the prologue winner has Black and must draw.
- The match will end by a fixed day. This is important for organizers, sponsors, media, and audience.

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'Logic will get you from A to B. Imagination will take you everywhere'. (Albert Einstein)

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Errata

- **p. 4, no. 15:** completely anticipated by Hans Hilmar Staudte, *Aachener Nachrichten 1973*
- **p. 42, no. 139:** not 'Feenschach 1956', but 'Fairy Chess Review 1956'
- p. 42, no. 144: only 'Die Schwalbe 2007, 2nd HM'
- **p. 45, no. 155:** not 'Retro Mailing List 2007', but 'Die Schwalbe 2007, 2nd commendation'
- p. 53, no. 181, line 2 and 4: not 'e1', but 'd1'
- **p. 137, no. 431, stipulation:** '... then mate in 1 Proca Retractor'