

The Art of the Endgame

My Journeys in
the Magical World
of Endgame Studies

Revised Edition – with 14 New Studies

by Jan Timman

NEW  IN CHESS

Jan Timman

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My Journeys in the Magical World of Endgame Studies

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For Geertje

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Preface

In my early youth, there were fascinations. I imagined how it would be to live in a house in the woods. Castles would bring me to raptures. I remember my excitement when I was standing with my parents on the ferry that transported visitors to Loevestein Castle. I dreamed that on the playground in our neighbourhood there was a castle you could play in.

In the summer holidays, we travelled along the Rhine in a Ford Taunus – my father behind the wheel, my mother next to him and we, the four kids, pressed together on the back seat. Our destination was Tuscany: Siena and Lucca, with its all-embracing city wall, which we rounded again and again during our long walks.

Along the Rhine stood the robber baron castles with their impressive names: Reichenstein, Rheinfels, and the Fürstenberg, the ruin that towered high above the Rheindiebach village. There we used to find lodgings in a little hotel, concluding the first stage of our trip. At home, in the living room, I would build Lego cities and Citadel castles.

M.C. Escher's 'Metamorphosis' starts with black-and-white squares that transform into salamanders. The salamanders become beehives. Out of these, bees emerge, which are ingeniously transformed into birds. Then there are fish, and in the accompanying pattern – birds again.

Here the 'Metamorphosis' arrives at things made by human hands. The new birds transform into blocks. Out of these, houses in the south-western Italian town of Atrani are formed. Now the systematic pattern of forms is broken. A bridge connects the town with a chessboard. On a3 is a white rook, which also exists in the other reality. On the chessboard, a position is depicted where White

perishes due to a smothered mate. And then Escher is back at the black-and-white squares.

From building miniature cities to chess: this was a step I already made in my youth.

The world of chess was the most fascinating. I devoured Euwe's books. The memory of the game Réti-Alekhine, annotated in his book *Practical Chess Lessons*, which never ceased to amaze me: the black rook appearing on e3 and remaining en prise there for several moves. Another game that was indelibly printed in my memory was Tartakower-Botvinnik from Hans Müller's *Mikhail Botvinnik, One Hundred Selected Games*. It was an impressive image: the white king was pinned down in the corner by a knight on f3, supported by a mighty pawn front.

Within the romantic world of chess there was a sector that was even more hermetically closed off from the outside world. I first became acquainted with it when I read Herbstman's book *De schaakstudie in onze dagen* (i.e. 'Contemporary Chess Studies'). In this new world there was no struggle in the sense of a man-to-man fight. The competitive element was gone – only scientific and artistic elements remained. The studies by Troitzky and Kubbel had a special magic. I felt that their masterpieces were made for eternity.

It is the strict regulations that lend a special status to the endgame study. White always has only one move to reach his goal, whether it is to force a win or a draw. Black, on the other hand, may have alternatives, and these extra possibilities can enhance the content and the richness of a study.

In practical chess, you think about what lies in the distance. You make plans and calculate variations. Creating an endgame study requires a significantly different thinking process. As a rule, the endgame study composer has an end position in mind, which contains a spectacular hidden point. Then comes the stage of retrograde thinking: he investigates the position backwards, asking

himself: ‘What was White’s last move?’ and then: ‘What was Black’s last move?’ Today I still ask myself these questions in my mind.

I composed my first studies in the early 1970’s, when I had just finished my secondary school education and the world was my oyster. Now that I look back on this, four decades later, it strikes me how uncomplicated these early pieces of work look. The points are nice, but the play misses the depth of my later studies. Not until the 1980s did I manage to create a few high-level studies.

Nowadays I can hardly imagine how it was to compose studies without a computer. In those days it was extremely difficult to work out all the tactical details. You could spend days eliminating little tactical tricks that upset the play. And then sometimes, there would still remain questions. Nowadays you can simply move your pieces and pawns to the right squares on the analysis board of your computer. Tactical snags are often useful for adding new elements to the study.

In December 2010, I decided to write *The Art of the Endgame*. I wanted to show systematically, guiding the reader along themes and genres, why endgame studies are so beautiful and so interesting. Especially the systematics were important. It had struck me that most books on endgame studies were quite random collections. My intention was to reveal the secrets from the world of endgame studies in 14 chapters. I also had a second intention: in 1991, my book *Schaakwerk II* had appeared in Dutch (later translated as ‘Studies and Games’). In the second part of this book, I had included a number of endgame studies. I wanted to put this material under the microscope one more time. With the help of the computer I would establish if the studies were correct, after polishing them up in some cases.

In January 2011, I started my journey in the world of endgame studies. I kept making new, fascinating discoveries. This stimulated

me to create new studies. Before, I had never occupied myself with the question how you could incorporate the Novotny theme and the related Plachutta theme in studies. Studying a number of examples pointed me in the right direction. Never before have I been so productive as an endgame study composer as in the seven months that I wrote this book. It was a sensational experience. Whether I looked at bishop promotions, systematic manoeuvres, or the Valladao Task, I kept finding new paths.

The computer has refuted a number of studies by great composers. Nowadays there is a trend to publish such refutations as if they were great achievements. In this book I have striven to use the computer in a constructive way. An impressive work of art that has been damaged, must be repaired with great care. I have treated studies with such defects in the same way. I corrected them in ways that did not affect the brilliant ideas.

In the first chapter I discuss miniature studies, i.e. pieces of work that are often closely related to the theoretical side of the endgame. The second chapter continues on this path, and is purely theoretical. Then we come to the real romanticism. Pawn promotion is an important factor in chess. First I discuss several methods to prevent pawn promotions, and after that the various promotion combinations are reviewed. I have given a representative picture of the themes. As with every theme, I cannot pretend to be comprehensive; there are more than 75,000 studies in existence!

In the chapter on knight promotions, I've had to restrict myself even further. This is the type of pawn promotion that is most frequent after the regular queening, in practice as well as in studies. I have exclusively dealt with knight promotions that repeat themselves according to a certain pattern. With bishop promotions I could paint a slightly more comprehensive picture again, even though I was forced to make choices here as well.

In the chapters on mate and stalemate, I have selected those studies that appealed to me most. That was anything but easy. Each study (or game) ends in mate or stalemate, and the motifs can be surprising and beautiful.

Mutual zugzwang and building a fortress are themes that can be of practical use. It is remarkable how often strong players do not recognize these themes. For this reason, I think that Chapters 9 and 10 are highly instructive.

On the other hand, the next two chapters contain themes that are entirely disconnected from practice. Systematic manoeuvres do not occur in games. Nor will a player strive to lose pieces in the course of a variation. However, it is worthwhile to see how these offerings are justified in studies.

In the chapter called 'Three Themes' I have dealt with three of my favourite themes. The final chapter is a collection of remaining studies. Again, I had to make a selection here. There were studies from the past with nice ideas, which nevertheless had to be rejected for publication, either because the computer refuted certain variations or because the variations were insufficiently special.

And that is how my seven months' journey came to an end. It was not only a fascinating experience, but also an instructive one. It seemed as if I was finally allowed to probe depths in the endgame that had been hidden from me before. I have tried to describe and explain my findings as clearly as possible. And I sincerely hope that the depth and beauty of endgame studies will also move the reader.

Jan Timman,

August 2011

Preface to this revised edition

For this revised edition, I have made a number of corrections to the text and the diagrams. In the past decade, computers have become stronger and stronger. Engines showed that some of the studies in

this book had defects; they were incorrect, or there were alternative solutions. Because of this, I felt the need to remove six studies and replace six others with better versions. Apart from that, I have added fourteen new studies, two of which are published here for the first time. The structure of the book has remained intact.

Jan Timman,

Arnhem, July 2023

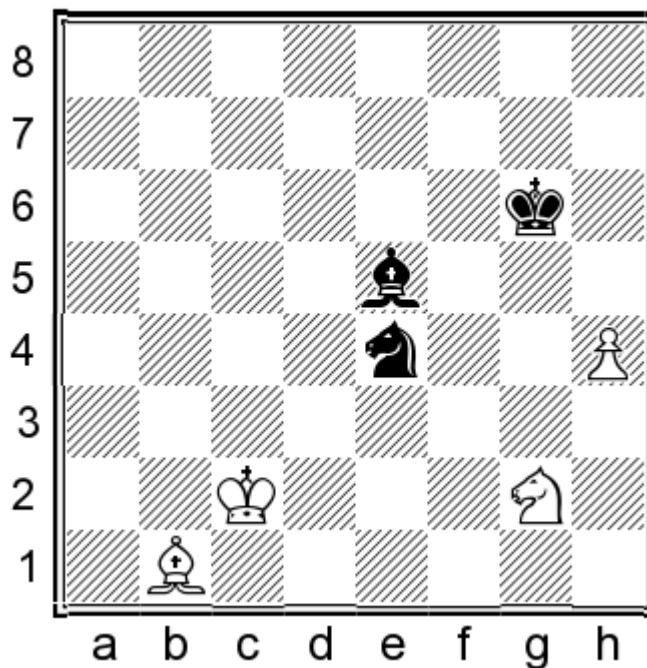
Chapter 1

Miniature studies

A miniature study is a study with no more than seven pieces in the starting position. With minimal material, the composer must weave the maximum amount of finesses into the position.

A classical example is the following study by the brilliant Russian composer Mark Liburkin.

Liburkin, '64' 1933



White to play and win

First of all White pins the black knight, in order to capture it next.

1.Kd1 Kf5 2.Ke2

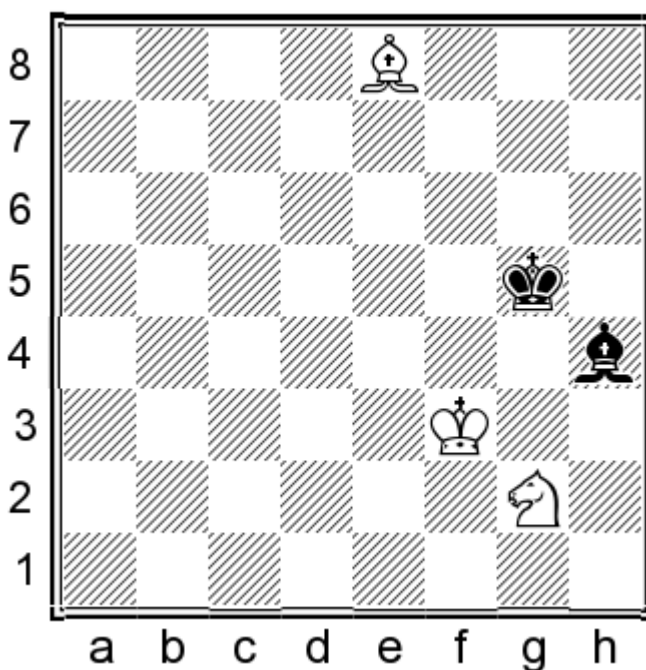
Because his bishop is in the way, Black cannot unpin his knight. However, he has a resource in store.

2...Bf6 3.Kf3 Bxh4

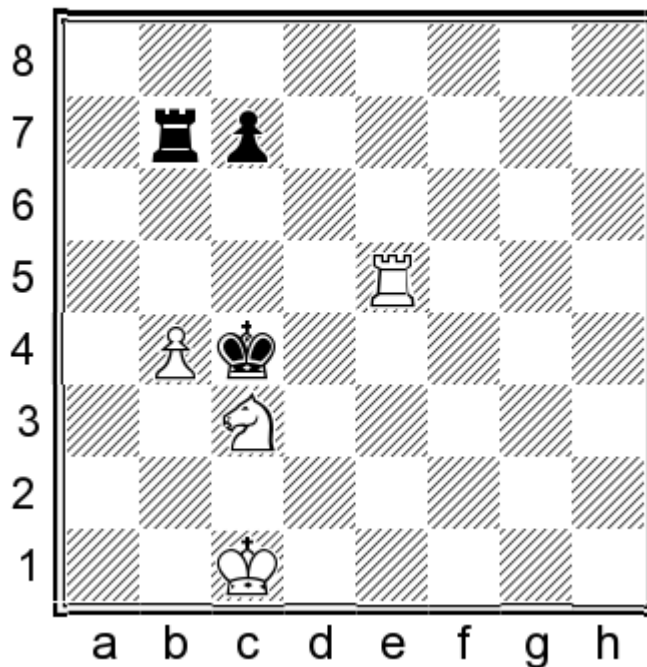
Black appears to save himself, since after 4.Nxh4+ Kg5 the white knight is also under attack. But now White changes tack.

4.Bxe4+ Kg5 5.Bd5! Kh5 6.Bf7+ Kg5 7.Be8

And the black bishop is lost.



This miniature study contains some themes that we will touch upon later. It starts with a pin. The final position shows a case of ‘mutual zugzwang’: if it were his move, White would not be able to win. Furthermore, the ‘domination’ theme makes an appearance: the black bishop has no squares and is dominated by the white pieces. I have composed a modest number of miniature studies myself; it is not easy to build in enough points and finesses with so little material.



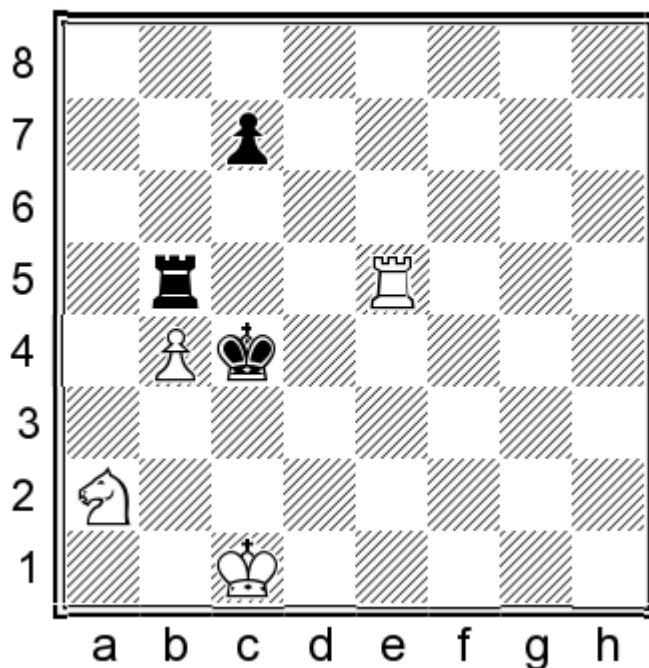
White to play and win

It is hard to foresee that the black king can be drawn into a mating net. Yet, that is precisely what this study was based on.

1.Na2 Rb5

A somewhat artificial move which is, however, connected with a clear plan: Black wants to carry through the saving thrust ...c7-c5 as soon as possible.

On 1...Kb3 White has 2.Kb1, keeping control.



2.Re3

Only this rook move wins. Of course, after the rook exchange it would be a draw, and 2.Re7 c5 3.Rc7 Kd4 didn't bring anything either.

2...c5

What can White do now against the exchange of the last pawns?

3.Nc3

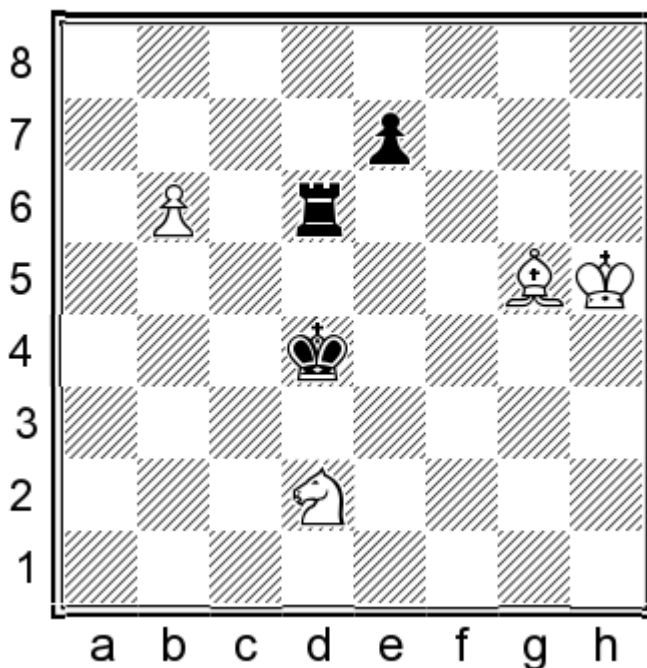
This is the answer. White sacrifices his b-pawn.

3...Rxb4 4.Kc2

And mate on e4 cannot be satisfactorily avoided.

This mating position can also be achieved without a black pawn, as we see in the following miniature study.

Matous, 'Shakhmaty v SSSR' 1984



White to play and win

White obviously tries to force Black to give up his rook for the b-pawn.

1.b7 Rd8

After 1...Rb6 2.Be3+ Black would lose immediately.

2.Bf4 e5 3.Nf3+ Ke4

Attacking the knight, so that capturing on e5 brings White nothing. However, White still has a knight check.

4.Ng5+ Kf5 5.Bxe5

Here, 5.Nf7! also wins.

5...Re8

The alternative 5...Rg8 fails to 6.Nf7 Ke6 7.Nh6, followed by 8.b8Q. After the text move White cannot promote to a queen in view

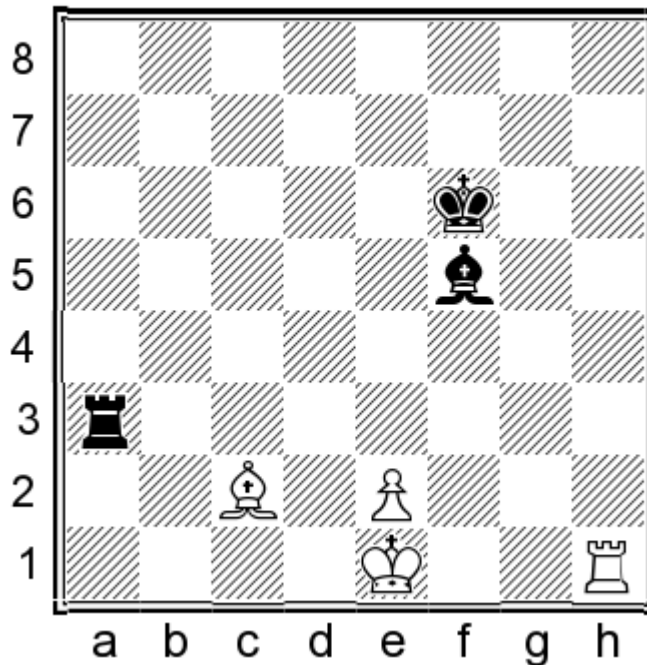
of 6... Rh8+ with stalemate. At the same time the bishop cannot budge, since it has to keep controlling the squares b8 and h8. And neither 6.Nf3 Ke4 7.Kg4 Rg8+ nor 6.Nf7 Ke6 7.Nd6 Rb8 bring White anything either. So there remains:

6.b8R Rxe5 7.Rf8

Mate.

This study received second prize in a competition organized by Shakhmaty v SSSR.

Timman 1986



White to play and win

1.0-0

In studies the players are always allowed to castle, unless it can be proved in the starting position that either the king or the rook has already moved.

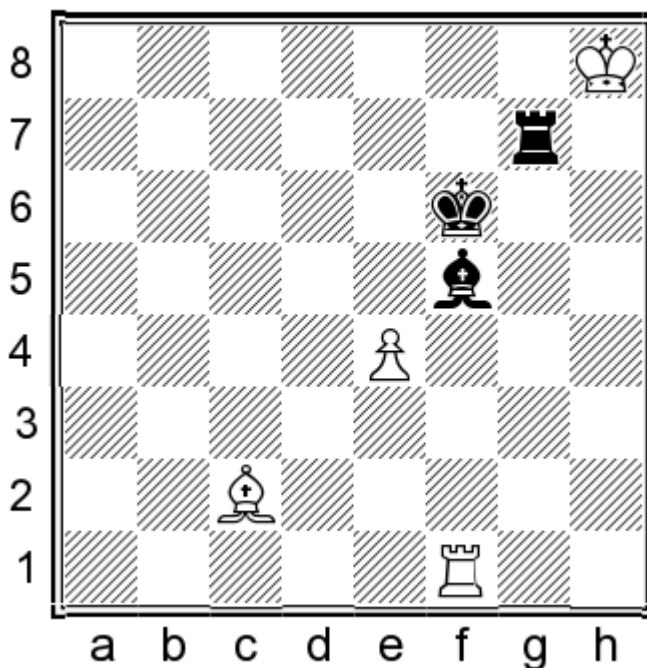
1...Rg3+ 2.Kh2 Rg5 3.e4

After castling kingside, White now plays the most popular starting move. Black cannot save the bishop, but he does have a long series of checks.

3...Rh5+ 4.Kg3 Rg5+ 5.Kh4

The white king has to advance to escape the checks.

5...Rg4+ 6.Kh5 Rg5+ 7.Kh6 Rg6+ 8.Kh7 Rg7++ 9.Kh8



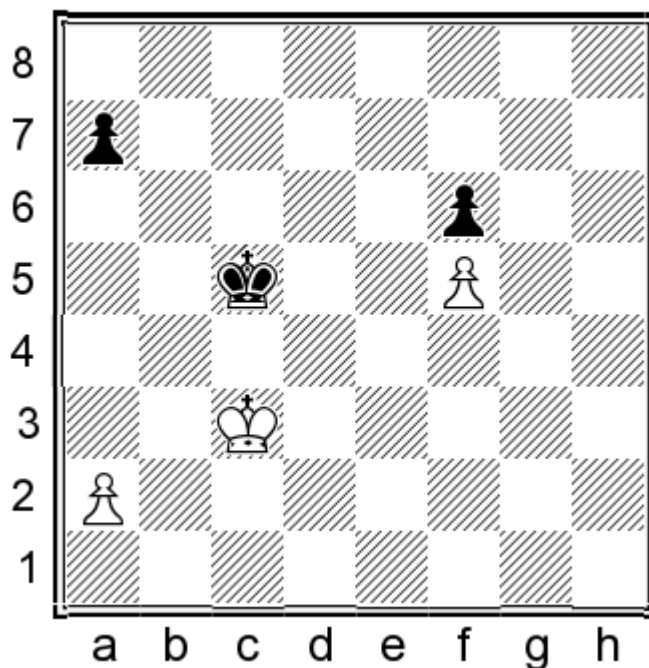
The white king has reached the corner, but the enemy checks are far from being exhausted.

9...Rh7+ 10.Kg8 Rg7+ 11.Kf8 Rf7+ 12.Ke8 Re7+ 13.Kd8 Rd7+ 14.Kc8

And on the following move White captures the bishop. The white king had to march along the edges of the board in order to escape the rook checks.

In the following pawn ending, mutual zugzwang plays an important role.

Timman 1988



White to play and draw

It is clear that the white f-pawn is doomed. If Black goes and collects this pawn, the white king will have to go for the enemy a-pawn. And in order to advance his own a-pawn far enough, he has to push it first.

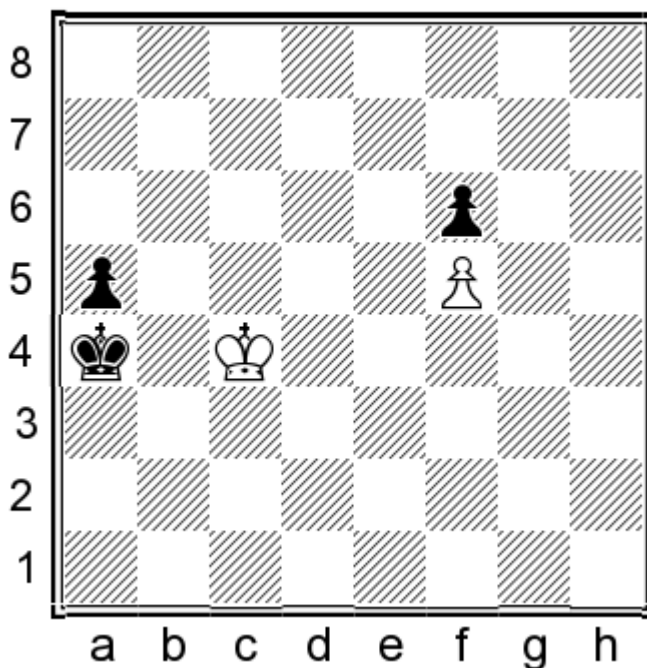
1.a4 a5

But now there is a new problem: White must lose his a-pawn.

2.Kd3

Only thus. After 2.Kb3 Kd4 White will be pushed back.

2...Kb4 3.Kd4 Kxa4



The critical moment. If White continues with the unsuspecting 4.Kd5 he will lose after 4...Kb5 5.Ke6 a4 6.Kxf6 a3 7.Ke7 a2 8.f6 a1Q 9.f7 Qg7 10.Ke8 Kc6 11.f8Q Qd7 mate. That is why, before he approaches the f-pawn, White must first force the enemy king to a worse square.

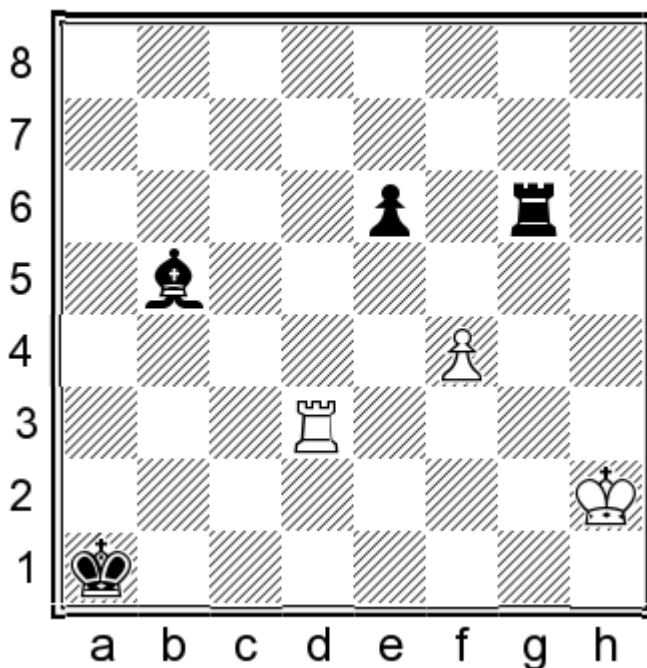
4.Kc4!!

This is the moment of mutual zugzwang. If it were his move, White would lose.

4...Ka3 5.Kd5

The rest plays itself. The white f-pawn will reach f7 and the black king is too far away.

Timman 1993



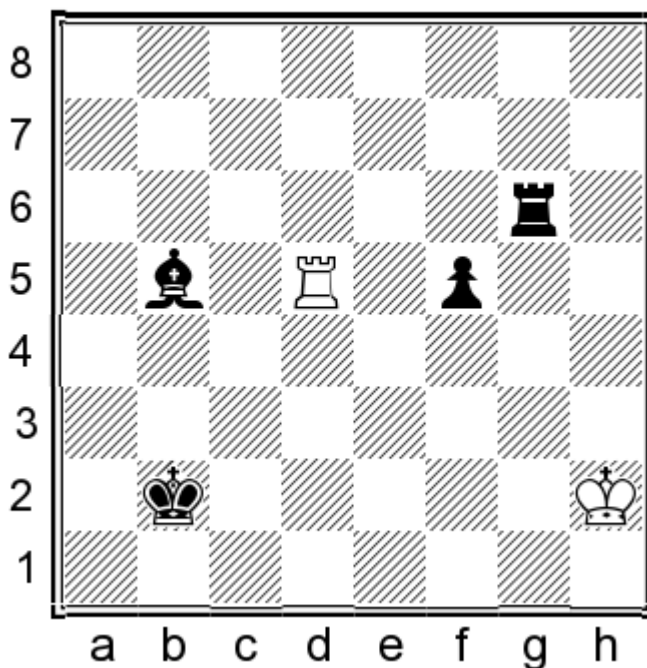
White to play and draw (dedicated to Judit Polgar)

White must start with a check.

1.Rd1+

After this move we are at a crossroads:

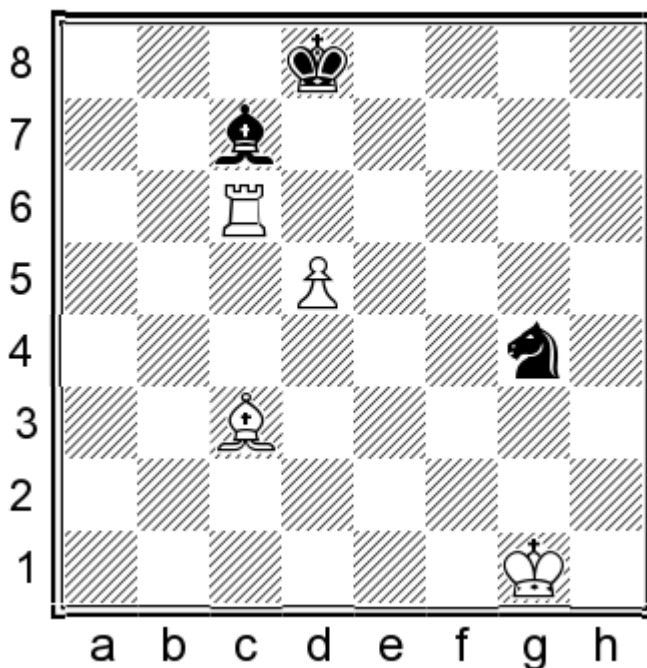
A) 1...Kb2 The most natural reaction. 2.f5! The thematic push. Black has to capture the pawn. 2...exf5 3.Rd5



This double attack seems to solve all the problems. However, Black has another finesse up his sleeve: 3...Rg2+! Now a sharp exchange of pins follows. The king has to move upwards, otherwise 4... Bc6 is lethal. 4.Kh3 Bf1 5.Rd1! Certainly not 5.Rxf5 on account of 5...Rf2+ 6.Kg4 Bh3+, winning. 5...Be2 6.Re1 Bf3 7.Rf1 Be4 8.Rxf5 with a draw.

B) 1...Ka2 This king move has a specific point. 2.f5 exf5 3.Rd5 Rg2+ 4.Kh3 So far the play is identical to Variation A. 4...Rb2 Black's first move left this square vacant. The bishop is protected, while the f-pawn is taboo for the moment. 5.Kh4! An instructive move. The king will attack the pawn from g5. 5...f4 6.Rf5 Rb4 7.Kg5 Winning the f-pawn.

Timman 1994



Black to move – White wins

This is a miniature study in the true sense of the word. The solution is simple, but attractive. Black, who is to move, will have to try and eliminate the white pawn.

1...Ne3

On 1...Kd7, 2.Rg6 Ne3 3.Rg7+ Kc8 4.Rg5 was winning.

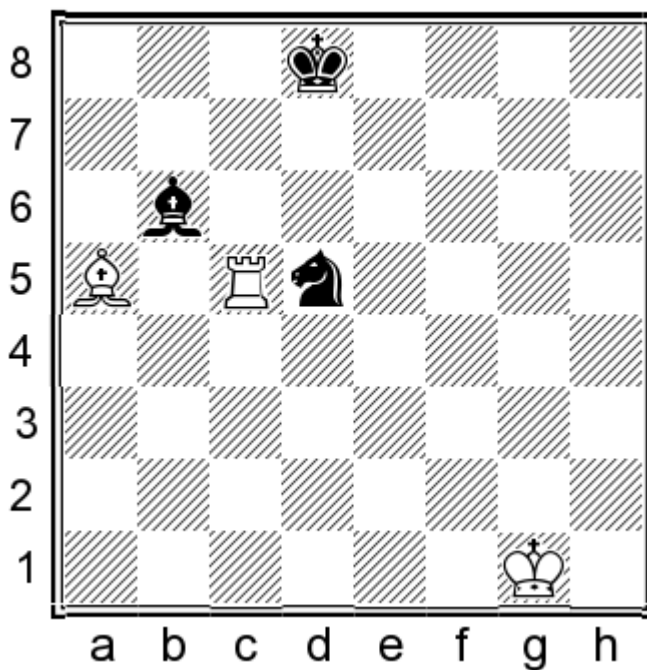
2.Rc5

The only way to keep the pawn. After 2.d6 Bb8 there is no win; by advancing, the d-pawn has become too weak, e.g. 3.Rb6 Ba7 4.Bf6+ Ke8 5.Rb7 Nd5+ 6.Rxa7 Nxf6 7.Kg2 Kd8! 8.Kf3 Ne8 and Black is just in time to eliminate the pawn.

2...Bb6

Introducing the motif of the indirect pin.

3.Ba5 Nxd5



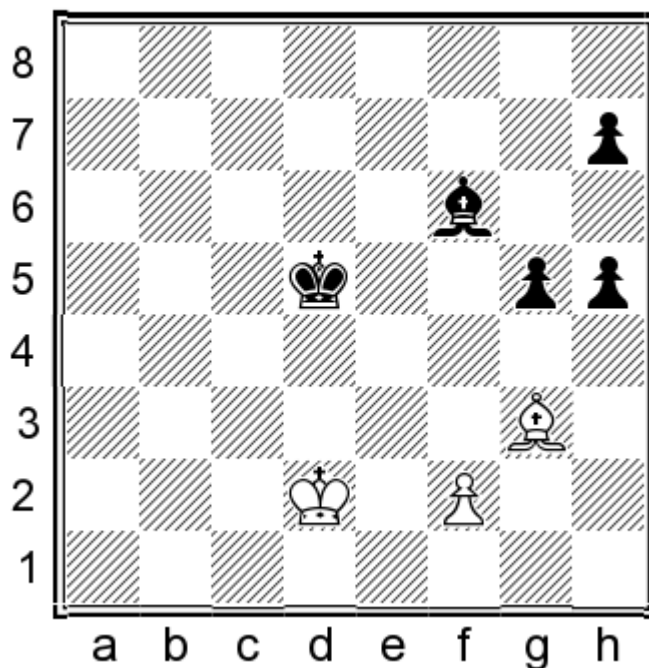
The pins are piling up. White now has only one king move that wins.

4.Kh1!!

The king moves further away from the scene of battle. Insufficient was 4.Kh2 on account of 4...Bc7+, while after other king moves Black would have a saving knight check. Now there is no defence for Black. White remains a rook up.

In the following study, Black has two extra pawns and his king is nicely centralized. However, White can make use of a chance circumstance in the position.

Timman 2008



White to play and draw

1.Bh4!!

Pinning the enemy g-pawn. If Black captures the bishop he will be left with the bishop of the wrong colour.

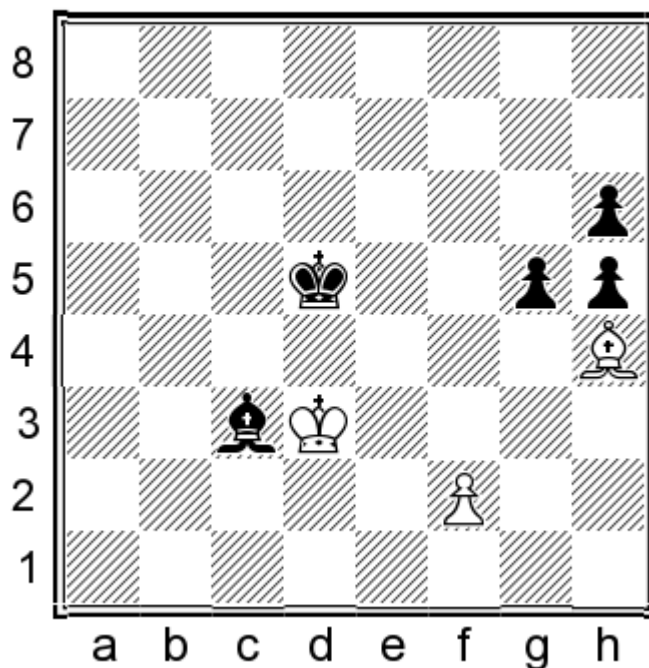
1...Bc3+!

A pretty counter-sacrifice that cannot be accepted either. The white king must be within the square of the g-pawn after the latter captures on h4.

2.Kd3!

The only square for the king. It has to keep attacking the enemy bishop.

2...h6



Protecting the g-pawn. Things look gloomy for White, but he has a resource.

3.f4!

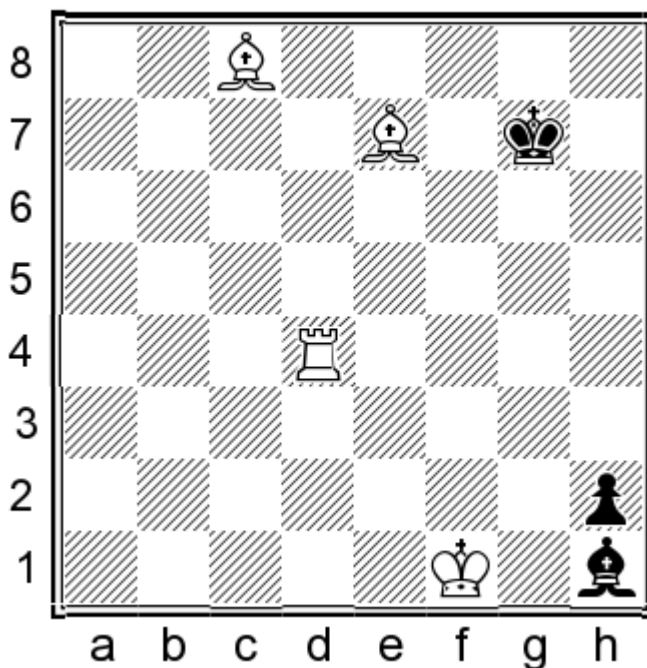
Forcing the g-pawn to reveal its plans.

3...gxh4 4.Ke2 h3 5.Kf2!

The only good square for the king. After either 5.Kf1 Bd4 or 5.Kf3 Be1!, it would be cut off.

5...Be1+ 6.Kg1 $\frac{1}{2}$ - $\frac{1}{2}$

Timman 2009



Black to move – White draws

White is far ahead in material, but the black pawn is about to promote.

1...Be4

Cutting off the white rook. If White allows the pawn promotion, he will lose due to the bad coordination of his pieces. Therefore he has to give checks in order to try and reach the h-file with his rook.

2.Bf8+!

Not 2.Bf6+ in view of 2...Kg6! and White does not have any effective checks left.

2...Kh8

2...Kg8 would have been met by 3.Be6+.

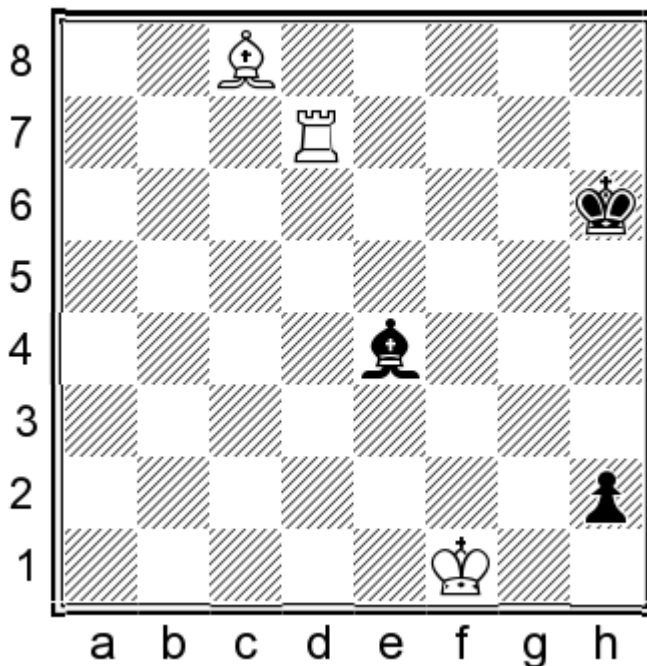
3.Bg7+!

White keeps offering the bishop.

3...Kxg7

The same position we had two moves ago, only now without the white queen's bishop. The path of the rook to the seventh rank has been opened.

4.Rd7+ Kh6



Now what? After 5.Rd6+ Kg5 White would be at the end of his wits.

5.Rh7+!!

A fantastic rook sacrifice. Black has to take with the king.

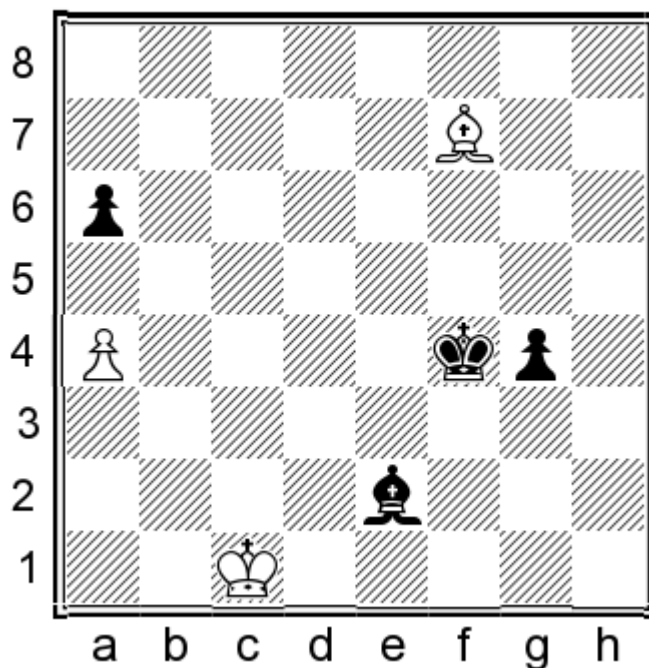
5...Kxh7 6.Bf5+!

The last white piece is also sacrificed.

6...Bxf5 7.Kg2

With a draw. A follow-up study on this promotion theme can be found in Chapter 4.

Timman 2009



White to play and draw

White is a pawn behind, but he has drawing chances, as he can give his bishop for the enemy g-pawn in the right circumstances. There are also chances for him in the pawn ending, as the course of the solution will show.

1.Kd2

Otherwise the g-pawn would march on.

1...Bf3

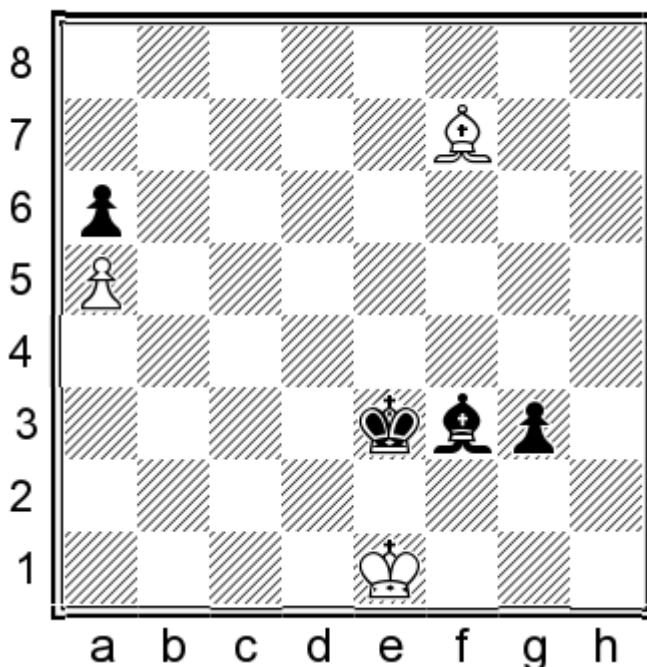
On 1...Kf3 White has the important finesse 2.Bh5!. He will take on g4 next and bring his king to the safe zone, on the lower left side of the board.

2.a5!

Even with strongly reduced material, the strategic principles must still be adhered to.

After other moves Black would play 2...a5 himself, when the white rook's pawn would become a fatal weakness.

2...g3 3.Ke1 Ke3



4.Bc4!

The prelude to a miraculous saving clause. 4.Kf1 would have been met by the winning 4...Kd4. Then the black king can march to the queenside unhindered and win the white a-pawn.

4...Be2

Resourceful play by both sides. On 4...g2 White had prepared the reply 5.Bf1!. If Black then promotes to a queen or rook, White is stalemated. This trick was discovered in 1856, by the Italian Luigi Centurini.

After the text move White cannot take on e2, because then the promotion of the g-pawn will decide after all.

5.Bd5 Bc4 6.Bg2!

The only square for the bishop. After 6.Bb7 Kd4 7.Kd2 Bd5 White would have no choice but to enter a lost pawn ending.

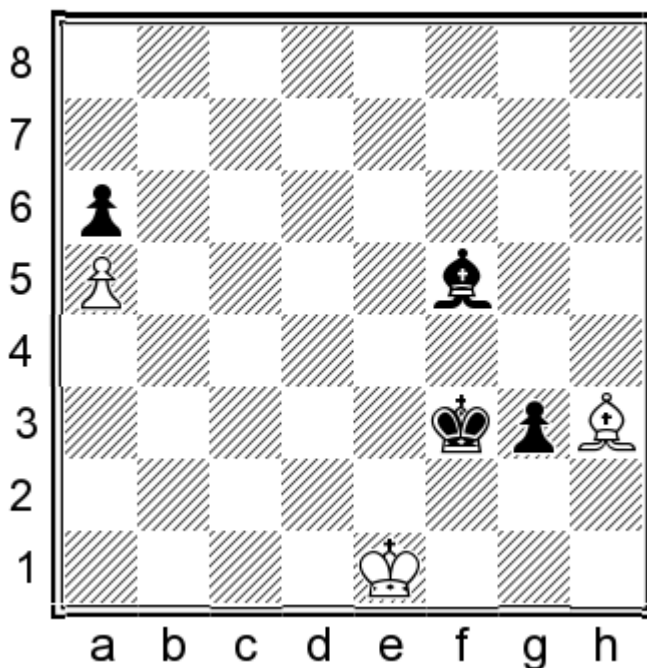
6...Bd3 7.Bh3 Kf3

Black has consistently worked on depriving the white bishop of squares. Still, there is a way out for the bishop.

8.Bf1!

White can now save himself in the pawn ending, since he has the opposition. But even this does not put an end to his worries.

8...Be4 9.Bh3 Bf5

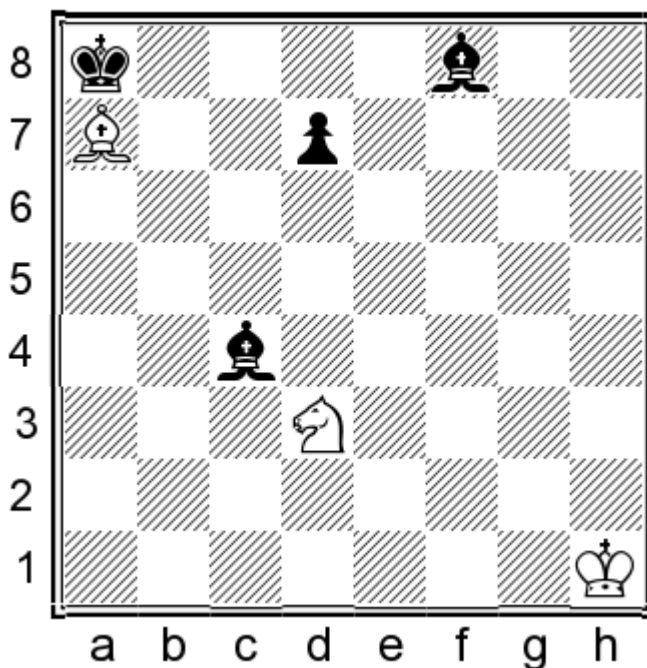


A final attempt. 10.Bf1 Bc8! would lead to mutual zugzwang. However, White has a radical solution to his problems.

10.Bxf5 g2 11.Be4+! Kxe4 12.Kf2

And the remaining pawn ending is just barely drawn.

Timman 2009



White to play and draw

Both white pieces are under attack. He will need to find a few cunning manoeuvres to remain on his feet.

1.Bc5 d6

If White now captures on d6, he will end up in a theoretically lost endgame.

2.Ne5!

The second piece is also put en prise. Black is forced to give check.

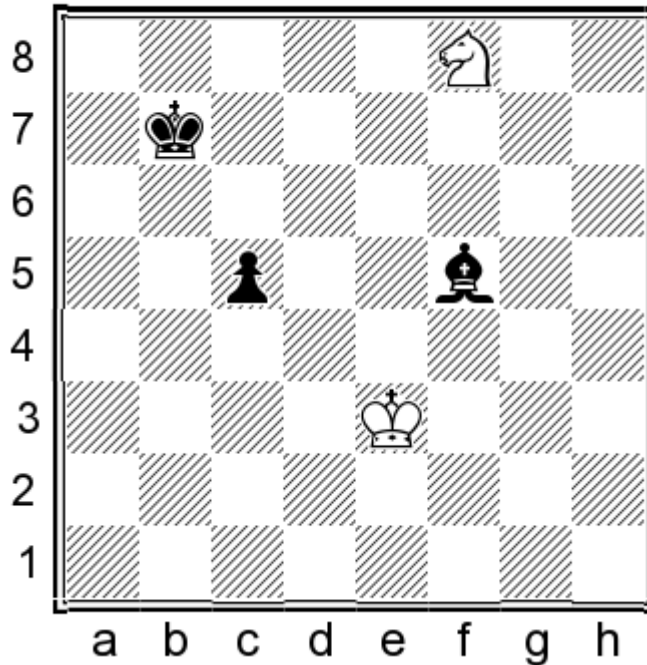
2...Bd5+ 3.Kg1 dxc5 4.Nd7

The point of the previous moves. White wins back the piece. However, new troubles await him.

4...Be6 5.Nxf8 Bf5

The knight is completely dominated by the bishop. Now there follows a duel between the kings.

6.Kf2 Kb7 7.Ke3



Up to here, everything was logical. If Black now continues 7...Kb6, White will hold the draw by 8.Kf4 c4 9.Kxf5 c3 10.Nd7+. Via e5 and d3 the knight can prevent the c-pawn's promotion. And after 7...Kc6 it will find its way via e6 and d4. However, Black has yet another, almost paradoxical king move:

7...Ka7!

The king steps aside in order to evade all the knight checks. Now White has to take care. After 8.Kf4 c4 a situation of mutual zugzwang would occur, with fatal consequences for White, e.g. 9.Ke3 Kb6 10.Kd4 Kb5, and the black c-pawn will decide the issue. Therefore, the white king too must step aside.

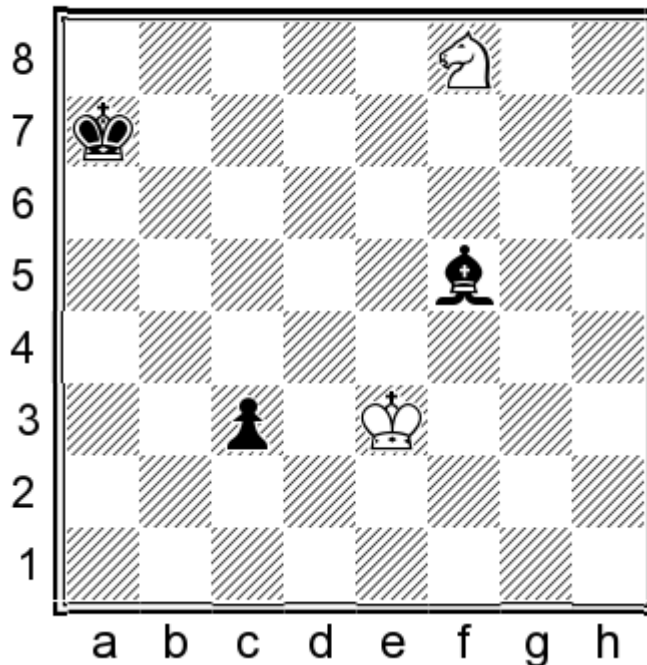
8.Kf3!!

Now Black must either choose an unfavourable square for his king or advance his pawn.

8...c4 9.Kf4 c3

Black still has no good king moves.

10.Ke3



The black king is too far away to support the c-pawn. After 10...Kb6, both 11.Nd7+ and 11.Ne6 are good enough for a draw. A fascinating endgame. If in the final diagram position we move all the pieces one file to the right, Black wins, as his king has more squares available to it on the queenside.

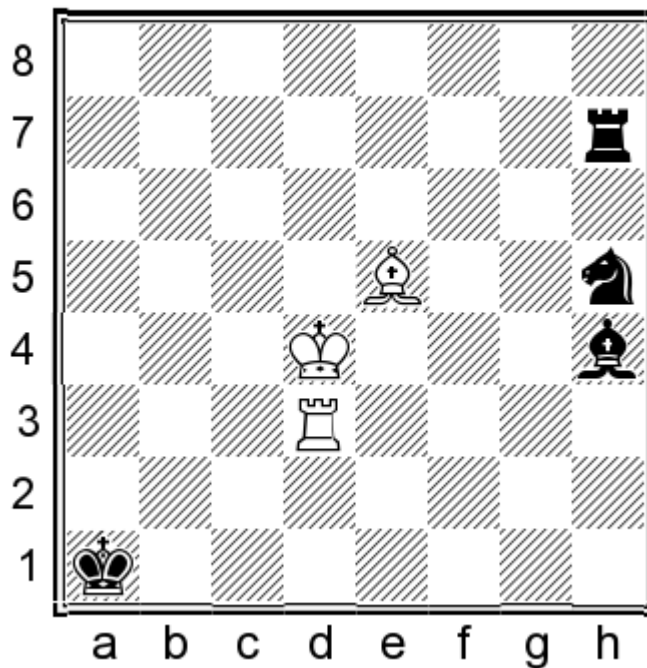
By the way, I didn't have to invent the final part of the study by myself. At the time there was a tablebase with 6 pieces. Nowadays all miniatures – a position with 7 pieces – can be checked with the tablebase. I first got acquainted with it in the spring of 2009. I visited Bessel Kok in his apartment at the Groenburgwal in Amsterdam. We were just drinking a glass of fine white wine when his phone rang. It was Garry Kasparov. For the first time in many years I spoke to Garry again.

‘What are you doing these days?’ he asked.

‘I’m busy composing endgame studies,’ I replied.

Then he promised to send me a new tablebase with seven-piece endgames; he had just received it from Elmar Magerramov. When I came home I found the document in the mail.

The tablebase contains the strangest endgames; for instance, it shows how four knights win against a lone queen. There were also a few ‘random’ endgames, like the following.



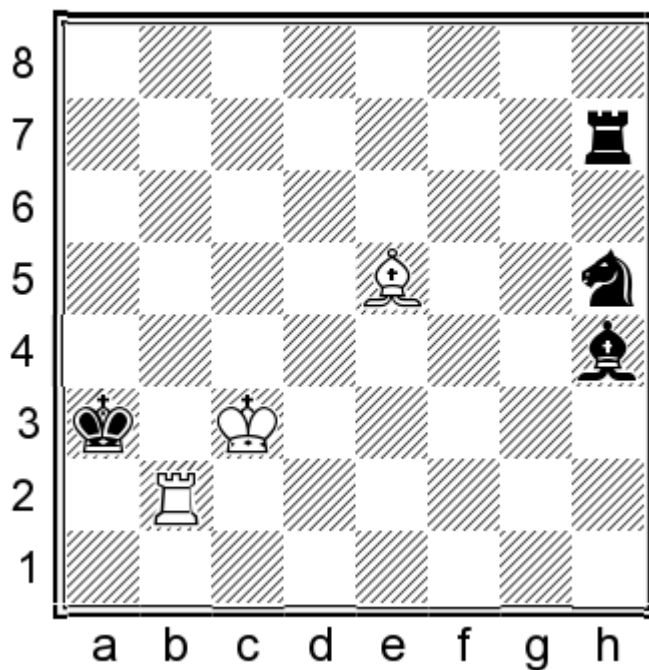
White to play and win

It's amazing that White can win here, especially as his pieces are not very close to the black king. The black pieces are not only far removed from the battleground, but they are also in each other's way. For instance, without the black knight the position would be a draw.

1.Rd1+ Kb2 2.Kd3+ Kb3 3.Rb1+

Forcing the king to the edge again.

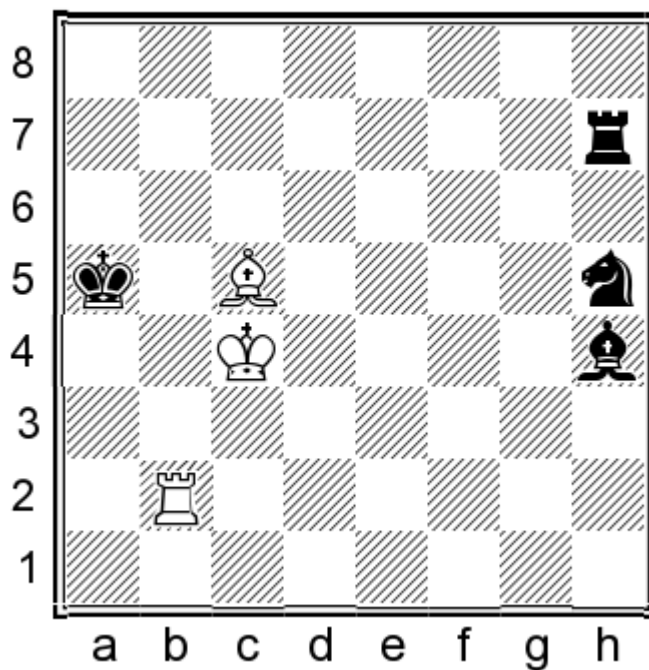
3...Ka2 4.Kc2 Ka3 5.Kc3 Ka2 6.Rb2+ Ka3



7.Bd6+

In the corner the enemy king cannot be mated. Therefore it is driven up the board.

7...Ka4 8.Kc4 Ka5 9.Bc5



Depriving the king of the square b6.

9...Ka6 10.Ra2+ Kb7 11.Ra7+

Thus White wins the rook, and then yet another piece.

Chapter 2

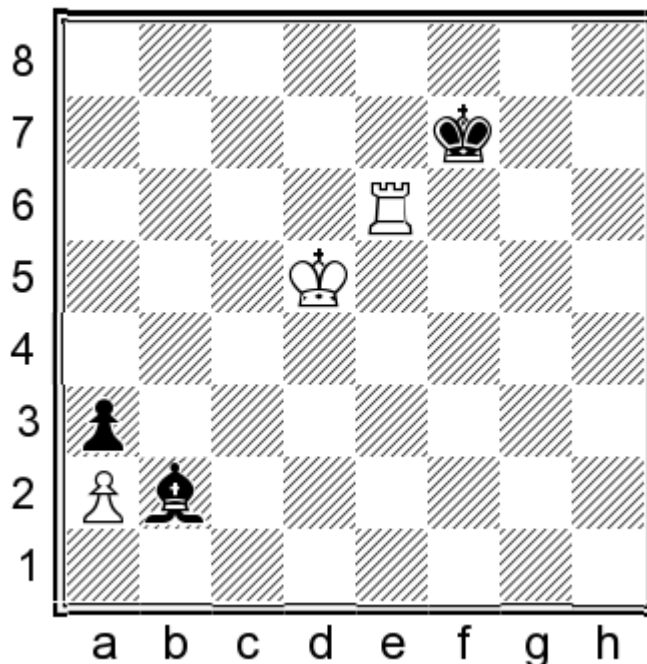
Rook versus bishop

I have noticed that many top players use *Dvoretsky's Endgame Manual* as a work of reference, and it is true that it is a good handbook, more exhaustive than Keres's *Practical Chess Endings*. Recently, however, I found a striking error in the book. Dvoretsky refers to my game against Velimirovic from Rio de Janeiro 1979. After White's 68th move the following endgame had arisen:

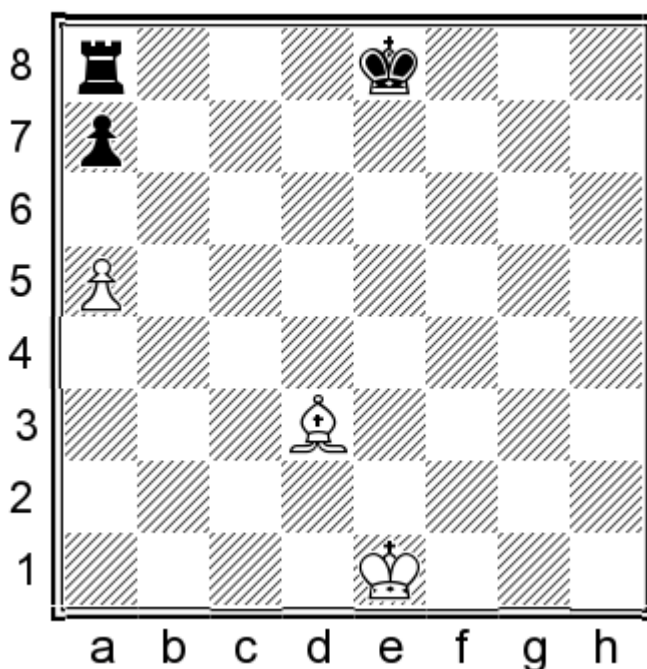
Timman

Velimirovic

Rio de Janeiro 1979



Dvoretsky makes the following general observation about this endgame: ‘It was proven that White should win. However the probability of its occurrence in a practical game is rather low, while the proof itself is quite complicated, so we have decided to omit it.’ It is not true that this endgame is always winning. In 1981 I published a long article in *Schaakbulletin* 166 in which I used a diagram to indicate where the safe zones for the black king were. Later, these conclusions were completely confirmed by the database. I also indicated that Velimirovic made the decisive error in the diagrammed position by playing 68...Kf8? (most sources erroneously give 68...Kg7), allowing White to take his king to g5, so that its black counterpart will inevitably be cut off on the back rank. All this can be found in my book *Studies and Games*. As an interesting illustration I will give you the following mini-study.



White to play and draw

In order to draw, White must start with:

1.Be4

It is important to ensure that the bishop will be able to go to square b7 before advancing the pawn. If the bishop covers the pawn from the f1-a6 diagonal, the position will always be lost.

1...Rb8

1...0-0-0 would have been an ideal move, but unfortunately this is impossible. The position shows that Black's last move must have been a king or rook move.

2.Kd2!

Certainly not 2.a6 in view of 2...Rb2, and the white king is cut off. Now 2...Rb2 3.Kc3 Ra2 runs into 4.Kb4.

2...Kd7 3.a6

Now this is possible.

3...Rb6 4.Bb7

And White is safe.

Dvoretsky is not the only person who thinks that this endgame is always won. Spinhoven and Bondarenko are of the same opinion in their book *De strijd tussen looper en toren* (= 'The battle between bishop and rook'). This misunderstanding has probably been fostered by the Swiss endgame theoretician André Chéron, who had investigated the endgame extensively in the 1960s. He gave a plethora of variations, always with the conclusion that White would win, while emphasizing that there are certain key positions that White must strive for. Chéron never explicitly states that the endgame is winning as such, but a brief study of his work suggests that it is, and he probably thought so himself. It wasn't until after a

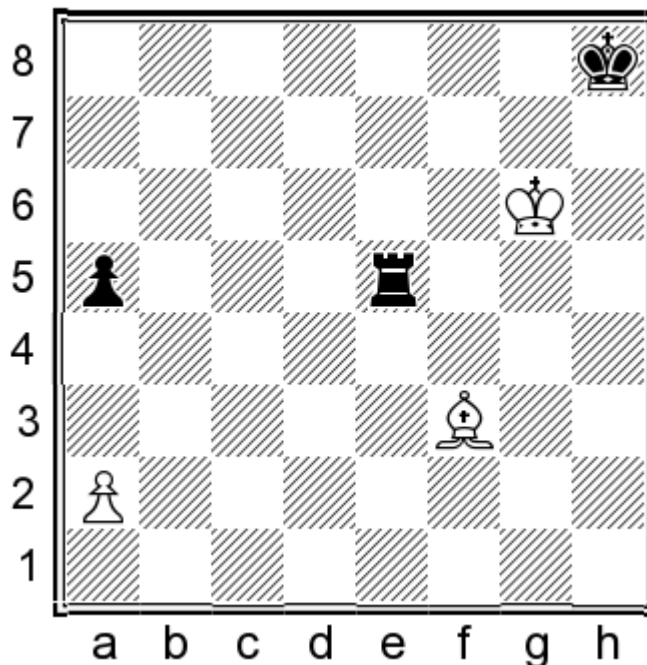
very deep study of the endgame that I discovered that those key positions cannot always be achieved.

Remarkably enough, the endgame only occurred in my game against Velimirovic.

There exists an endgame of this type – i.e. both sides have a rook's pawn, and these pawns are standing nose to nose – which is won, namely with a white pawn on a6 versus a black one on a7. It occurred with reversed colours in the game Aronian-Kramnik, Shanghai 2010. Remarkably enough, during the game both players thought it was a theoretical draw.

Chéron had already concluded as early as 1948 that the endgame is won in all cases. Only if White were to succeed in winning the enemy a-pawn without endangering his king would it be a draw. In the following position, White has to pull out all the stops to get the draw.

Timman 2010



White to play and draw

If White manages to push his a-pawn to a4 in order to cover it with the bishop from c6, the draw is in the bag. But after 1.a4, both 1...Rc5 and 1...Re3 will win, which means that White must first improve the position of his king.

1.Kf6 Re3 2.Bc6!

Preventing the advance of the enemy a-pawn.

2...Ra3 3.Bd5

Now White will have to allow the advance, but since the black rook will have to vacate a3 again, White has gained a crucial tempo.

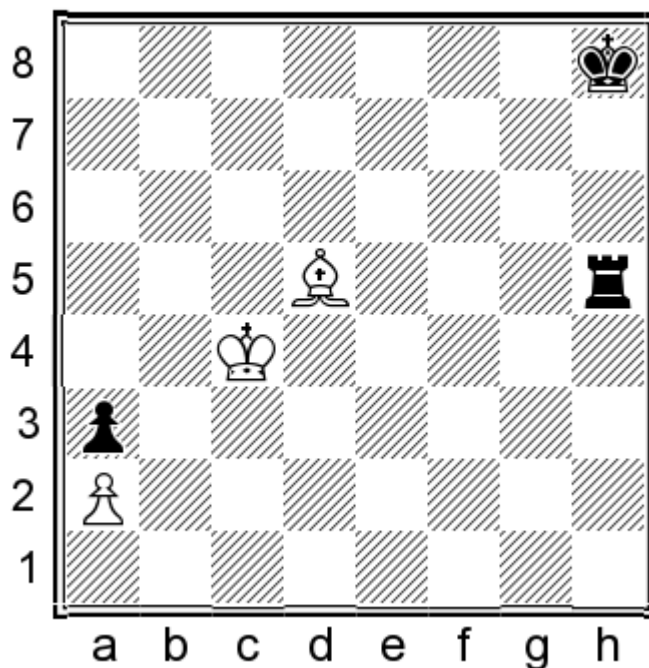
3...a4 4.Ke5 Rh3

The alternative was 4...Rg3. I will return to this later.

5.Kd4 a3 6.Kc4

Threatening 7.Kb4 followed by 8.Bb3. Black has only one move to prevent this.

6...Rh5



Now White will have to choose a square for his bishop.

7.Ba8!!

Improbable as it seems, this is the only move. After, for example, 7.Bf3 Black would win with 7...Rh2.

If Black had played 4...Rg3 and 6...Rg5, White would have been forced to find another square for his bishop, since 7.Ba8 would then run into 7...Rg8! and 8... Rb8, and the white king has been cut off. Then the only move would have been 7.Bf3, intending to meet 7...Rg3 with 8.Bd1!, after which Black will be unable to stop White executing his plan with the king on b4 and the bishop on b3. Note that this is always possible because of the remote position of the black king.

7...Rh6 8.Kb4 Rb6+ 9.Ka5!

Again the only move. Incredibly enough, the white king has had to trek from g6 to a5 in order to secure the draw.

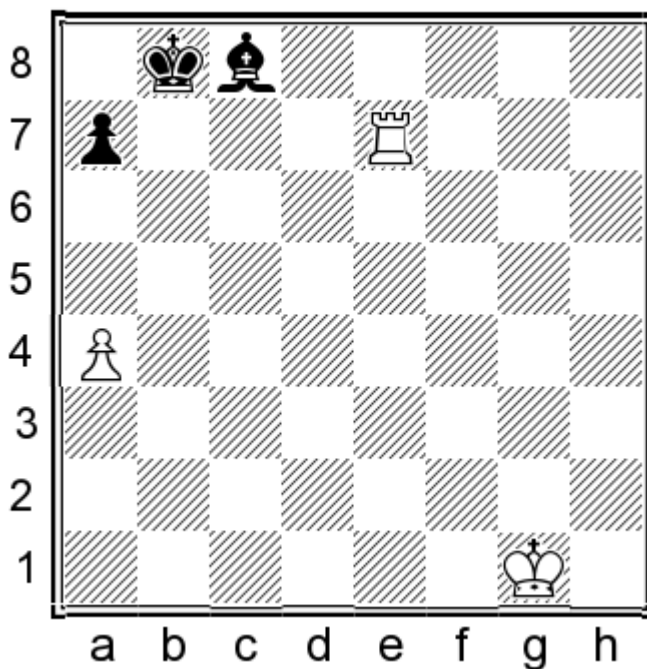
9...Rg6 10.Kb4

And a draw. Black is unable to make any progress.

Remarkably, most of the theoretical investigations into endgames of $R + \text{♙}$ vs $B + \text{♙}$ (without any passed pawns) concentrate on positions with rook pawns not separated by a square. The position only becomes really interesting with one or more squares between the pawns. Sometimes the moves and conclusions of the database are difficult to understand, but closer analysis usually showed me what exactly was going on.

In the conclusions of my investigations I will restrict myself to positions that can be explained in an acceptable and logical manner, with special focus on the crucial manoeuvres that lead to technical positions – which are the most important for endgame theory. The generally lengthy technical process then unfolds gradually. As this contains few surprises, I will ignore it.

I will start with positions with two rook pawns.



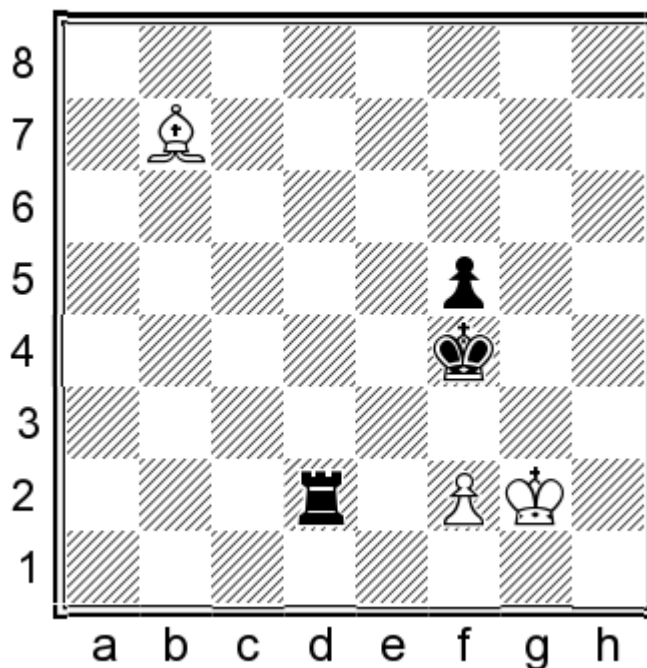
White to play and win

As a rule, the position is winning with the black king cut off on the back rank, regardless of the position of the white king. In the diagrammed position, however, White must watch out, since after 1.Kf2? a5! 2.Ke3 Bb7! it's a draw. There is no remedy against the threat of 3... Bc6. 2...Bg4 won't do in view of 3.Kd2!, and the black bishop is dominated. White wins by playing 1.a5 before deploying his king.

Even with the black king not cut off White can win if he succeeds in taking his king to c5, after which Black cannot prevent his king from being cut off. The position is a draw, however, if Black has the king's bishop, since this will enable him to build a fortress by putting his bishop on the g1-a7 diagonal and advancing his pawn to a6.

There are two famous practical examples in which the pawns are separated.

Gligoric
Polugaevsky
 Amsterdam 1970



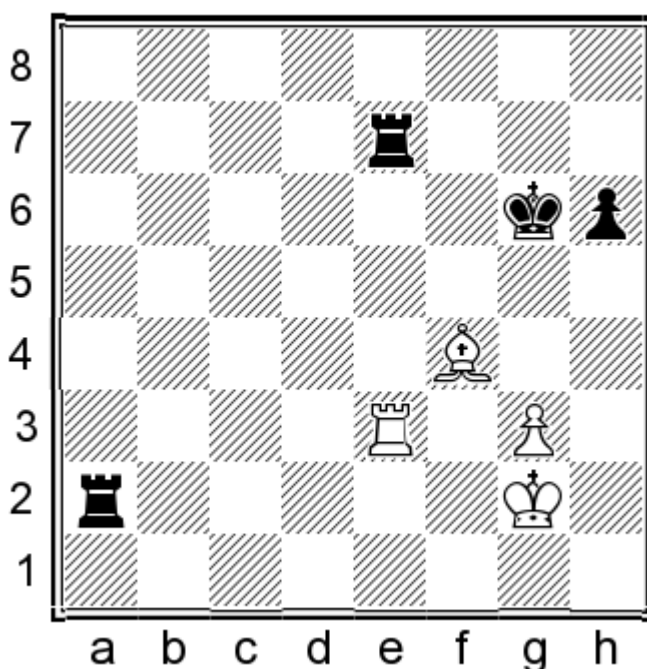
Position after 73.Bb7

Although Black eventually managed to win, this position is a theoretical draw. This would be different with the black pawn on f7 instead of f5, when Black would have the winning plan of taking his king to e1 via the queenside. White's counterplay then would be to attack the black f-pawn. On f7, however, it is just too far away.

Reshevsky

Fischer

Los Angeles 1961

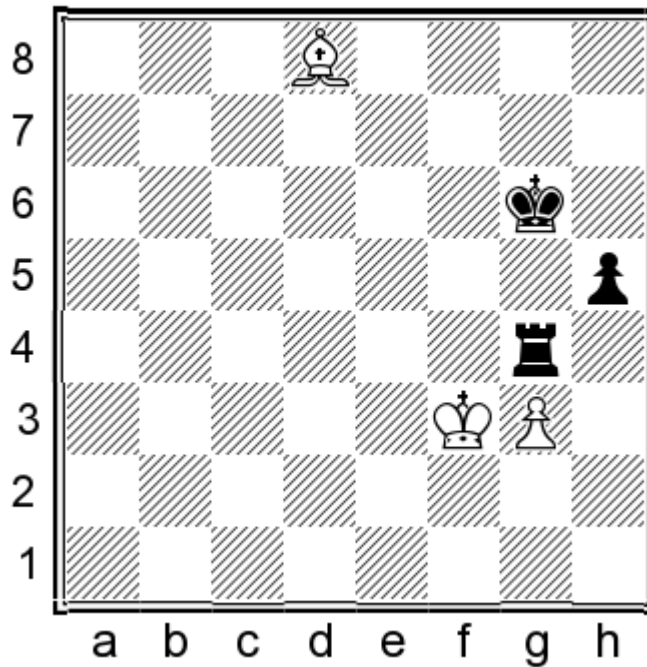


Position after 52...Ra2+

White played 53.Kf3? here, and now Black could have reached a winning position with 53...Rxe3+ 54.Bxe3 h5, as Evans indicated in

Chess Life, since White will be unable to stop the black king from reaching the crucial g4-square.

How important it is to secure the square h3 for the white king is clear to see in the following position:



White to play and draw

1.Kg2!

On its way to h3.

1...Kf5 2.Kh3 Rc4 3.Be7!

The only square for the bishop, as we'll see.

3...Rc1 4.Bf8!

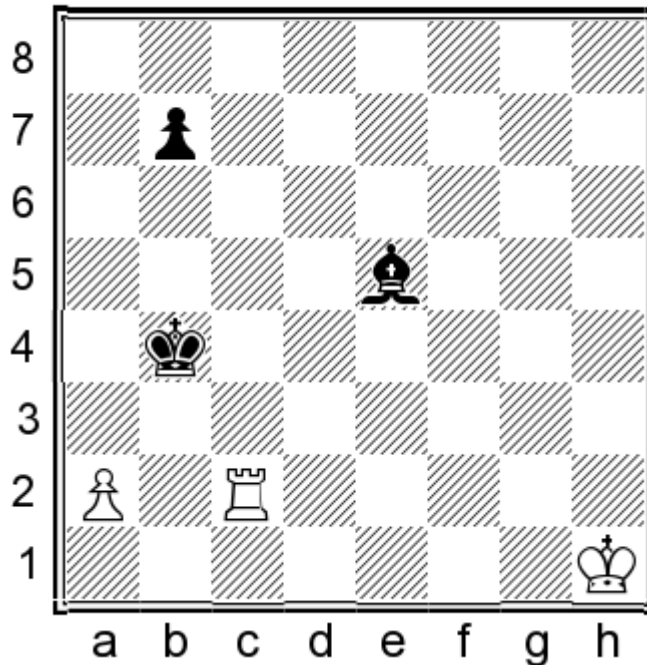
The point of the previous move. The bishop is forced to hide itself; otherwise Black would give check on h1 and then attack the white bishop.

4...Rb1 5.Bg7 (5.Bh6)

and Black won't make any progress.

In the Reshevsky-Fischer example, the position would also have been winning if the black pawn had been on its starting square.

Sometimes it's even winning if the king of the attacking player is far away.



White to play and win

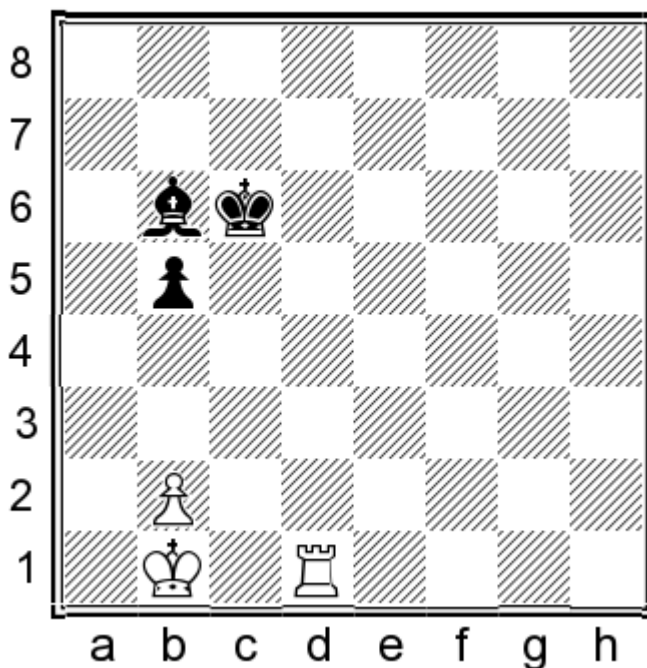
In this position, Black is threatening to draw immediately by playing 1... Ka3, followed by 2... Bb2.

1.Re2! Bd4 2.Rd2 Bc3 3.Rd3

White has brought the situation under control. Now he has all the time in the world to take his king closer. The quickest route is via the fourth rank, since its eventual destination is c8. The win will take another 65 moves.

Remarkably enough, the diagram position with the king on h7 instead of h1 would be a draw. In that case Black can save himself with 3...b5! 4.Kg6 Ka3! 5.Rxc3+ Kxa2 , and the white king is not in time to reach the square e2 to restrict its black counterpart's freedom of movement. With the king on h5, however, the position would be winning by the narrowest margin.

In the following position, White has only one winning move.



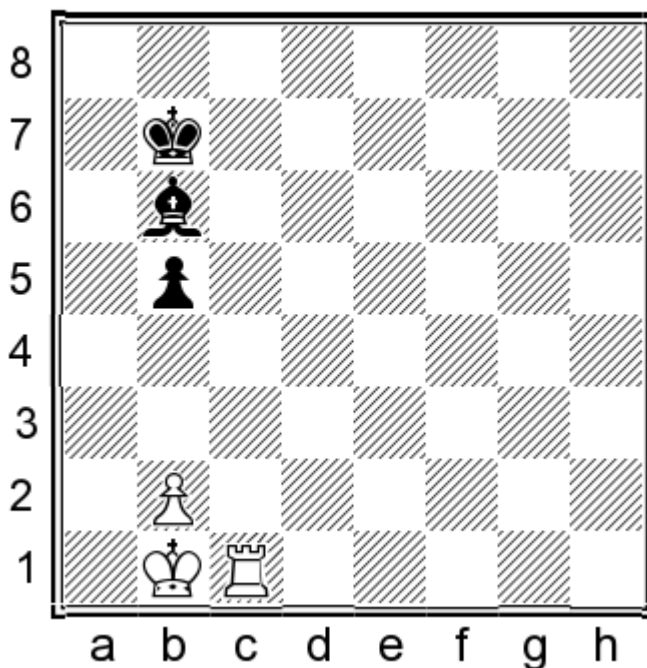
White to play and win

1.Rc1+!

The main point is that Black can no longer take his bishop to c5.

1...Kb7

Now White has two entirely different winning plans:



A) 2.Rf1 Ka6 3.Rf6 Ka5 4.b4+! Ka6 5.Kc2 Kb7 6.Kd3 , and now it becomes clear why 2.Rh1 was insufficient for the win, since in that case, Black would be able to activate his bishop with 6...Bf2. White must always make sure to continue to dominate the enemy bishop. After 6...Kc7 7.Ke4 Kb7 8.Kd5 Bg1 9.Rg6 Bf2 10.Rg7+ Kb6 11.Rg2 Be3 12.Ke4! the black bishop is forced to leave the g1-a7 diagonal, after which the win is simple;

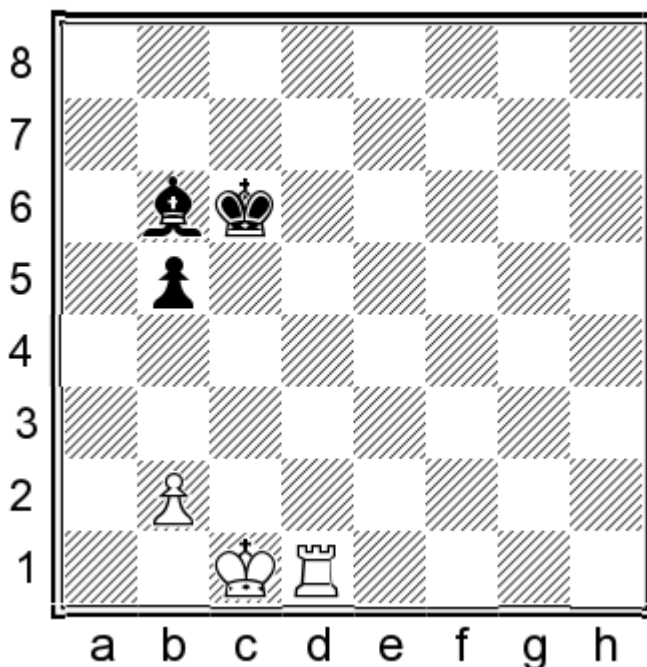
B) 2.Kc2 Bc5 , and now White will have to be careful: after 3.Kd3 Kb6! 4.Ke4 Be7! 5.Rf1 Ka5! Black would throw up an efficient defensive line.

Winning is 3.Rf1! Kb6 4.Kc3! , and the black bishop is dominated again. The white king is threatening to penetrate via d4.

If Black has a queen's bishop, he can build an effective defensive line by keeping his b6-pawn and his bishop on the long h1-a8 diagonal, from which they cannot be driven away through domination.

With the white king on c1 (instead of b1) in the diagrammed position White would have no win, since he doesn't have the crucial

rook check. But Black would have to play very accurately to hold his ground.



White to play – draw

The main line goes as follows:

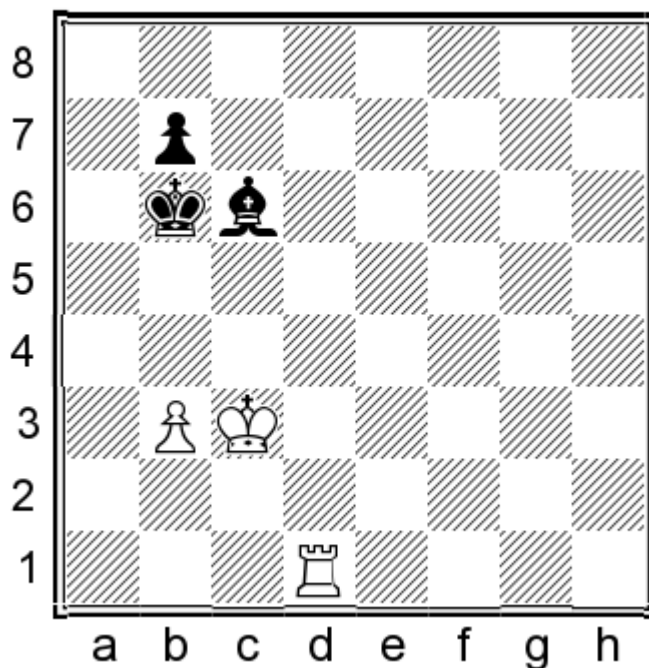
1.Kc2 Bc5! 2.Kd3 Bf8! 3.Rg1

Keeping the bishop from g7.

3...Kc5 4.Rg6 Kb4

And White will make no progress. All Black's moves were the only moves with which to maintain the balance.

Sometimes White is able to win because of chance circumstances.



White to play and win

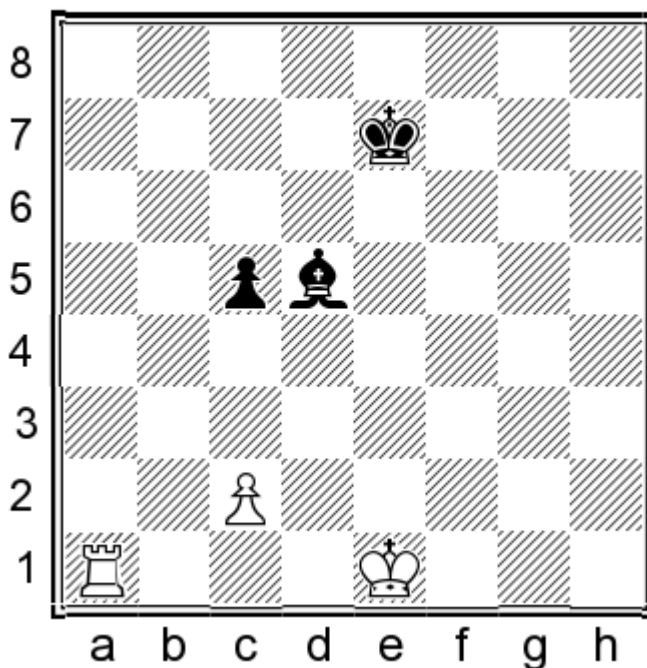
1.Kb4! Kc7 2.Ka5! b6+ 3.Ka6

And the white king has penetrated decisively.

If both players have a c-pawn, there are more winning positions.

White usually wins, for example, if the pawns are on their starting squares and Black has a king's bishop.

The following position is curious.



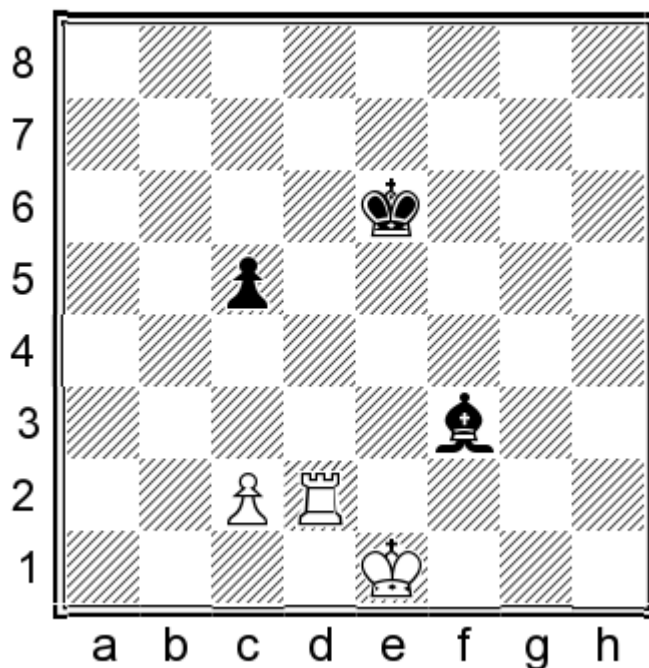
White to play and win

The solution is:

1.0-0-0!

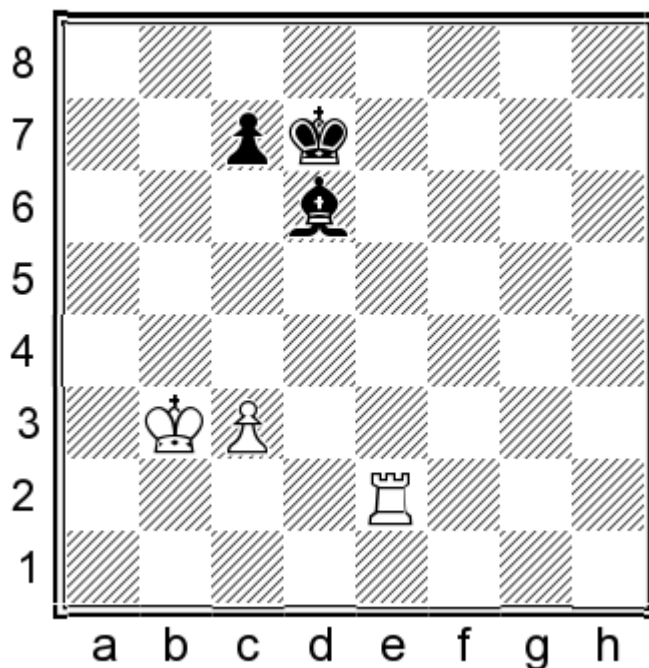
Black's problem is that his king remains cut off. White's winning plan involves taking the king to a4. A possible continuation is: 1...Ke6 2.Kb2 Ke5 3.Ka3 Bc6 4.Kb3 Bb5 5.Kc3, followed by 6.Rb1. The bishop cannot stay on the f1-a6 diagonal, which means that the white king will penetrate. An important consideration is that the king has the square c3: with the white pawn on c3 (instead of c2) the diagrammed position would be drawn.

White cannot win with 1.Rd1, because after 1...Ke6 2.Rd2 Bf3! his own king would also be cut off.



3.Rd8 is no good, as this is met by 3...Bd5, and the trap is sprung behind the white rook.

Here, too, it is very important that the white pawn was still on its starting square, but the endgame contains an interesting paradox: generally speaking it is advisable to keep the pawn back, but once it is on the third rank, it is often better to advance it as far as possible. This can be seen in the following position.



White to play and win

1.Kc4 c6 2.Kd4

Centralization.

2...Kc7

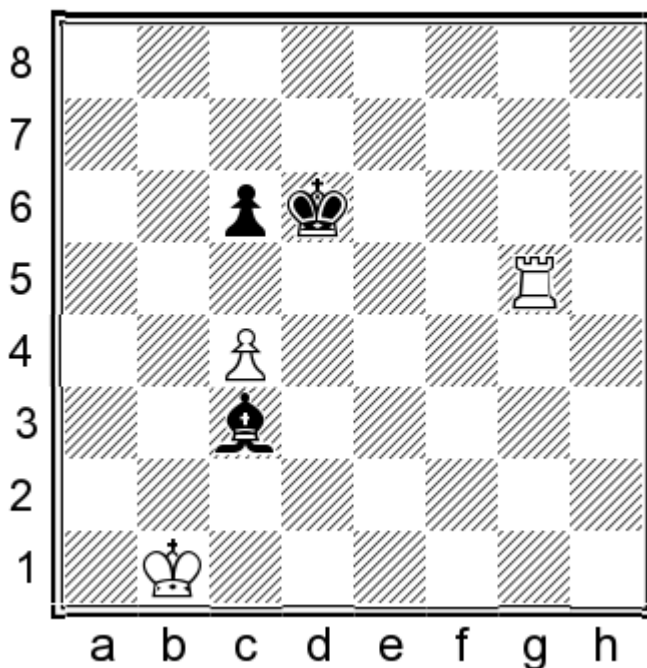
2...Ba3 would have been met by 3.Ra2!. But not 3.c4? in view of 3...Kd6, and Black has the situation under control.

3.c4!

The only way to make progress.

3...Kb6 4.Rb2+ Kc7 5.c5

And this position is winning, because the black bishop's movements are restricted. Only if the bishop can be taken to the g1-d4 diagonal does a position arise which, in certain circumstances, may be drawn.



White to play – draw

1.c5+ Kc7 2.Kc2 Bd4! 3.Kd3 Bf2 4.Rf5 Bg1! 5.Kc4

Threatening 6.Kb4 and 7.Kb5.

5...Be3

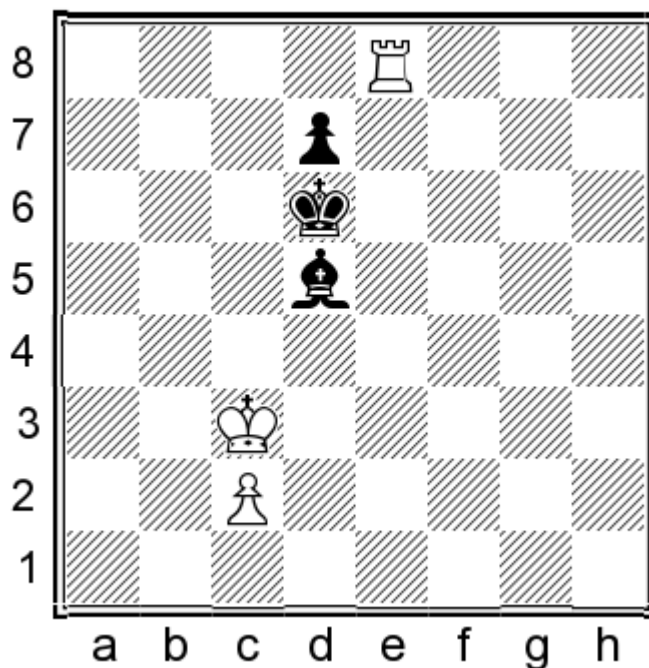
or

5...Kb7

And White can make no progress.

With the pawns moved one square to the left, there are even fewer winning chances. The pawn structure prevents White from penetrating with the king via the queenside.

The following position is also interesting.



White to play and win

1.Kd4

Centralization.

1...Bb7

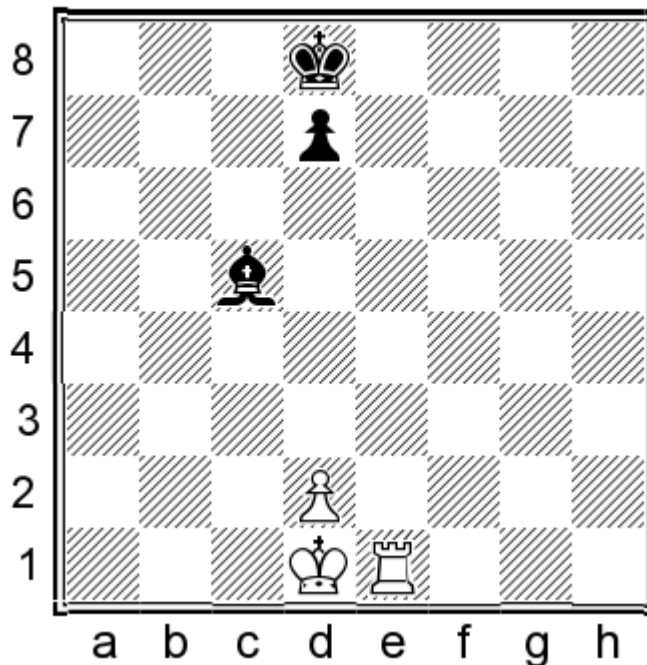
The most tenacious defence. The obvious move now is 2.Rh8, intending to create more room for the rook for horizontal checks. But this is met by 2...Kc6, with the threat of 3... d6, and Black has a fortress. And 3.Ke5 is met strongly by 3...Kc5!: now it is not the black king which is cut off, but the white one.

2.Re3!

The only winning move. White prepares a check on c3 in order to prevent Black from building a fortress.

2...Kc6 3.Rc3+ Kd6

And now 4.Rg3 makes for the quickest win. Eventually the black king will be forced back, and then White will have to play accurately: if the black king goes to e7, White takes his king to c5; if Black withdraws the king to c7, White penetrates via e5.



White to play and win

In this position, Black is threatening to build an impregnable defensive line with 1... Kc7, followed by 2... d5.

1.Re4!

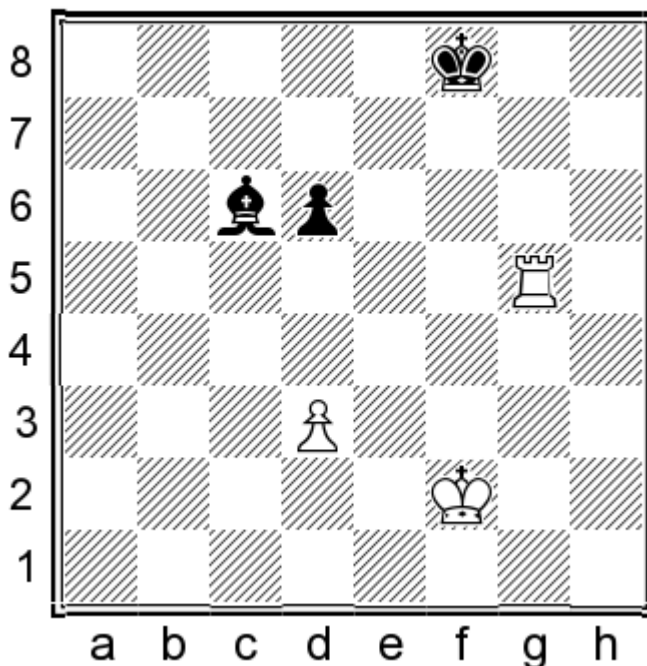
The same principle as in the previous position. White takes the rook to the c-file in order to upset the coordination in the enemy camp.

1...Kc7 2.Rc4! Kd6 3.Kc2

The only way. After 3.Ke2? Kd5 4.Kd3 Kc6! the white d-pawn would be blocked, giving Black time to play 5...d5.

3...Kd5 4.Kc3!

And White has the situation under control.
From this point on, it will take another 67 moves to the mate.



White to play and draw

With the pawn on d2 White would have an easy win. Now he will have to advance the pawn again.

1.d4! Kf7 2.d5!

And now White will bring up his king.

If White starts with 1.Ke3, Black can draw with very accurate play:

1.Ke3 Ke7 2.Kd4 Bf3!

The only move. Black wants to take his king to d7, after which he can make his sortie via c6 and e6.

3.Kc4 Kd7 4.Rg3

After 4.Kb5 Ke6! 5.Kb6 Be2! Black will just be able to save himself.

4...Bh1!

Unlikely. Black has to keep his bishop on the long diagonal at all costs.

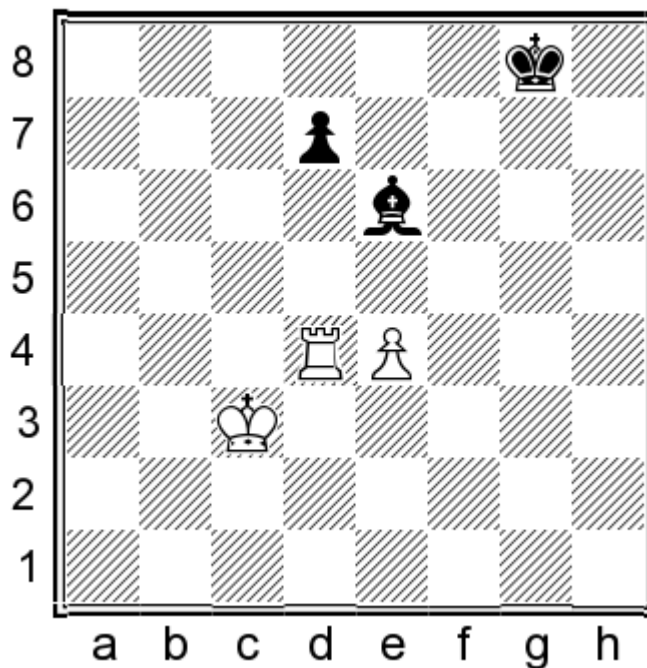
5.Kb5 Ke6!

Threatening to take the king to the fifth rank.

6.Rg5 Bf3

And the drawn position in the comment to White's fourth move has arisen again.

I will finish with an example of lighter calibre.



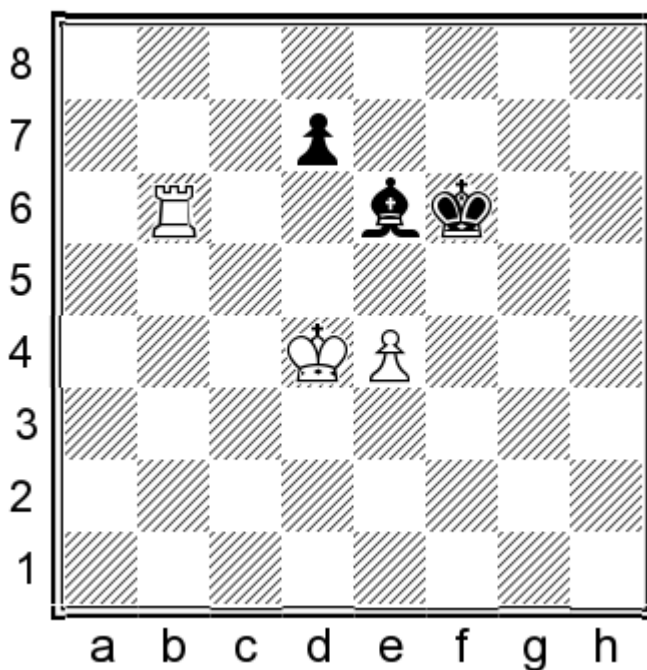
White to play and win

In light of the above it is not difficult to find White's moves.

1.Rd6! Kf7 2.Kd4 Kf6 3.Rb6

(or 3.Ra6)

and Black is in zugzwang.



3...Ke7 4.Ke5

Now Black will be forced onto the back rank, after which the play could continue as follows:

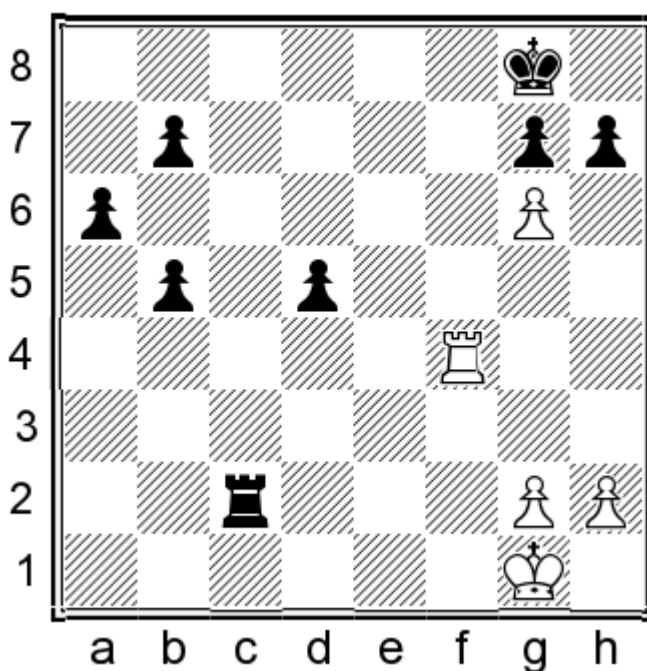
4...Bf7 5.Rh6 Be6 6.Rh7+ Bf7 7.Rg7 d6+ 8.Kf5 Ke8 9.Kf6 Bc4 10.Rc7 Bb3 11.Rc3

followed by 12.Rd3 and wins.

Chapter 3

Preventing pawn promotion

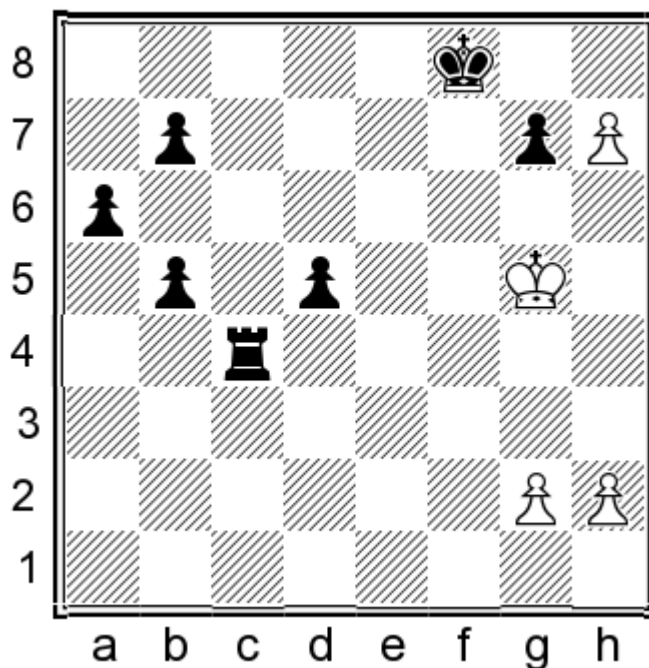
In a simultaneous game Lasker-Loman, London 1910, the following happened:



34.Rf8+! Kxf8 35.gxh7 Rc1+ 36.Kf2 Rc2+ 37.Kg3 Rc3+ 38.Kg4?

This seems winning, but Black has a nasty riposte.

38...Rc4+ 39.Kg5



39...Rh4!!

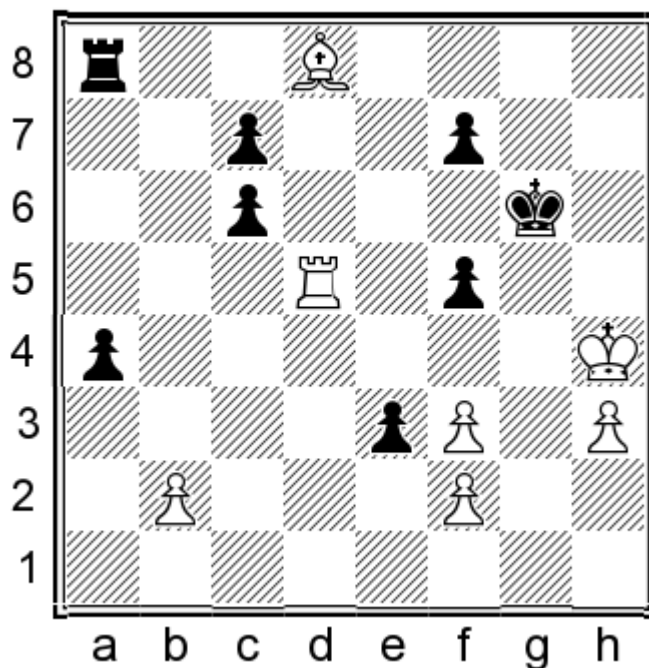
Thus Black succeeds in preventing the promotion of the h-pawn.

40.Kxh4 g5+ 41.Kxg5 Kg7 0-1

This is probably the best-known simultaneous fragment in chess history.

The following study was based on Loman's 39th move.

Timman 2008



White to play and win

White is a piece up, but Black has all kinds of counterchances – especially with the pawn on e3, which will play an important role.

1.Rd1 a3!

The start of a clever action. After 1...exf2 2.Bxc7 Re8 3.Kg3 Re2 4.Rf1 White would have a technically winning position.

2.bxa3

Forced, as otherwise Black would obtain another dangerous passed pawn.

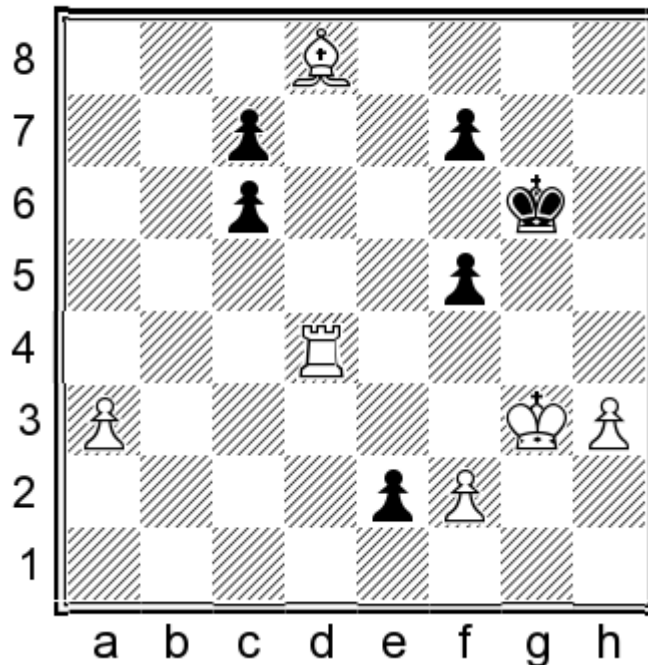
2...Ra4+ 3.f4!

Before retreating his king, White first sacrifices a pawn. Only at the end of the study will it become clear why this is necessary.

3...Rxf4+ 4.Kg3 Rd4

This is the point of Black's play. If White does not take the rook, a rook ending ensues that cannot be won.

5.Rxd4 e2



How can White stop the pawn now? His task is much more difficult than Loman's.

6.Rd6+!

The first rook sacrifice.

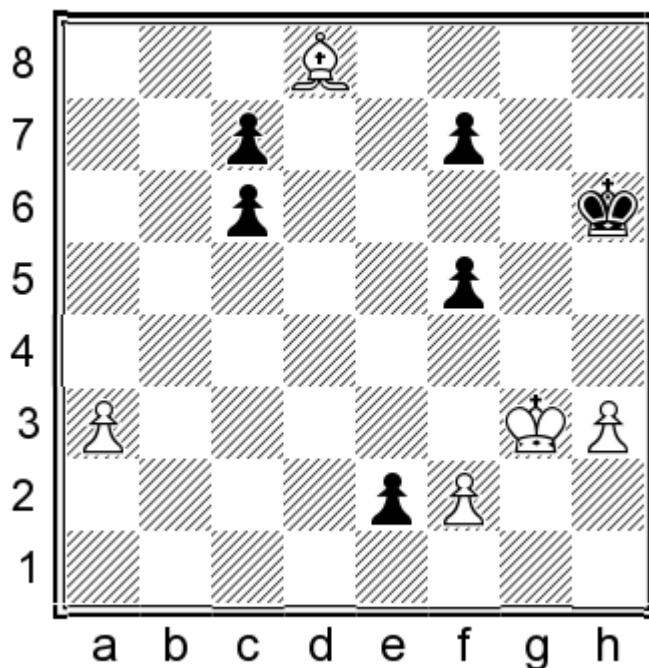
6...Kh7

6...cxd6 is met by the winning 7.Ba5.

7.Rh6+!

The second rook sacrifice. Black is forced to accept this one, as otherwise his king will be caught in a mating net.

7...Kxh6



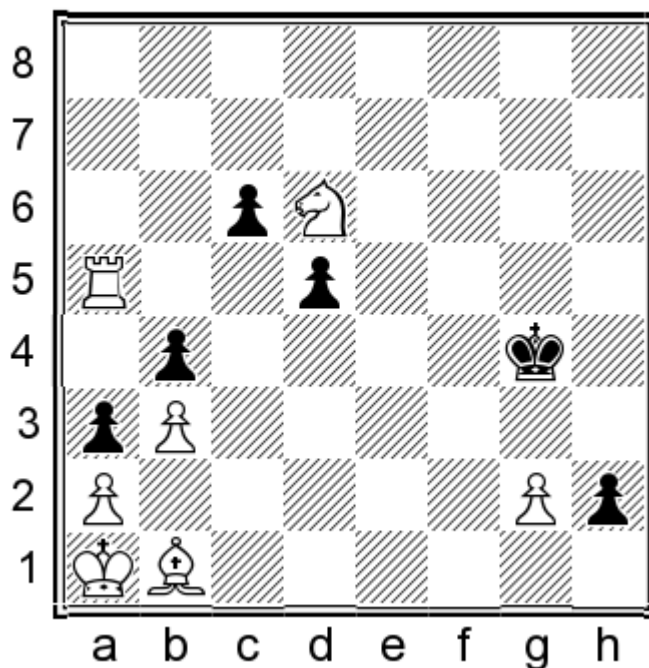
8.Bg5+! Kxg5 9.f4+

Now the point of White's third move becomes clear: the square f2 is vacated for the white king, after which the remote passed pawns decide the issue. The combination carried out by White in this study is called a 'magnet combination'. The black king is drawn towards the fatal square g5 as if by a magnet.

This study received second prize in the annual tourney of the magazine *The Problemist*.

It is also possible to use Loman's move to clear the way for a bishop, which then saves the day. By way of an illustration I give the following little study.

Timman 2011



White to play and draw

White is truckloads of material up, but once the enemy h-pawn queens, he will be mated soon. Therefore, drastic measures are called for.

1.Ne4!

With the winning threat 2.Nf2+, so Black has to take the knight.

1...dxe4 2.Rh5!

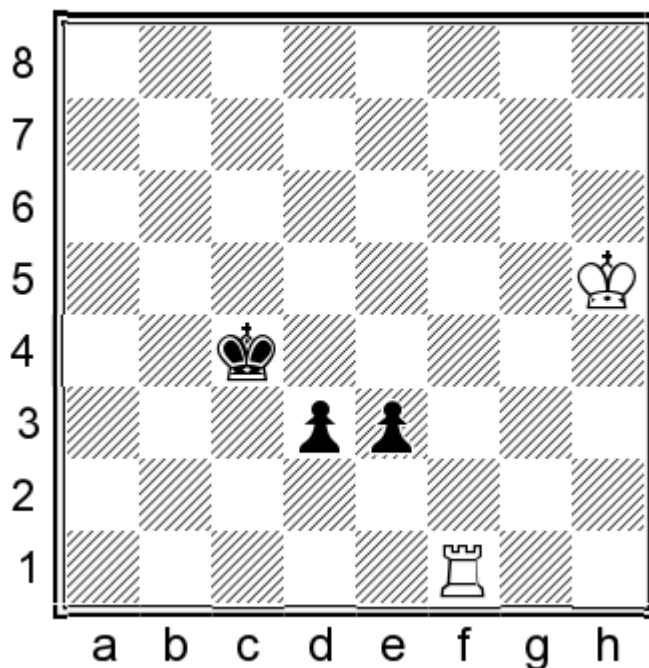
Loman's move.

2...Kxh5 3.g4+ Kxg4 4.Bxe4

Draw.

Sometimes White has to sacrifice a rook to prevent a pawn promotion.

Prokes, 'Schackvarlden' 1939



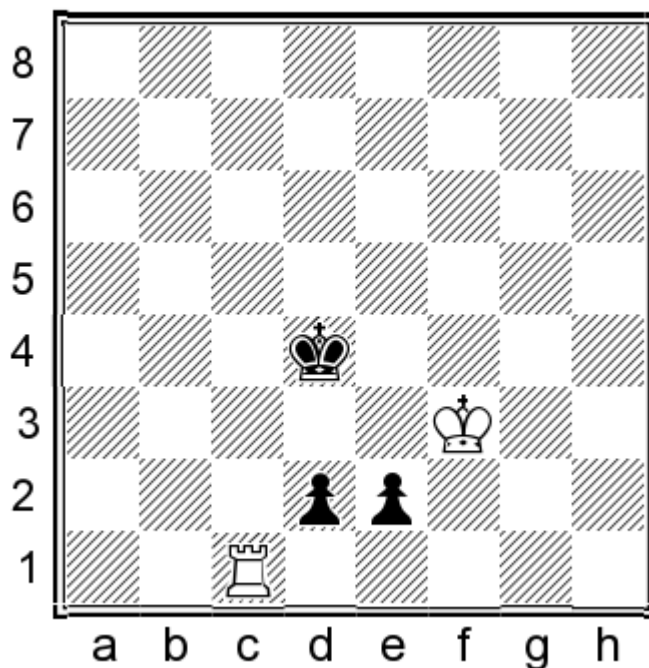
White to play and draw

The situation looks hopeless for White because his king is so far away. But he has a miraculous saving clause.

1.Kg4 e2

An important alternative is 1...d2, in order to meet 2.Kf3 with 2...Kd3. Then White has 3.Ra1, saving the draw. The rook will keep giving lateral checks.

2.Rc1+ Kd4 3.Kf3 d2



Now comes the crucial move.

4.Rc4+!!

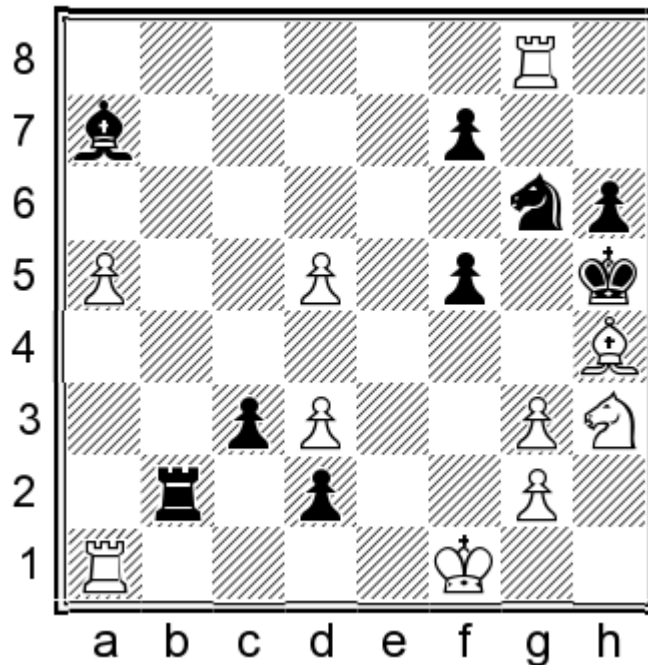
You could call this rook check a ‘desperado’, i.e. the sacrifice of a piece which is lost anyway, in a way that yields the best result. But then this is a very special desperado. Everything revolves around the fact that the d-pawn, which is on the verge of promotion, comes within reach of the white king.

4...Kxc4 5.Kxe2 Kc3 6.Kd1

Draw.

White’s 4th move is known as the Prokes Manoeuvre. There are various examples with this theme from tournament practice. Also, numerous other studies have been made with the Prokes Manoeuvre as a theme.

In June 1993, I was in Moscow, where a blitz tournament was held in memory of Misha Tal. I was working on a study that would feature the Prokes Manoeuvre via a hidden mechanism. Eventually it worked out, and I decided to dedicate the study to Tal. I give the new version that I composed 29 years later.



White wins (in memory of Misha Tal)

Again we see that Black has several far-advanced passed pawns. White must bring his king closer to the fray.

1.Ke2 Rb1

A thematic rook sacrifice that White has to accept.

2.Rxb1 c2

But now what? After 3.Rd1 c1Q Black has a draw within reach. Therefore White has to try and find a path towards the black king.

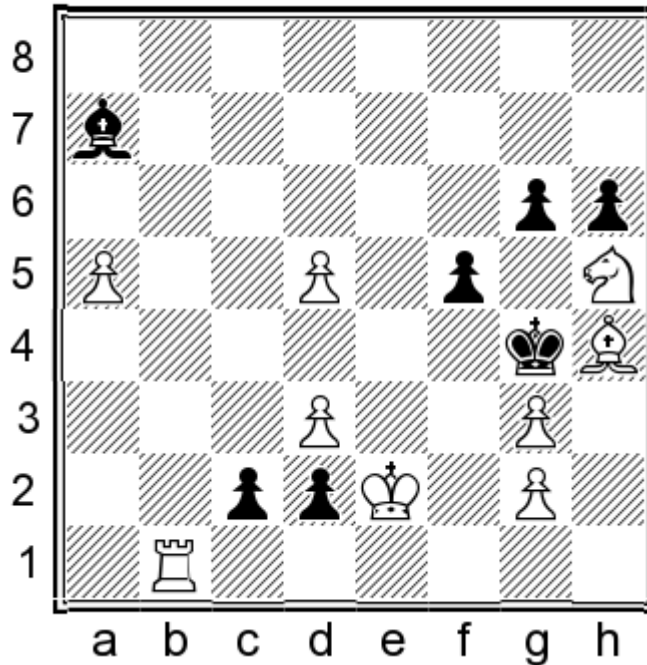
3.Rxg6

Threatening mate in one.

3...fxg6

Forced, as after 3...Kxg6 4.Rb6+ Bxb6 5.Kd2 White would win right away.

4.Nf4+ Kg4 5.Nh5!!



The climax of the study. Again White threatens mate in one.

5...Kxh5

The same position occurs as two moves ago, but without the white knight. Alternatives weren't satisfactory either, viz.:

A) 5...Bd4 6.Nf6+ Bxf6 7.Rb4+ and again the rook has found its way towards the enemy king;

B) 5...f4 6.Nf6+ Kf5 7.g4+ Ke5 8.Nd7+ Kd6 9.Rb6+ Bxb6 10.Kxd2 Bxa5+ 11.Kxc2 Kxd7 and amazingly enough, a technical bishop endgame has come on the board. White continues with 12.Kb3, followed by 13.Kc4. He is winning due to the fact that the black kingside pawns are very weak.

6.g4+!

Opening the short diagonal for the white bishop.

6...fxg4

But now what?

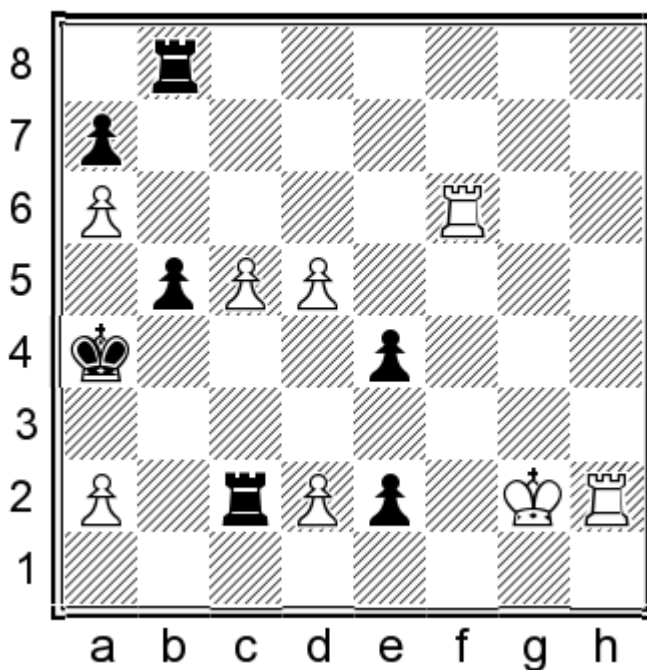
7.Rh1! c1Q 8.Be1+!

Here we have the hidden mechanism.

8...Kg5 9.Bxd2+ and White wins.

My interest in the Prokes Manoeuvre was aroused by Tim Krabbé. In the summer of 1992 we met on an estate in the south of France, in the vicinity of Sainte Maxime. Misha Tal had just died, and I was analysing games for an 'In Memoriam'. After I had showed Krabbé a couple of findings, he started talking about the 'Double Prokes'. From that moment on it seemed as if my chess understanding had changed. A fascinating world opened itself before my eyes. Was it really possible that such an ingenious idea could be doubled in a study? Krabbé had thought up the following scheme.

Krabbé 1992



White to play and draw

The intention was that White would draw as follows:

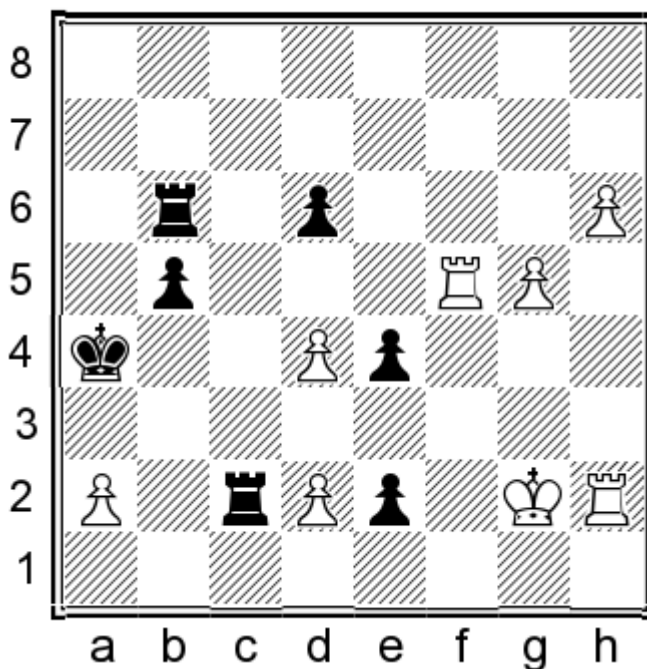
1.Rh1 e3 2.Kf3 Rc1 3.Rxc1 exd2 4.Rc4+ bxc4 5.Kxe2 c3 6.Rf1 Rb1 7.Rxb1 c2 8.Rb4+ Kxb4 9.Kxd2

With a draw.

The idea is fantastic, but this construction contains many flaws. Krabbé realized this all too well. He asked me to make a version that worked. I toiled over this for days. The Double Prokes turned out to be a head-spinning task. My intuition told me I could make an award-winning study of it, but I couldn't come up with a good version. All the studies I published in the 1990s turned out to be incorrect.

Not until 18 years later did I manage to make a good, solid version.

Timman/Krabbé 1992/2010



White to play and win

In fact, all the elements of Krabbé's scheme have been retained. Only here White has two highly dangerous passed pawns, which forces Black to act quickly. White's first move is forced.

1.Rh1

On 1.Kf2 Black would save himself by 1...e3+! 2.dxe3 Rc1 3.Kxe2 Rc2+.

1...e3!

Still the best chance, even in these circumstances.

2.Kf3! Rc1 3.Rxc1 exd2 4.Rc4+!

The first Prokes Manoeuvre.

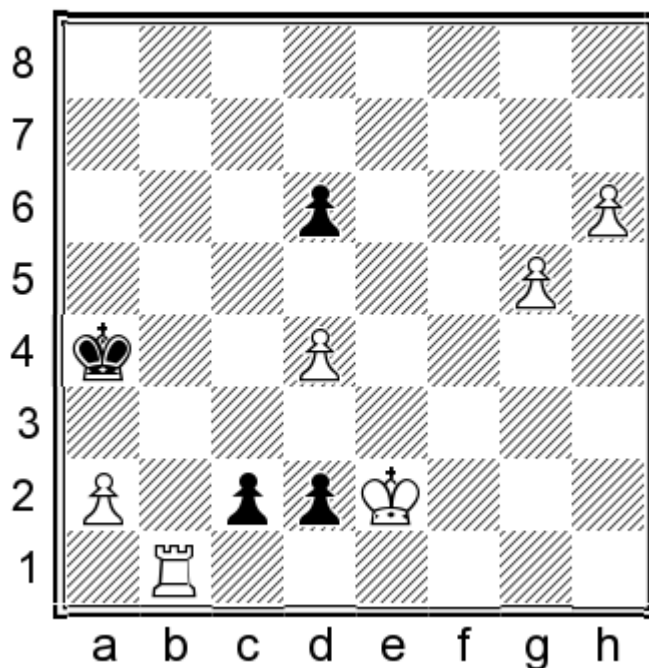
4...bxc4 5.Kxe2 c3

The white king has come closer, but in the meantime Black has created a mighty pawn pair.

6.Rf1 Rb1

The second black rook offers itself. After other moves the white passed pawns would quickly decide the game.

7.Rxb1 c2



8.Rb4+!

The second Prokes Manoeuvre.

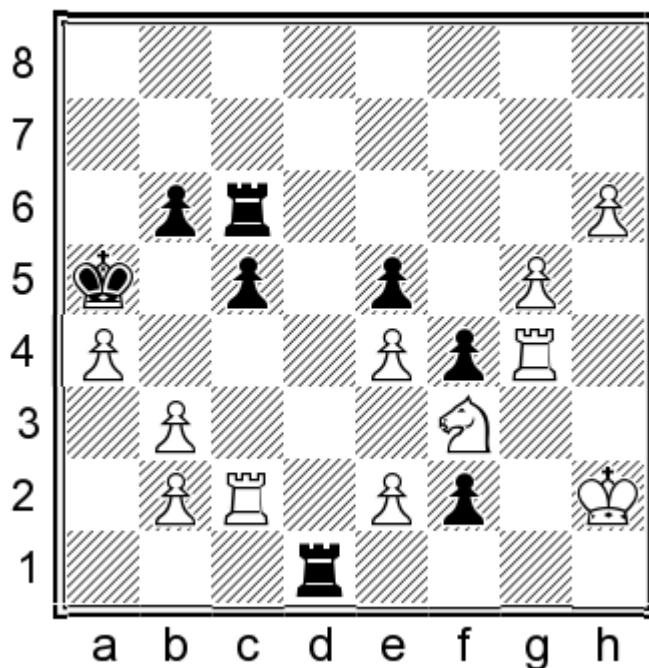
8...Kxb4 9.Kxd2

And wins.

The solution is also identical to what Krabbé had envisaged.

Now that I had finally made this old dream come true, I decided to find out if I could achieve more with this theme. This led to the following spectacular study.

Timman 2010



White to play and win

Again, White has a powerful pawn pair. But first he will have to do something about Black's threat of promoting the f2-pawn.

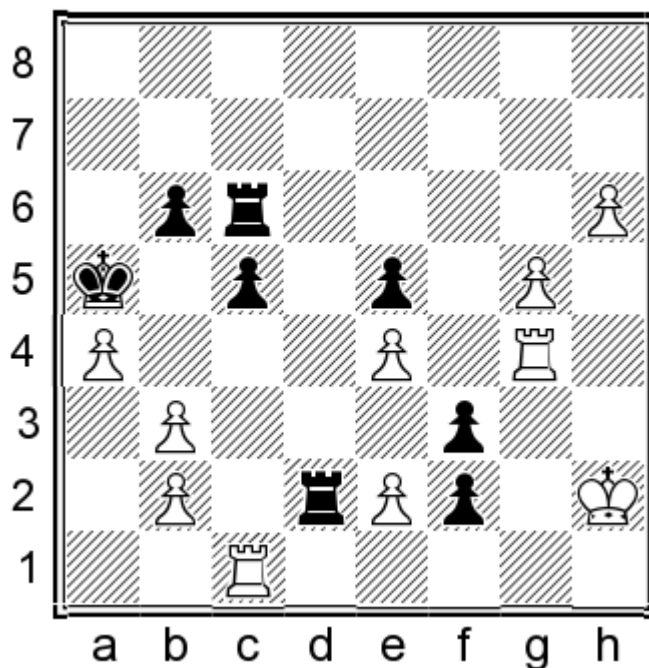
1.Nd2 Rxd2

The best chance. The thematic 1...f3 would have been prospectless in view of 2.Nc4+! Kb4 3.Ne3, and the black pawns are harmless. Also insufficient was 1...Rd6 on account of 2.Kg2 R6xd2 3.Kxf2 Rxc2 4.Rg1! Rdd2 5.Re1 and White's passed pawns decide.

2.Rc1

After 2.Kg2 Rxc2 3.Kxf2 Rc1! White would not be able to win.

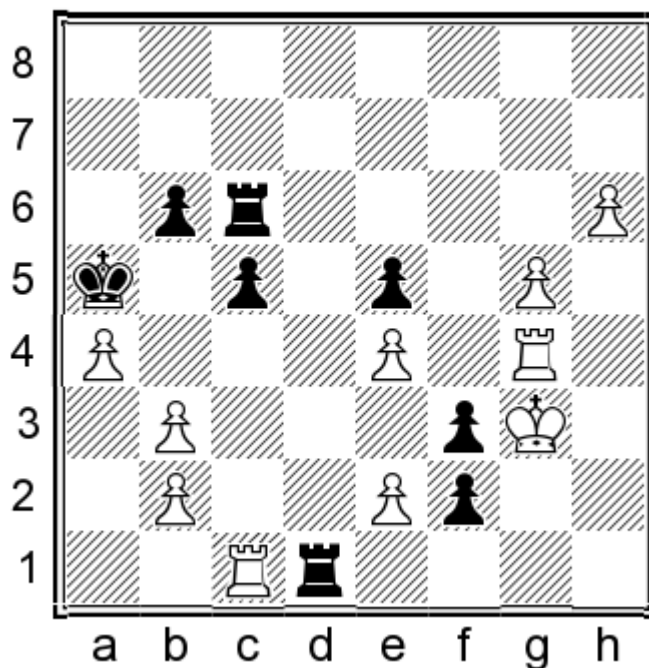
2...f3



3.Kg3! Rd1!

Both sides make the moves we know by now. Black's last move is a so-called 'switchback', i.e. a piece – in this case, the rook – moves back to a previously used square.

White must be very careful now: only one move wins, all other moves lose.



4.b4+!!

The path to the black king must be opened by force. White could not wait with this check, since after 4.Rxd1? fxe2 5.b4+ Ka6! Black would gain the upper hand. After 6.b5+ Ka5 7.b4+ cxb4 8.Rd8 b3 9.Kxf2 Rc1 10.Kxe2 b2 the black c-pawn decides the issue.

4...Kxb4

Alternatives wouldn't do either:

- A) 4...Ka6 5.b5+ Ka5 6.Kxf2! and wins;
- B) 4...cxb4 5.Rxd1 fxe2 6.Rd5+ and wins. In this line, one Prokes Manoeuvre suffices.

5.Rxd1 fxe2 6.Rd4+!

The first Prokes Manoeuvre.

6...cxd4 7.Kxf2 d3 8.Rg1 Rc1

The second rook sacrifice.

9.Rxc1 d2 10.Rc4+!

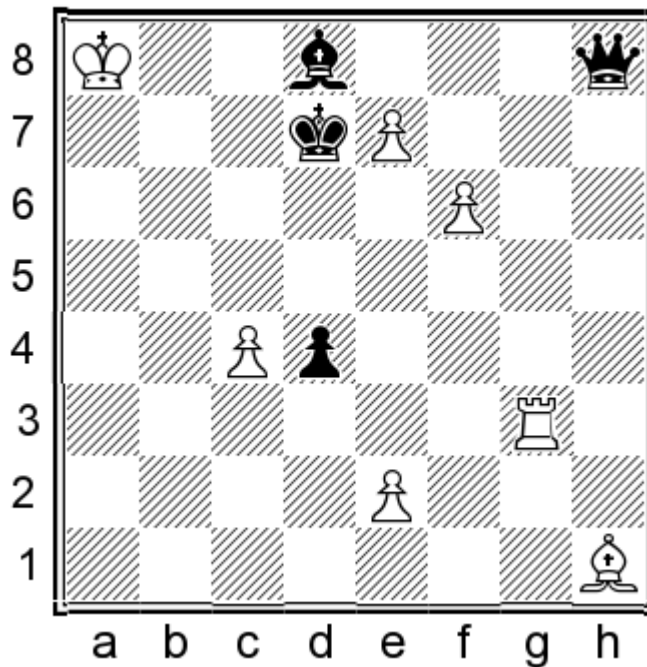
The second Prokes Manoeuvre.

10...Kxc4 11.Kxe2

And wins. With this I had concluded a magical chapter.

Related to the Prokes Manoeuvre is a theme that was first adapted by the renowned Georgian study composer Gia Nadareishvili.

Nadareishvili 1965



White to play and draw

At first glance, the situation looks very bad for White. His bishop is threatened with capture with check, while at the same time Black is threatening a deadly discovered check with his own bishop.

How can White exploit his far advanced passed pawns?

1.Bc6+!

This bishop sacrifice forces the king onto the long diagonal.

1...Kxc6 2.Rg8

A second piece sacrifice with a special point.

2...Qh1

A clever trick. Now 3.exd8Q is not possible due to 3...Qa1+ and White will get mated.

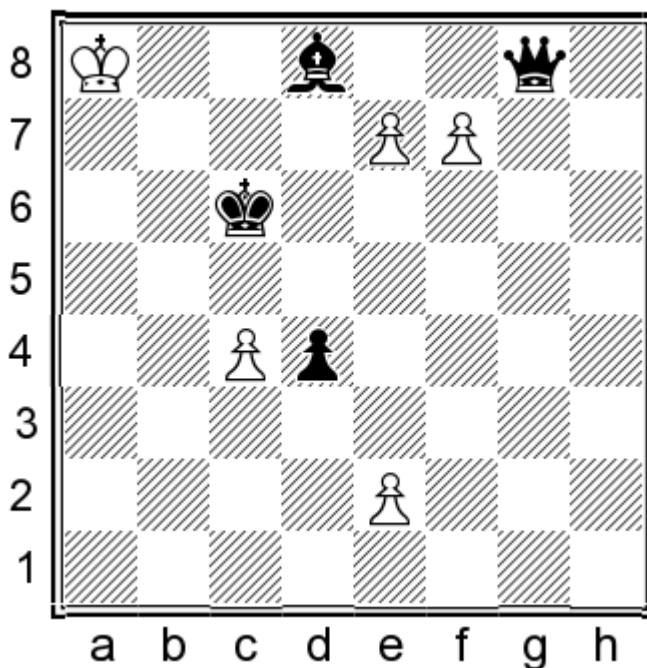
3.Rg1!

The rook has to keep following the queen.

3...Qh8 4.Rg8 Qxg8

Otherwise Black cannot make progress.

5.f7



This is what White was aiming for. An area of tension has occurred which Black can only remove with a check. If there is no such check in the position, then the pawn promotion will be unavoidable.

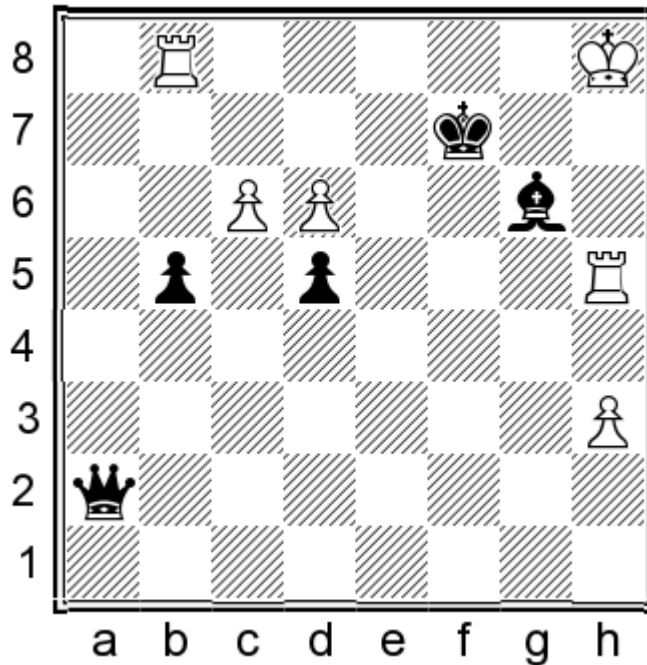
5...Qxf7 6.exd8N+

And now Black is the one who has to go all out for a draw.

For this study Nadareishvili received shared first/second prize in the 'Vecherny Leningrad' tourney. Yet this isn't one of Nadareishvili's

best achievements. The final play is weak. Oleg Pervakov must have been thinking the same when he made the following study.

Pervakov, 'Moscow Championship' 1986



White to play and draw

The white pawns on the 6th rank are ready to advance, but first he must prevent mate.

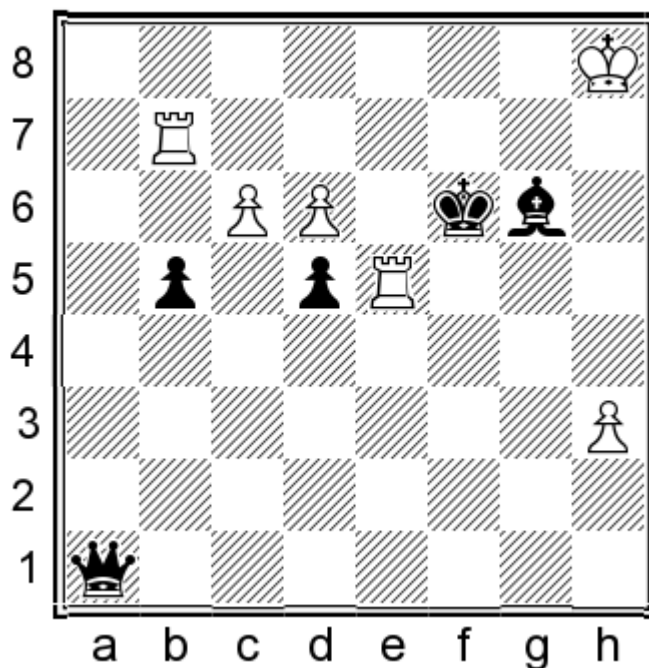
1.Re5 Qa1!

Now the situation is critical again for White.

2.Rb7+

White must give this check, since 2.Rbe8? Qd4! 3.R8e7+ Kf8 is a dead end.

2...Kf8 3.Rb8+ Kf7 4.Rb7+ Kf6



5.d7!

White must advance the d-pawn. After 5.c7? Qxe5 6.c8Q Qh5+ 7.Kg8 Bf7+ White will be mated.

5...Qa8+ 6.Re8!

The right move order. After 6.Rb8? Qxb8+ 7.Re8 Qxe8+! 8.dxe8Q Bxe8 9.c7 Bd7 Black wins.

6...Bxe8 7.Rb8!

Preparing the area of tension.

7...Qxb8 8.c7! Qxc7 9.dxe8N+!

Winning the queen. White still has to be careful though.

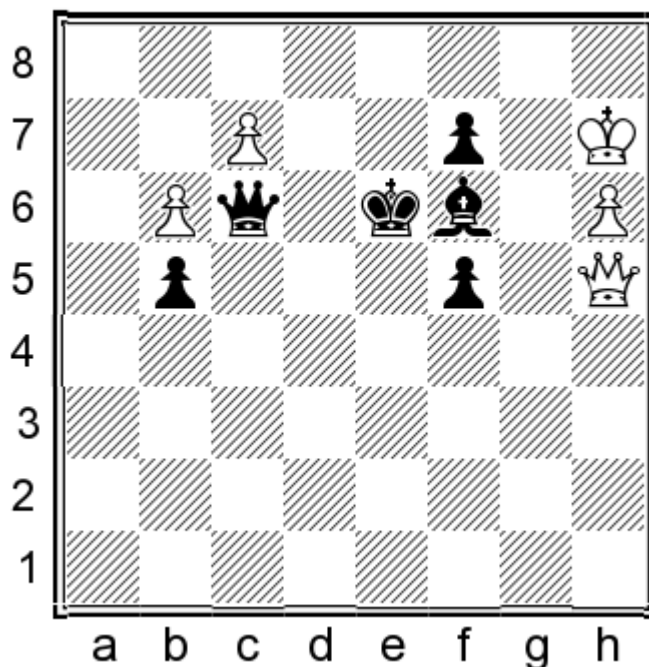
9...Ke5! 10.Nxc7 b4 11.Na6!

The only way. Black wins after 11.Nb5? d4 12.Nxd4 Kxd4 13.h4 b3 14.h5 b2 15.h6 b1Q 16.h7 Ke5 and the black king is close enough.

11...b3 12.Nc5! b2 13.Nd3+ Kf5 14.Nxb2 ½-½

Pal Benkö elaborated the theme in a slightly different way.

Benkö, 'Magyar Sakkélet' 1987



White to play and win

White has two powerful passed pawns, but his king is threatened with being caught in a mating net.

1.Qd1!

A queen sacrifice is not sufficient. After 1.Qf3 Qxf3 2.c8Q+ Ke7 3.b7 Be5, White cannot win.

1...Qa8

Threatening mate in one.

2.Qd8! Bxd8 3.b7

Nadareishvili's area of tension again. Black has to take the b-pawn.

3...Qxb7 4.cxd8N+

Here, too, White promotes to a knight. In this position it turns out to be winning.

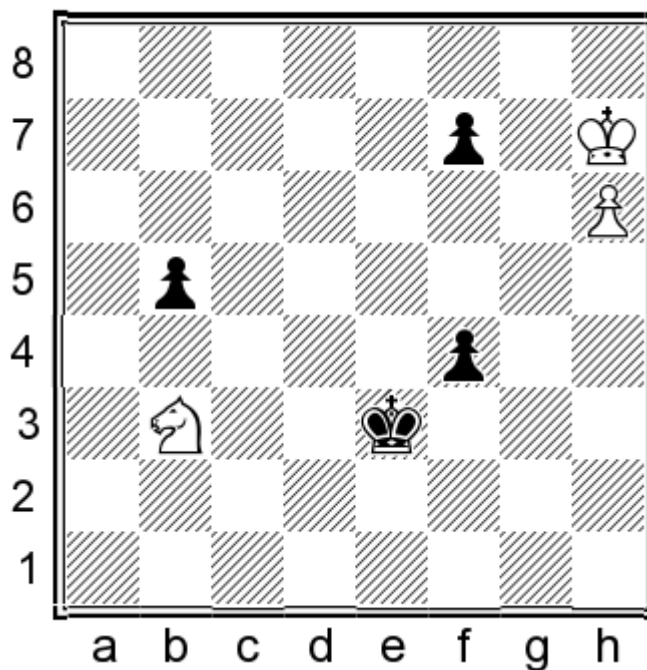
4...Kd5 5.Nxb7 f4

It looks as if the win is still difficult.

6.Na5!

Via the edge of the board White tries to reach the d2-square in order to stop the enemy f-pawn.

6...Ke4 7.Nb3 Ke3



The king controls the d2-square. But White has another subtlety up his sleeve.

8.Nd4! Kxd4 9.Kg8 f3 10.h7 f2 11.h8Q+

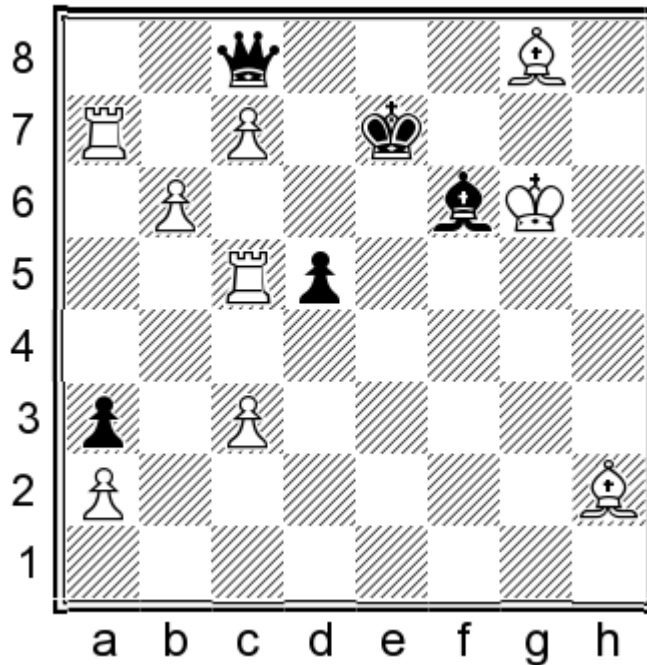
And wins.

This study was awarded first prize in the tourney of the above-mentioned Hungarian chess magazine.

When, I wanted to use this theme in the late 1980s, I did not know any of these three studies. I had only had a look at an incorrect study by the Bulgarian I. Ionchev. A diagram with Nadareishvili's area of

tension was given in Krabbé's Chess Curiosities. For me this was the starting point for the following study.

Timman 1992



White to play and win

White enjoys a large material advantage, but his king is unsafe. In order to avert the immediate danger, he has to sacrifice a bishop.

1.Bd6+!

The alternative 1.Be6 narrowly fails in view of 1...Qe8+ 2.Kf5 Qh5+, with sufficient counterplay for Black.

1...Kxd6 2.Rxd5+ Ke7

Black is threatening again, but this time the bishop sacrifice on e6 does work.

3.Be6 Kxe6

After 3...Qe8+ 4.Kf5 Qh5+ 5.Kf4 the white king will eventually manage to reach the queenside, where it is safe.

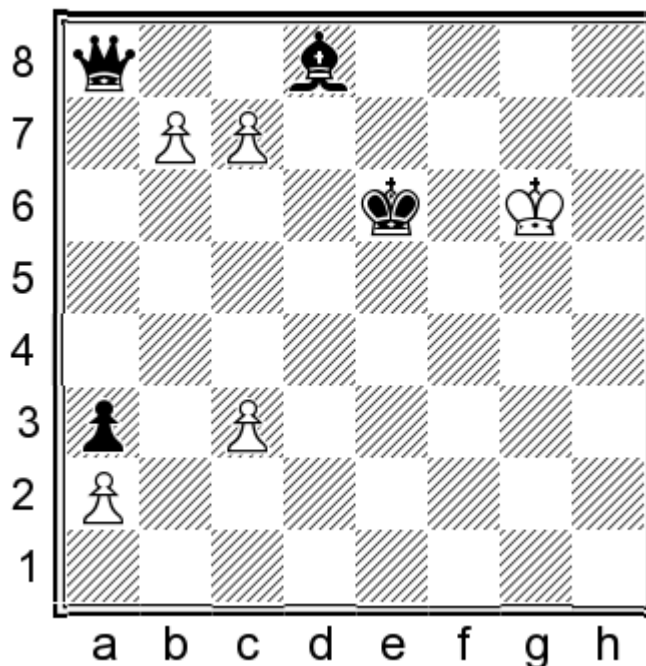
4.Rd8!

After two bishop sacrifices the first rook sacrifice follows. Due to the last bishop sacrifice the route to g4 was blocked for the black queen, and now g8 is made inaccessible.

4...Bxd8 5.Ra8

The second rook sacrifice forces the Nadareishvili position.

5...Qxa8 6.b7



As in Nadareishvili's study, Black now has two possibilities. The main line continues:

6...Qxb7

The alternative is 6...Qa6, in order to wait for 7.cxd8Q Ke5+ 8.Kg5 before continuing with 8...Qxb7, so that the knight promotion with a fork is avoided. White must then play accurately to secure the win, because if the queens stay on the board, a draw is inevitable. The

only winning move is 9.Qh8+!, in order to force a queen swap after 9...Kd6 10.Qd4+.

7.cxd8N+ Kd5 8.Nxb7 Kc4

At first sight, this looks like a draw, because Black is going to capture both queenside pawns.

But the white king is just in time to corner its black colleague, after which the contours of the Stamma mate begin to take shape.

9.Kf5 Kxc3 10.Ke4 Kb2 11.Kd3 Kxa2 12.Kc2 Ka1 13.Nc5

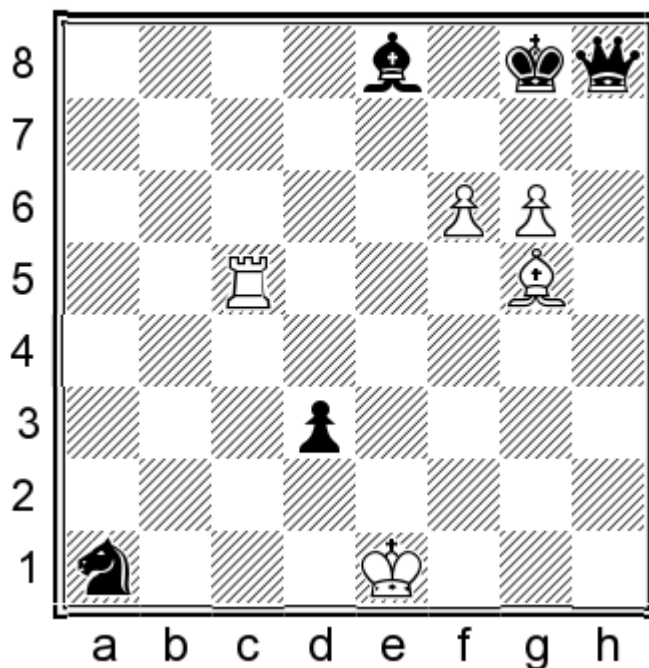
The knight is going to force mate in the usual fashion.

13...Ka2 14.Nd3 Ka1 15.Nc1 a2 16.Nb3

Mate.

With hindsight I am not so satisfied with my version. It starts with a lot of sacrifices, but all this violence does not really add anything substantial to the theme. Stamma's mate is a nice touch, but it isn't sufficient to give the study extra cachet. I thought it would be a good idea to make a study where Nadareishvili's area of tension continues to exist for a couple of moves, and where Black just fails to break out with his queen and bishop due to various self-blocks by the opponent.

Timman 2011



White to play and draw

Black has a great surplus in material. White can only try to save himself with a series of checks.

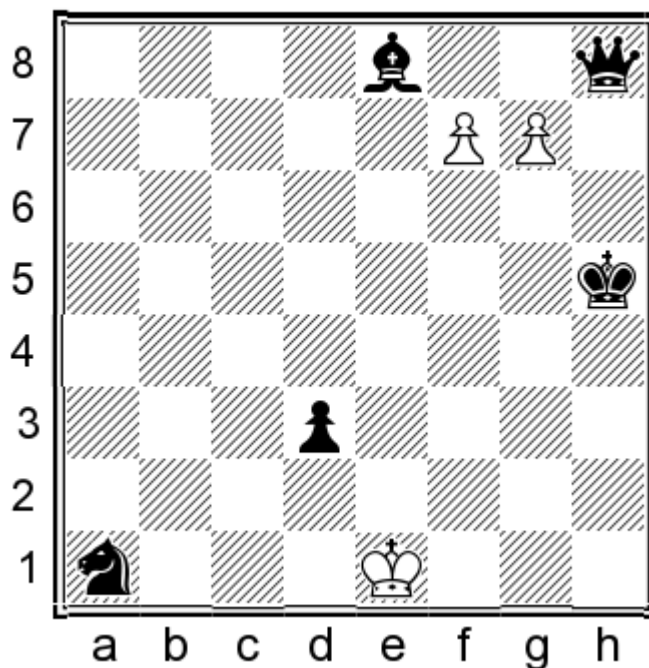
1.f7+ Kg7 2.Bh6+!

With this bishop sacrifice White lures the enemy king further forward.

2...Kxh6 3.Rh5+!

Now it has grown into a magnet combination. The king is drawn further out, enabling White to build Nadareishvili's area of tension on the board.

3...Kxh5 4.g7



Now there are two main lines:

A) 4...d2+ 5.Kf2! d1N+ 6.Ke1 and despite his enormous material supremacy there is no win for Black;

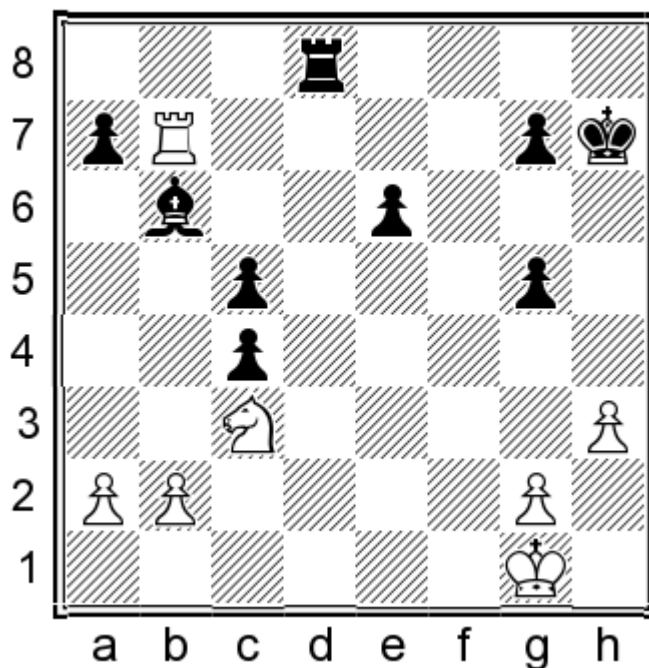
B) 4...Nc2+ 5.Kd1! The knight blocks the black bishop's diagonal. Now 5...Qxg7 would bring Black nothing after 6.fxe8Q+ Kh6 7.Kd2! Nb4 8.Qe6+ Qg6 9.Qh3+ and there is no good way for Black to escape from the checks. 5...Ne3+ 6.Kc1! and now the knight blocks the black queen's diagonal.

Also related to the Prokes Manoeuvre is a famous promotion combination from a game played in Madrid in the 1930s.

Ortueta

Sanz

Madrid 1933



Position after 30.h3

Black is two pawns up, but his structure is shattered. An easy win is not on the cards.

30...Rd2

The introduction to a magnificent combination.

31.Na4

This allows the combination. More tenacious was 31.a4 in order to meet 31...Rxb2 with 32.a5. In that case it is probably best for Black to strengthen his position with 31...Kg6.

31...Rxb2!

A rook sacrifice which is based on a series of marvellous finesses.

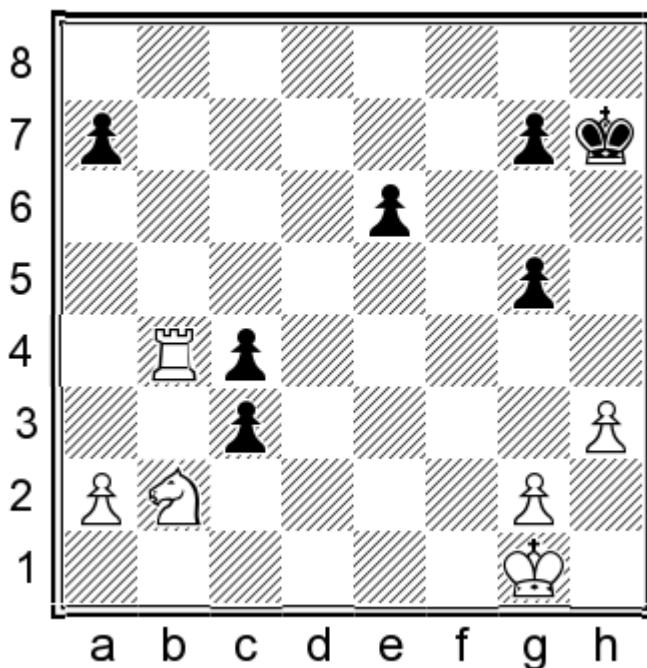
32.Nxb2 c3 33.Rxb6

White appears to save himself, but now there follows a colossal surprise.

33...c4!!

The main point is that the white knight is deprived of the d3-square.

34.Rb4



Again White appears to have everything under control, but a new surprise awaits him.

34...a5!!

The third pawn move. In spite of his enormous material advantage White cannot prevent the promotion of the c-pawn.

It is almost incredible that such a combination, full of study motifs, can occur in a practical game. However, the story becomes stranger still: in 1953 a game from 1931 between the Polish players Tylkowski and Wojciechowski was published, which contained exactly the same combination! This game is shrouded in mystery. Originally it was claimed that it had been played in the national championship, but this turned out to be untrue. There is a game

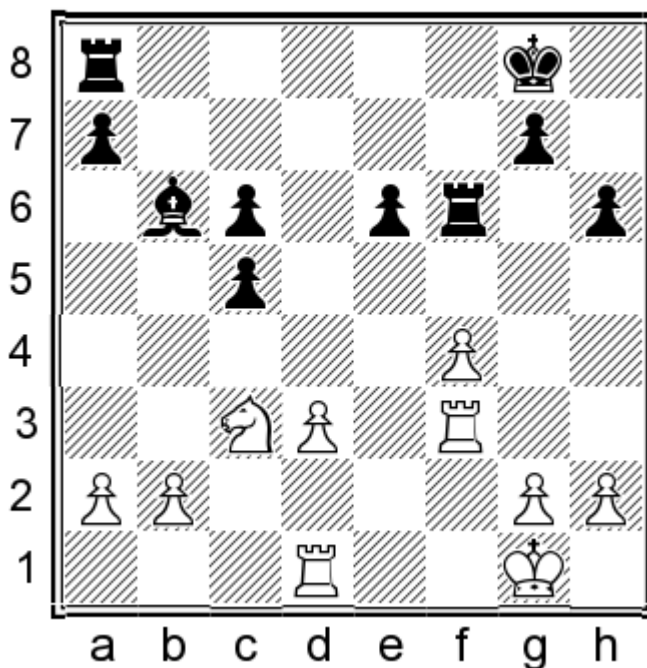
between the same players from that championship, but here Tylkowski was the winner. No problem, according to the sources from Poznan that had made the game public: it had been a casual game. There were supposed to have been onlookers as well. Witnesses insisted that they had seen the game in question, including the combination. One of them claimed that the game had been published at the time in Dziennik Poznanski, the local newspaper, which had a weekly chess column. This latter message turned out to be untrue as well.

So how credible does this make this game's authenticity? If there had been so many witnesses, this incredible combination had to have found its way to the newspaper column. It is also conspicuous that both players had died by the time the game was published. Nothing could be checked with either of the two persons directly involved.

Despite all this, Tim Krabbé, who has published a lot about this mysterious game on his website, claims that Tylkowski-Wojciechowski has really been played.

I quote:

‘It is hard to think of a reason why it would have been invented, and it would have been very difficult to invent it.’ As for the first argument: to me it looks like an understandable attempt of local Poznan chess players to put their city on the global chess map. In 1953, Ortueta-Sanz had already been a famous combination for a long time. What could be more beautiful than the suggestion that all this had already occurred two years earlier in Poznan? And as for the game itself: it contains a bizarre episode.



After 22. Rf3, the game is said to have continued as follows:

22...c4+

Understandable. Black wants to get rid of his doubled pawns.

23.d4?

But this is very strange. The d-pawn could have been lost now. There was nothing against 23.Kf1.

23...c5??

And this is simply a grotesque strategic blunder. With 23...Rd8 he could have gained a big advantage.

24.d5 exd5 25.Rxd5

With a big strategic advantage.

25...Kh7

A strange move which, however, fits into the scheme.

26.Rd7 Rd8 27.Rb7?

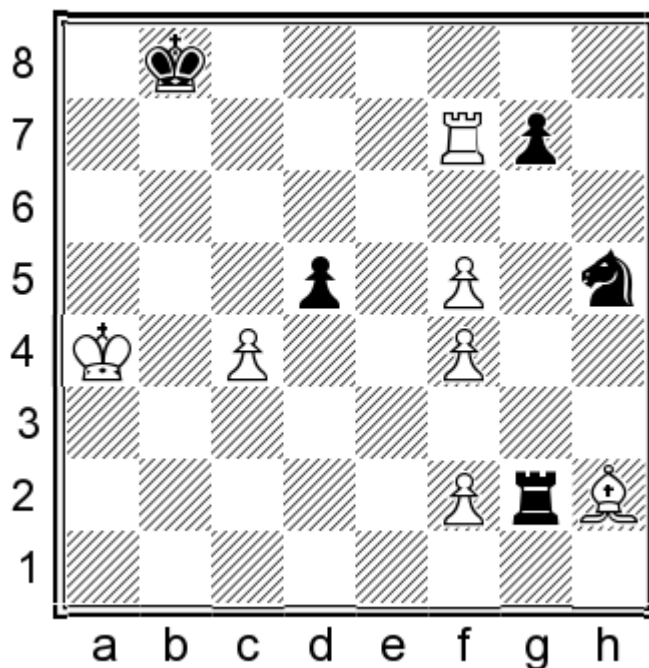
What is this? White puts his rook out of play and hands the only open file to his opponent. The only justification for the text move appears to be that White wants to reach the position where the famous combination can start as soon as possible.

27...Rg6 28.Rg3 Rxc3 29.hxc3 Rd2

Now the aim has been achieved. The position is ripe for the combination. Tylkowski and Wojciechowski were pretty strong players. It seems to me to be out of the question that they were able to play such bad moves.

Back to Ortueta-Sanz. The position after Black's 30th move is often published in a stylized version, without the black pawns on e6 and g5. In that case the capture on b2 would have been the only way to win. Then you could turn the board around in order to make an endgame study of it, with the stipulation 'White to play and win'. This wouldn't be a bad study, but it should be possible to get more out of it. There are studies by the Italian Rossi and the Russian Lomov, but they are incorrect. And there is little use in trying to restore them, since they hardly add anything to Sanz's combination. A good study is the following one by Ernest Pogosyants, the man who composed more than 2000 endgame studies.

Pogosyants, 'Thèmes-64' 1977



White to play and win

The first move is obvious. White must save his bishop.

1.Bg3 dxc4

The technical background of this study is that both 1...d4 and 1...Nxg3 lead to lost rook endings.

2.Rxg7!

Here is the rook sacrifice, in the other corner of the board.

2...Nxg7 3.f6 Rxg3 4.f5!!

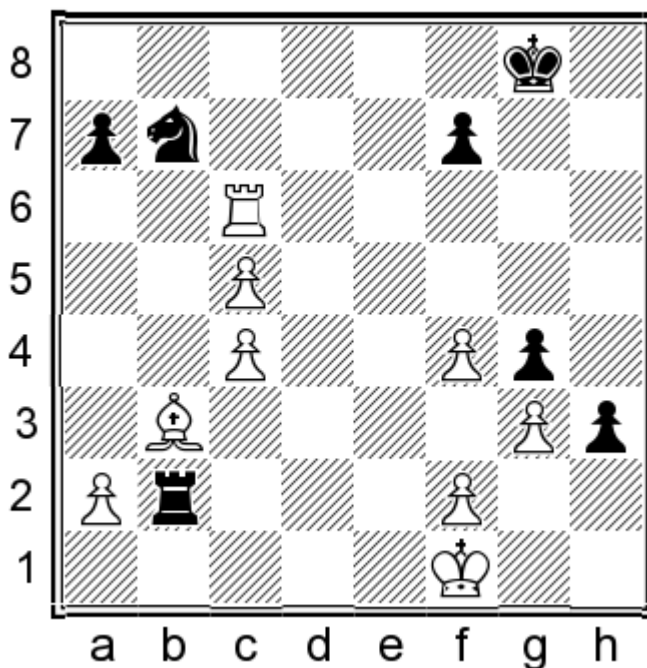
If White captured on g3, Black would be able to scrape a draw.

4...Rg5 5.f4! Nxf5 6.f7

And wins.

The rook sacrifice can also be made on another square.

Timman 2010

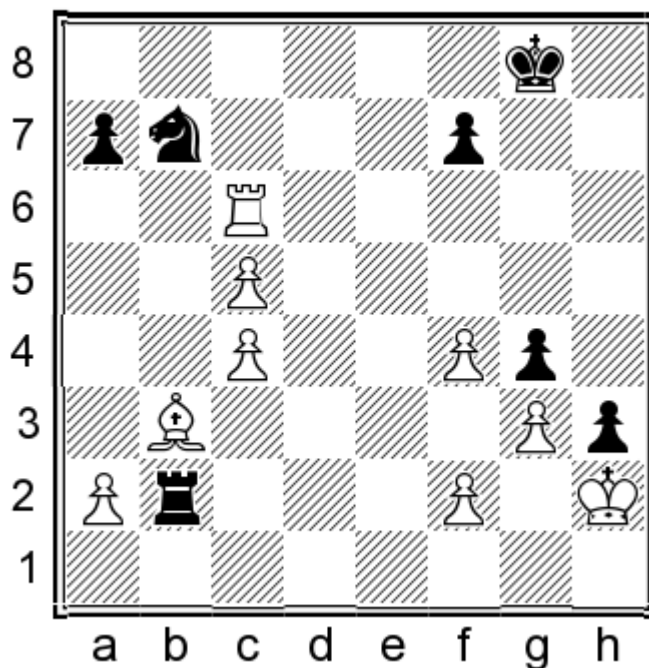


White to play and win

The situation on the queenside is familiar. But on the other wing there's also something going on. First White has to stop the h-pawn.

1.Kg1 Rb1+ 2.Kh2 Rb2

Black's counterplay is not to be underestimated. White has to take drastic measures now.



3.Rg6+!!

White sacrifices his rook in order to clear the way for the pawn on c5, and at the same time to open the a2-g8 diagonal. Black is forced to accept the sacrifice, as otherwise White will take on g4.

3...fxg6 4.c6

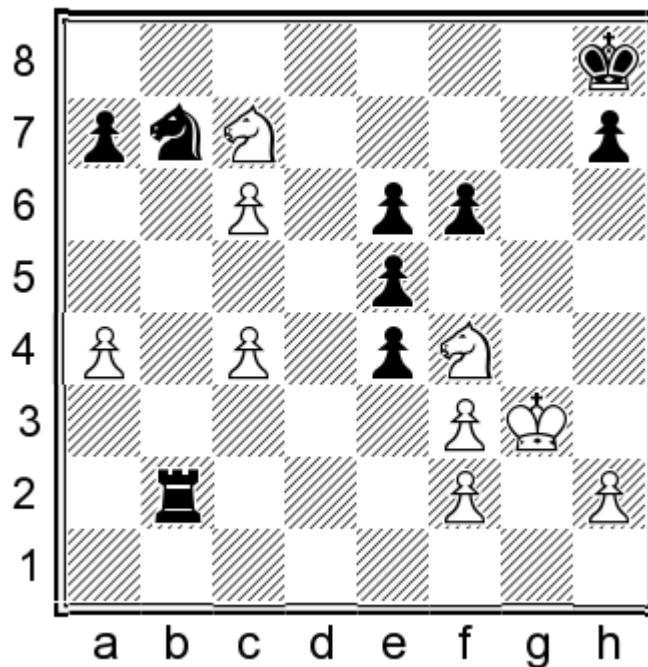
The rest is well-known territory.

4...Rxb3 5.c5 Rb5 6.a4 Nxc5 7.c7

And the c-pawn queens.

When I showed this study to Yochanan Afek, he shook his head and said: ‘You paid a high price for this rook sacrifice’. Afek likes maximum economy in a study. As little material as possible should be used to convey the ideas. In this study there is an entire structure on the kingside that doesn’t play any role in the main variation. I fear that this is inevitable if we want to add any new ideas to the combination.

Instead of a rook, White can also sacrifice two knights in order to break through.



White to play and win

Black threatens to capture the knight on f4 with check. Therefore this knight is sacrificed first.

1.Ng6+! hxg6 2.Nb5!

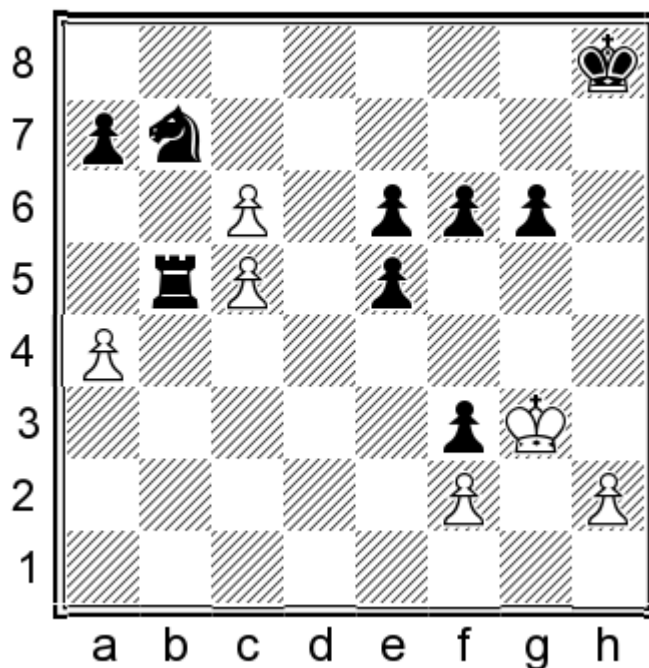
Keeping the black knight from d6 and the rook from b6.

2...Rxb5 3.c5!!

In the circumstances, this is a quite special pawn move.

3...exf3

An ingenious defence. Black vacates the e4-square for the knight. If White now plays 4.axb5, Black can save himself by 4...Nxc5 5.c7 Ne4+, followed by 6...Nd6.



4.Kh3!!

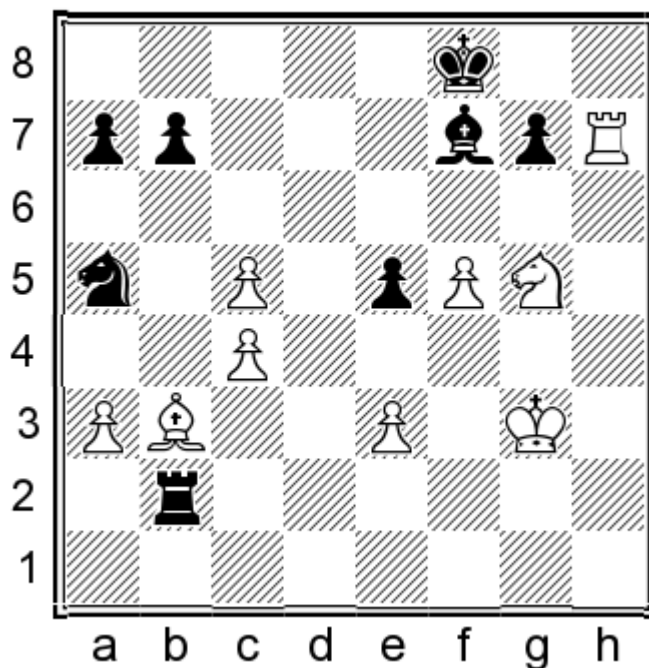
A marvellous quiet move. White takes his time and first eliminates the knight check, while maintaining the threat to take the rook.

4...Nxc5 5.c7

And wins.

Here again, we see this heavy structure on the other wing, but an extra element has been added: the quiet move at the supreme moment. Fourteen years earlier I had already tried to use this idea.

Timman 1997



White to play and win (first publication)

The intended solution was:

1.f6 gxf6

Forced, as White's main threat was 2.Rh8+ Bg8 3. f7, while 1...Bg8 would have run into 2.fxg7+ Ke7 3.Rh8 Rxb3 4.Rxg8 Kf6 5.Ne6!, and White wins.

2.Rxf7+ Kg8

Not, of course, 2...Ke8, in view of 3.Ba4+.

This is the start of the well-known combination.

3.Rxb7 Nxb7

Boris Gelfand pointed out that Black can save himself in a rook ending. After 3...fxg5! 4.Rxa7 Rxb3 5.Rxa5 Rxe3+ 6.Kg4 Kf7 there is no win for White.

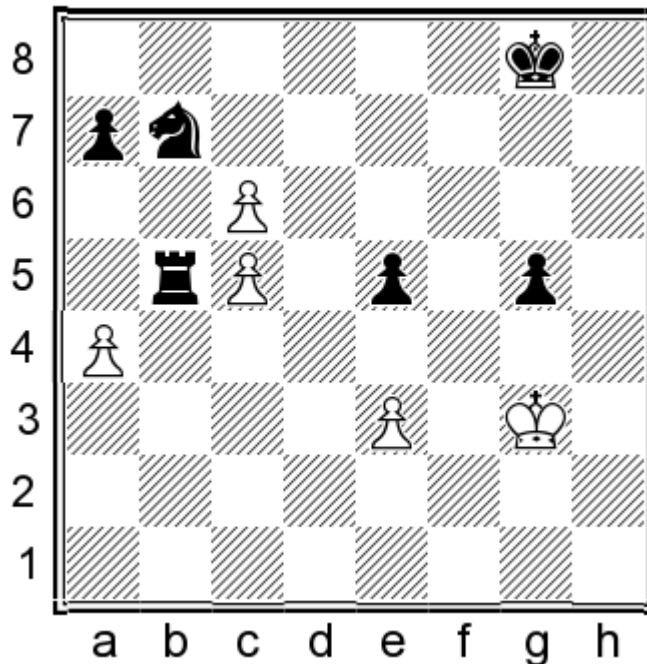
4.c6 Rxb3 5.c5

The well known theme. With this pawn move the black knight is kept away from d6 and the rook from b6.

5...Rb5 6.a4

Nothing new so far. But Black has a nice riposte.

6...fxg5!



With the point that 7.axb5? is impossible in view of 7...Nxc5 8.c7 Ne4+, followed by 9...Nd6.

We have now reached the high point of the study.

7.Kh3!!

An enormous surprise. Although a rook and a knight down, White is in no hurry to win back material, but starts by hiding his king. The absolute high point of the study is thus lengthened by one move.

7...g4+ 8.Kh4

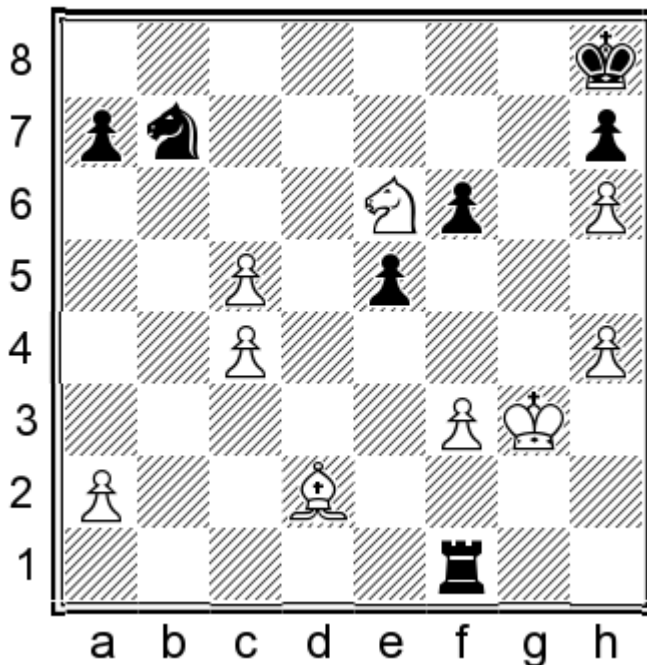
And wins in two moves. The pawn on c6 decides the outcome.

‘It has become a kind of Prokes theme,’ observed Krabbé when I showed him this study.

After making this study I hadn't indulged in the passion of composing endgame studies for two years – until I found three messages from Tim Krabbé on my answering machine in the space of thirty minutes. In the first message he said: 'Eh Jan, in that study after Ortueta-Sanz the bishop is not covered. Wouldn't it be better if it was?'. And the second message, about two minutes later: 'OK, no, I get it now, the bishop cannot be covered.' And finally, in the third message, he said: 'But still, wouldn't it be better if the bishop was covered?' Hearing these messages, I felt something stir in my innermost chess soul.

Rusty retrograde cogs started churning, picking up speed. I decided to tackle the study on a larger scale. Having the bishop on b4 instead of on b3 turned out to be a good starting-point. The result looks as follows:

Timman 1999



White to play and win

As far as material is concerned, the situation is roughly equal. White obviously depends on his passed c-pawns. 1.c6 Nd6 at once yields nothing, so he will have to start by trying to dominate the enemy knight.

1.Bb4 Rb1

There is no other defence against the threatened 2.c6, as may be seen from 1...Rg1+ 2.Kf2, and now:

- A) 2...Rg8 3.c6 Nd8 4.Be7!, and wins;
- B) 2...Rc1 3.c6 Rxc4 4.c7 Rc6 (otherwise 5.Bc5) 5.f4 e4 6.f5, and wins.

2.a3

Tempting, in view of what we have seen before, is 2.c6 Rxb4 3.c5, but this fails to 3...Nxc5 4.c7 Ne4+, followed by 5...Rc4.

2...a5 3.c6

Only now can the bishop be sacrificed.

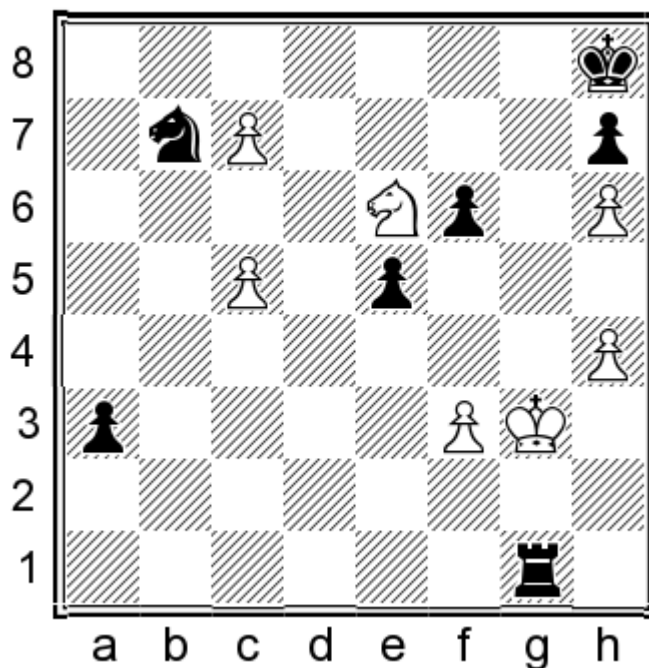
3...axb4 4.c5

The Ortueta-Sanz motif. Now 4...Nxc5 is insufficient in view of 5.c7 Ne4+ 6.fxe4 Rc1 7.axb4, and wins.

4...bxa3 5.c7

Now the black rook has to hurry back to the bottom rank to stop the foremost white passed pawn.

5...Rg1+



6.Kh3!

For two reasons, both of which will become apparent, this is the only good square for the king.

6...Rg8

Interesting is the try 6...a2 7.c8Q+ Rg8, which leaves White only one way to win, viz. 8.Nd8! (threatening mate in one) 8...Nxd8 9.Qa6, and the black a-pawn is eliminated.

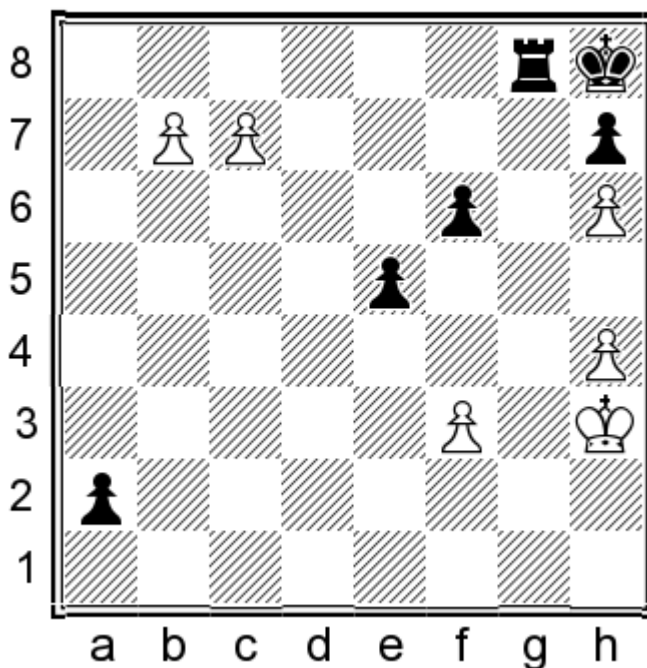
7.Nd8 Rxd8 8.c6!

The Prokes motif. Here we see the first reason why the white king had to go to h3; on the second rank it could be checked by the rook.

8...Rg8

The best defence; Black turns the game into a pawn race.

9.cxb7 a2



10.b8Q

The only way to queen which wins, as will become clear in a while.

10...a1Q 11.Qxg8+ Kxg8 12.c8Q+ Kf7 13.Qd7+

Now it is clear why the b-pawn had to queen first: the black king must not be allowed to go to e6. If the black king now goes to g8, he loses the h-pawn with check via g7 and g8/h8.

13...Kg6 14.Qg7+ Kh5 15.Qf7+

And this is the second reason for White's 6th move: the white king assists in weaving a mating net. If the black king had gone to f5, White would have taken on h7 with check and then escaped the perpetual.

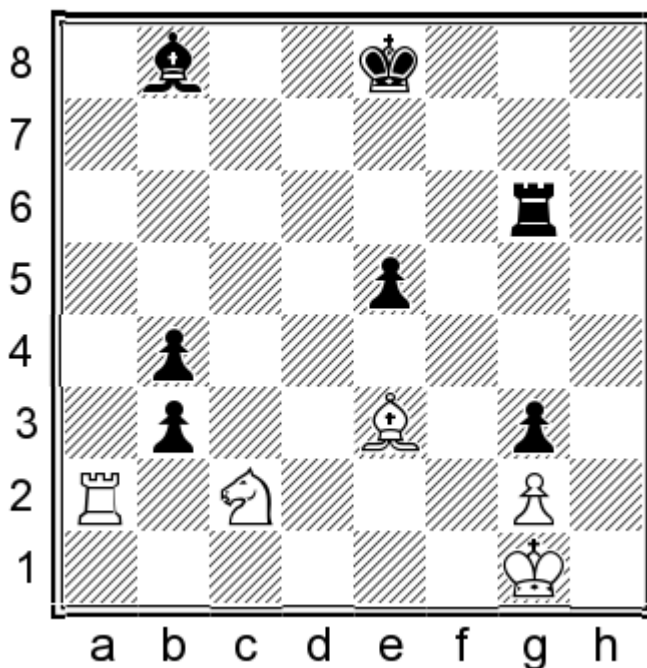
15...Kxh6 16.Qxf6+ Kh5 17.Qg5#

A wonderful Excelsior of the black a-pawn, with the newly-born queen powerless to do anything. I failed to find a way to create an Excelsior with the hindmost c-pawn in a similar way.

The difference between the Prokes Manoeuvre and the combination from Ortueta-Sanz is that with the manoeuvre the pawn promotion

is prevented, whereas in the second case, the promotion is realized by the combination. I thought it would be a challenge to create an ‘Anti-Ortueta-Sanz study’ – i.e. a study where White manages to prevent the pawn promotion.

Timman 2010



White to play and draw

White's first move is forced.

1.Ra8 Rb6!

A thematic sacrifice that serves to shield the b-file.

2.Bxb6 b2

Threatening to promote the pawn, which would even mean mate here. White must retreat his rook.

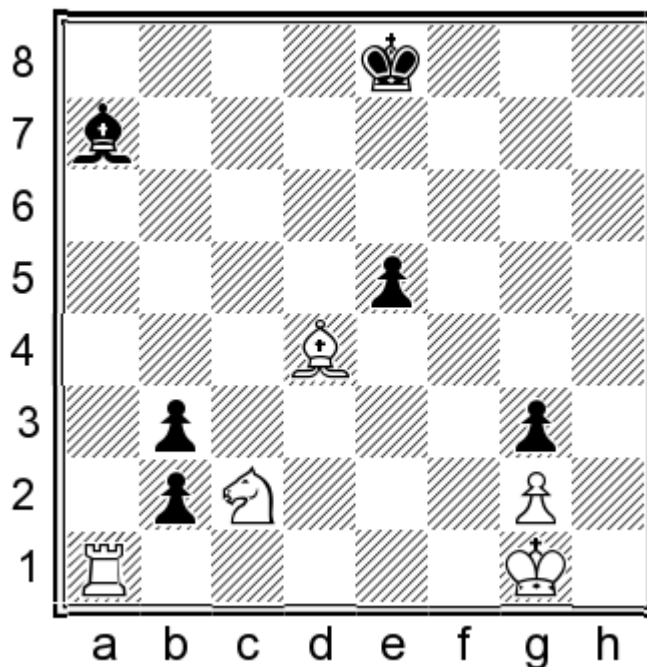
3.Ra1 b3

Like in the previous study we see a mix of the Prokes Manoeuvre and the Ortueta-Sanz combination. White must find a way to get to the enemy king.

4.Bd4!!

A curious situation. Two moves ago none of the white pieces was under attack. Now all three of them are. However, for the moment there is no reason for Black to capture either of the pieces.

4...Ba7!



The tension on the board is increased to the maximum. White's bishop is pinned, the black bishop cannot be taken. How can he save himself?

5.Kf1!

The solution! Black has two ways to capture the bishop, but then a rook check on a8 or e1 respectively, is possible.

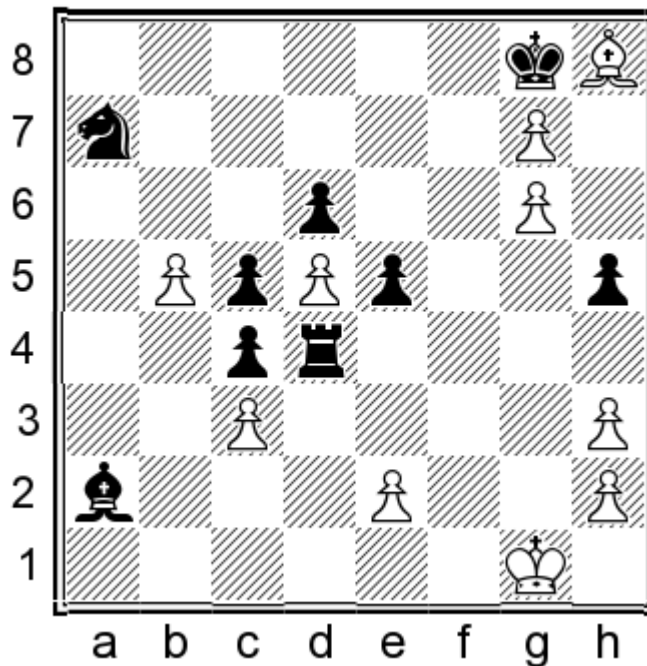
Insufficient was 5.Kh1 on account of 5...bxa1Q+ 6.Nxa1 exd4 7.Nxb3 d3 and White cannot save himself.

5...bxa1Q+ 6.Nxa1 Bxd4 7.Nxb3

With a draw.

Related to the Ortueta-Sanz combination is an idea from a quite unknown study by the Russian endgame study composer Alexander Herbstman.

Herbstman, 'De Schaakwereld' 1937



White to play and win

Materially White is in bad shape, but he has a dangerous passed pawn.

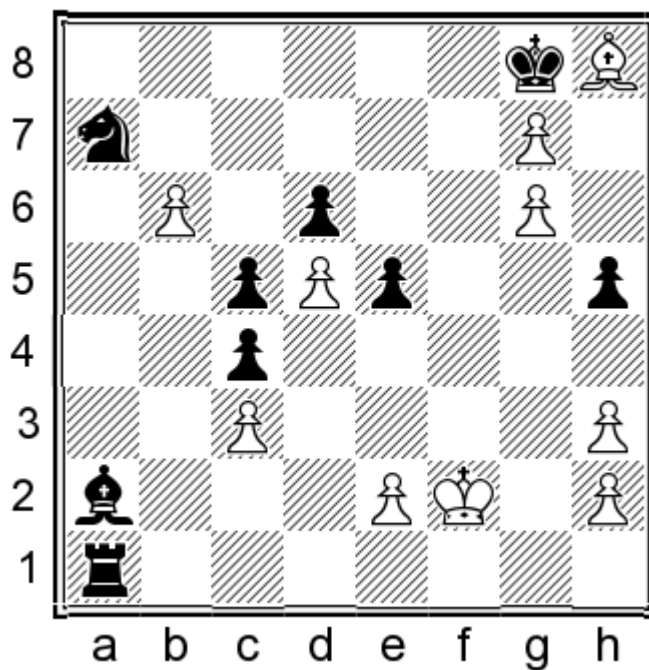
1.b6 Rd1+

The rook has to hurry in order to stop the b-pawn.

2.Kf2

Definitely not 2.Kg2? in view of 2...Bb1! followed by 3...Be4+ and the black rook can stop the dangerous pawn.

2...Ra1

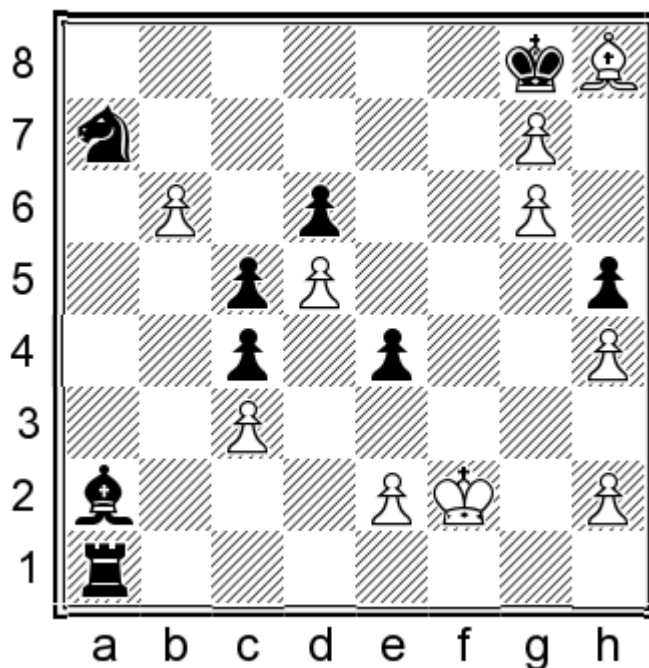


A curious situation. Black would prefer to get rid of one of his minor pieces, or both. They are hopelessly in each other's way.

3.h4!

A tempo move.

3...e4



4.Kg2

Now that the black pawn is on e4, this square is accessible to the king.

4...e3 5.Kg3 Rg1+ 6.Kf4 Rf1+ 7.Kg5 Rg1+ 8.Kh6 Ra1

There are no more checks, and the rook returns to its post.

9.h3

Mutual zugzwang. White wins.

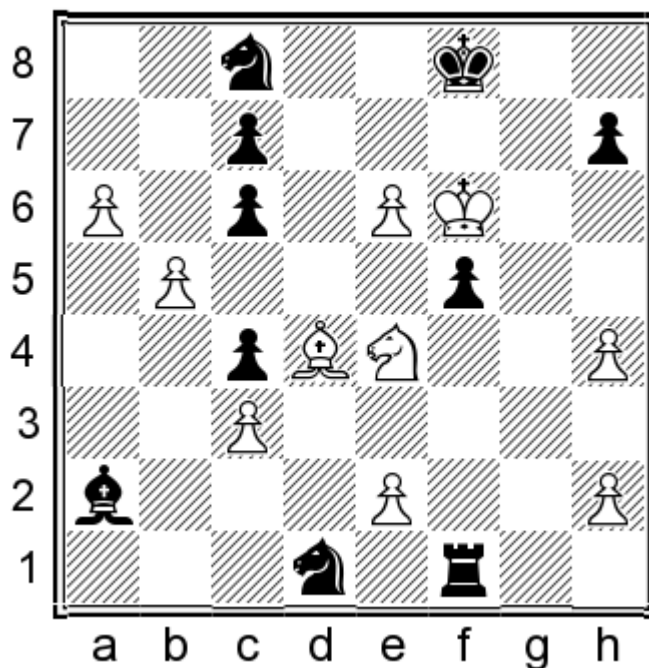
A nice study; but on move 4 there are two duals in the position.

4.Ke3 wins too, and the little move 4.h3 leads to mate in 14.

This is a pity, as the idea of a tiny pawn dominating three black pieces is spectacular, and it deserved a better adaptation.

I considered that all kinds of sacrifices would be possible to reach the spectacular position. Also, more can be done with the theme of mutual *zugzwang*.

Timman 2011



White wins (after Herbstman)

The black bishop is ready. The other pieces still have to be moved to the crucial squares.

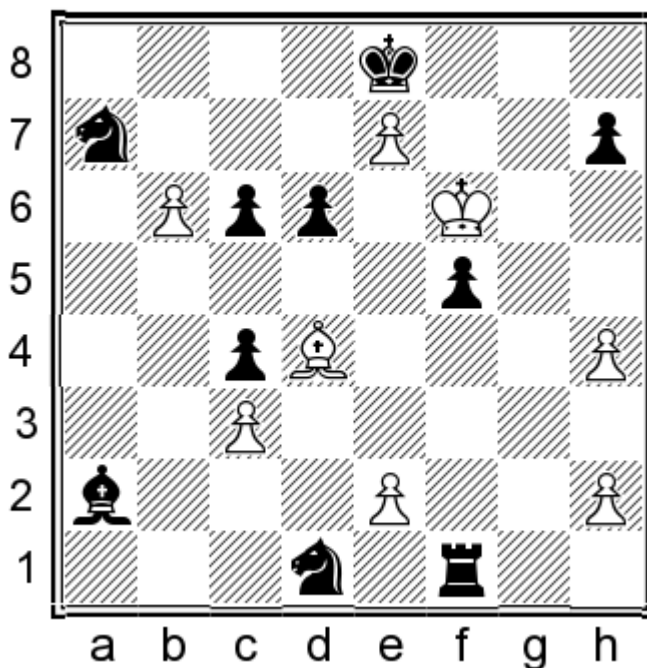
1.e7+ Ke8 2.Nd6+!

Forcing Black to take with the c-pawn, after which White can open the path for his b-pawn.

2...cxd6 3.a7!

A pawn sacrifice to wrongfoot the black knight.

3...Nxa7 4.b6



The paralysing passed pawn arrives on the scene.

4...Ne3!

With this knight sacrifice Black clears the back rank for his rook. White has to accept the sacrifice, since a check on d5 is threatened.

5.Bxe3 Ra1

Now Black threatens to clear the c6-square for his knight with 6...c5.

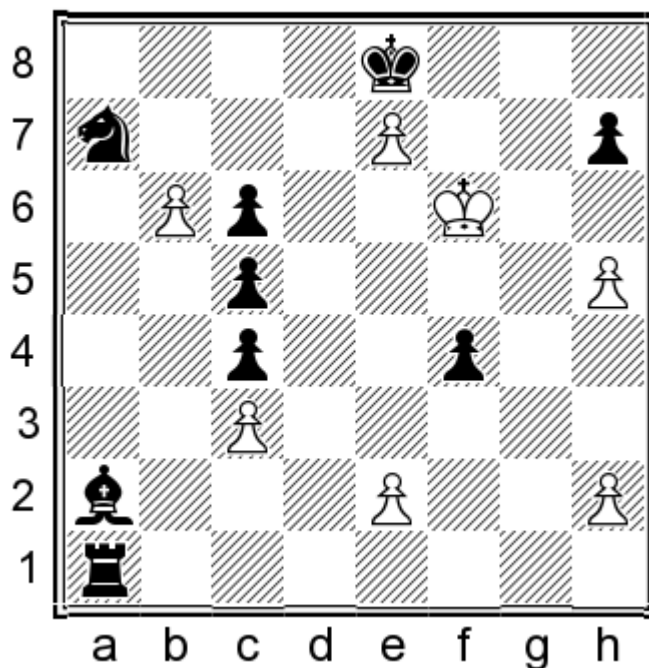
6.Bc5!!

The only way to thwart Black's plan. Black has to accept the bishop sacrifice, because 7.b7 Rb1 8.Bb4 is threatened.

6...dxc5 7.h5!

Not 7.h3 on account of 7...h5! 8.e3 f4 9.exf4 Kd7! and 10.Kf7 fails to 10...Bg6+. It is very important for White to gain control of the g6-square.

7...f4



8.h3!

With this tempo move White comes out on top.

Insufficient was 8.h6 in view of 8...f3 9.exf3 Kd7! and Black is OK again.

8...h6 9.h4

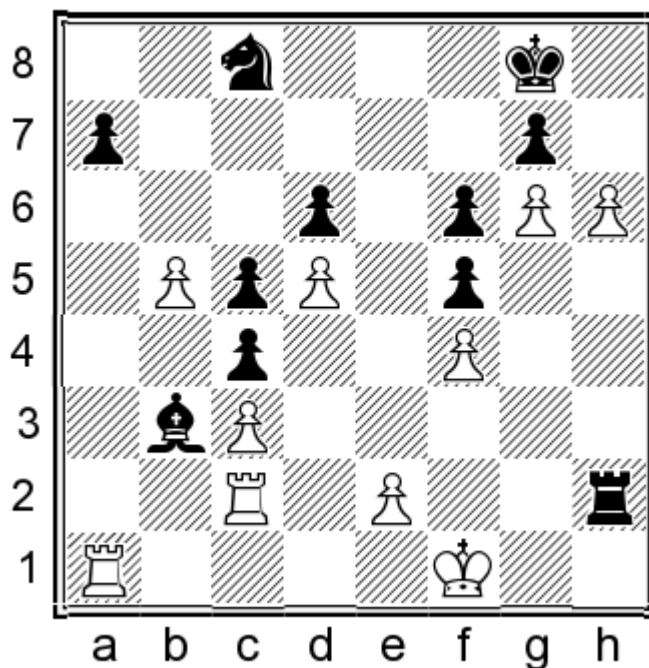
Mutual zugzwang. For rook, bishop and knight, White only has one pawn, but still Black is powerless.

9...Bb1 10.b7

And wins.

Two years later I elaborated this theme in a more economic way.

Timman, 'The Problemist' 2013



White to play and win

The first move is clear.

1.h7+

Forcing the black king to the corner.

1...Kh8 2.Rxa7!

The first rook sacrifice.

2...Nxa7 3.Ra2!

And the second.

3...Bxa2 4.b6 Rh1+ 5.Kf2

The king has to go to a dark square. After 5.Kg2 Bb1 6.Kxh1 Be4+ 7.Kg1 Bxd5 (or 7...Nc6) there is no win.

5...Ra1

Black has set up his temporary defence.

6.Ke3 Rc1 7.Kd2

Forcing the rook back.

7...Ra1 8.e3

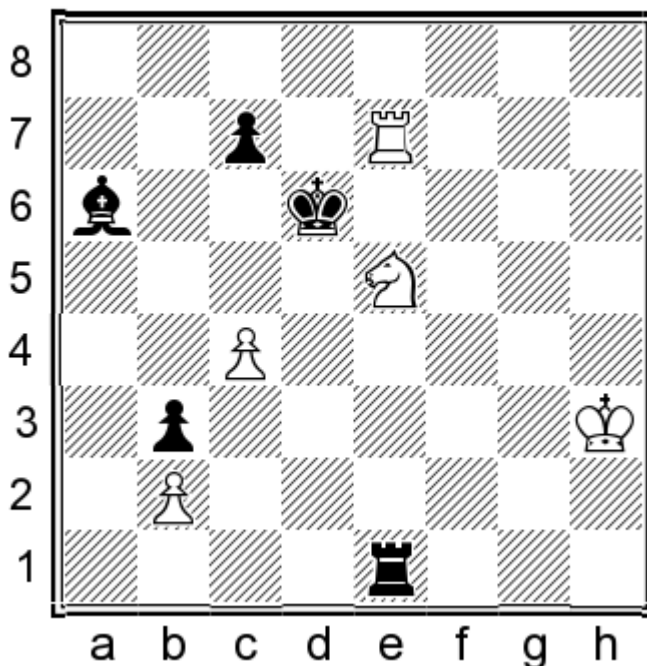
Now Black is in a lethal zugzwang.

8...Rb1 9.bxa7

And wins.

I made the following study on October 31, the day that rumours were buzzing about that the great Dutch writer Harry Mulisch had died. While anxiously following the news, I was working on the ideas. When the study was finally finished, the news came through that Mulisch had died the night before. I decided to dedicate the work to his memory.

Timman 2010



White to play and draw (in memory of Harry Mulisch)

It is clear that White cannot prevent the loss of a piece. Therefore he goes after the enemy c-pawn.

1.Rd7+ Ke6 2.Rxc7 Re3+

Black wants to capture the knight with the king. To this end, he must interpolate this rook check.

3.Nf3!

Drawing the black rook to a less favourable square.

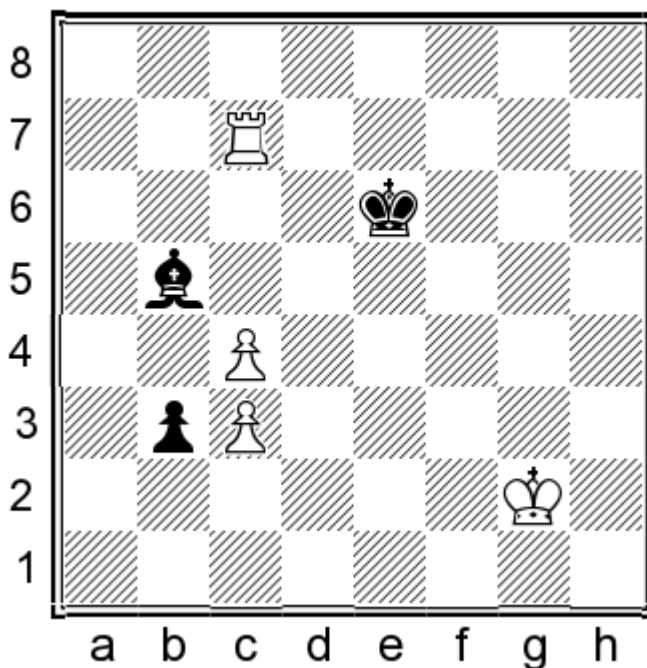
3...Rxf3+ 4.Kg2 Rc3!

Black's best chance. After 4...Rd3 5.Rc6+ Ke5 6.Rxa6 Rd2+ 7.Kf3 Rxb2 8.Ke3 the rook ending would be a draw.

5.bxc3

The only move. After 5.Rc6+ Ke5 6.Rxa6 Rc2+ 7.Kf3 Kd4! the rook ending is winning for Black, as the white king is shouldered off.

5...Bb5!



The fantastic point of the previous move. Black blocks the b-file, and now White's task to prevent the promotion of the b-pawn seems impossible. On 6.Rb7, for example, Black has 6...Bc6+.

6.Rc5!!

A calm move. White threatens to take the bishop.

6...Bd7

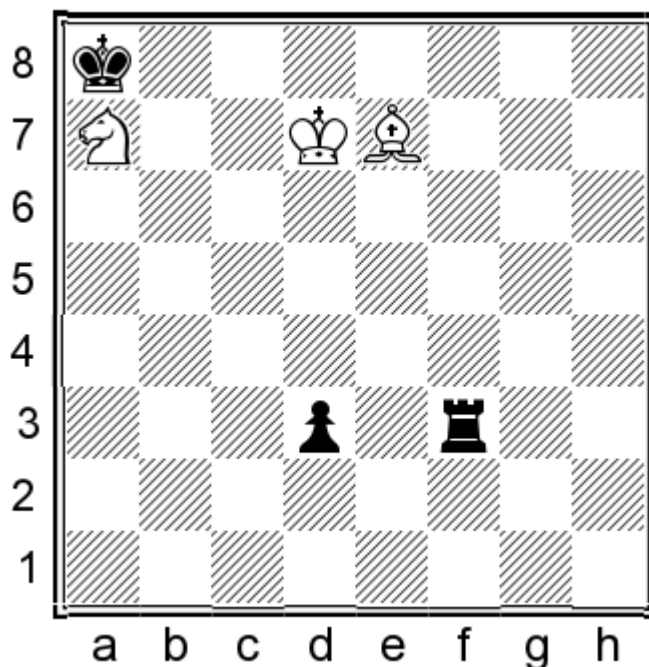
Now what?

7.Rg5!!

Only with this rook move can White prevent promotion. The rook aims for three different squares. The threat is 8. Rg6+, followed by 9. Rb6. Should Black try 7...Bc6+, then the white king steps aside, after which the g1-square is available for the rook. Finally, 7...Kf6 is met by 8.Rg8; then the rook will have access to the square b8.

The great Russian endgame study composer Vladimir Bron has created a study where White tries to prevent promotion by hiding a stalemate in the position. Unfortunately the study turned out to be incorrect, for a surprising reason.

Bron, 'Sovietskaya Rossiya' 1957



White to play and draw (incorrect)

The intended solution was:

1.Nb5

White has to try and prevent the promotion of the d-pawn.

1...d2

Otherwise the knight goes to c3.

2.Kc8

Suddenly White threatens mate in two. There is only one parade:

2...Rf5 3.Nc7+ Ka7 4.Bb4

Forcing the d-pawn to promote.

4...d1Q 5.Bc5+!

The point of the previous move.

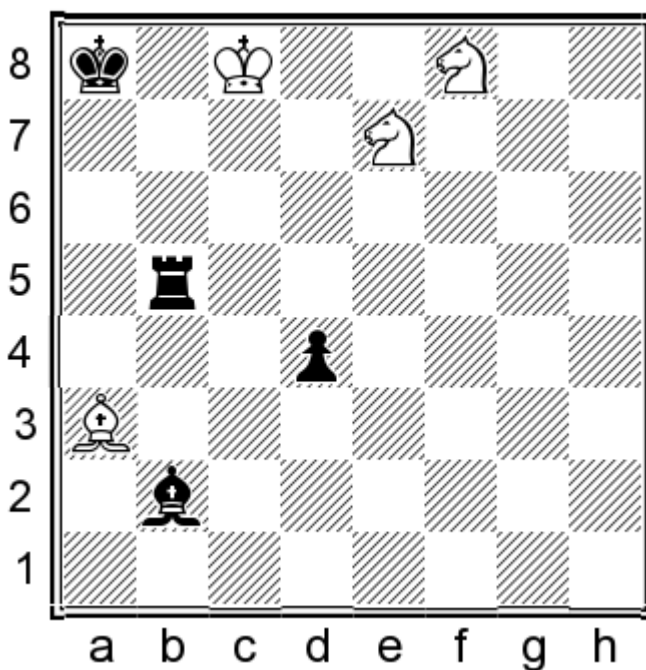
5...Rxc5

Stalemate.

A charming miniature study, wouldn't you say? The main line is short and sweet. However, the problem is that Black can win with 4...d1B!. The tablebases indicate that this is mate in 79 moves. For a long time it was thought that the ending of R+B versus B+N with opposite-coloured bishops was a theoretical draw. To be frank, I have always had my doubts about this theoretical verdict. Even with limited material, the presence of opposite-coloured bishops provides attacking chances. This is not the only study that was proven incorrect by the findings of the tablebases. The same fate befell studies by, among others, Fritz and Rinck.

In itself, the bishop promotion is an attractive starting-point for a new study. For example, you could reverse the colours and turn it into a win study. But more can be made of this theme.

Timman, 'Schaaksite' 2011



White to play and draw (after Bron)

Here, too, it is hard to stop the black d-pawn. For instance, 1.Bxb2? would fail to 1...d3!.

1.Bd6

With this bishop move White seems to solve his problems. On **1...d3** he has planned **2.Ne6**, when 2...Ka7 gives nothing because of **3.Bf4!**.

The struggle becomes sharper after **2...d2 3.Nc7+ Ka7 4.Nxb5+**. Now Black has two king moves:

A) **4...Kb6 5.Nc3 Bxc3 6.Nd5+**, followed by **7. Nc3**, with a draw;

B) **4...Ka6** Now White cannot stop the pawn, but he has a hidden perpetual check mechanism: **5.Bb4! d1Q 6.Nc7+ Kb6 7.Ned5+ Kc6 8.Ne7+** and the black king cannot walk out of the checks.

1...Ba3!

This bishop sacrifice enables Black to disturb the coordination in the white camp. White has to take the bishop, as **2.Ne6 Bxd6** would result in another theoretically winning ending for Black: rook + bishop versus two knights.

2.Bxa3 d3

How can White stop the pawn? **3.Ne6** is met by first **3...Rb8+**, after which the d-pawn marches on.

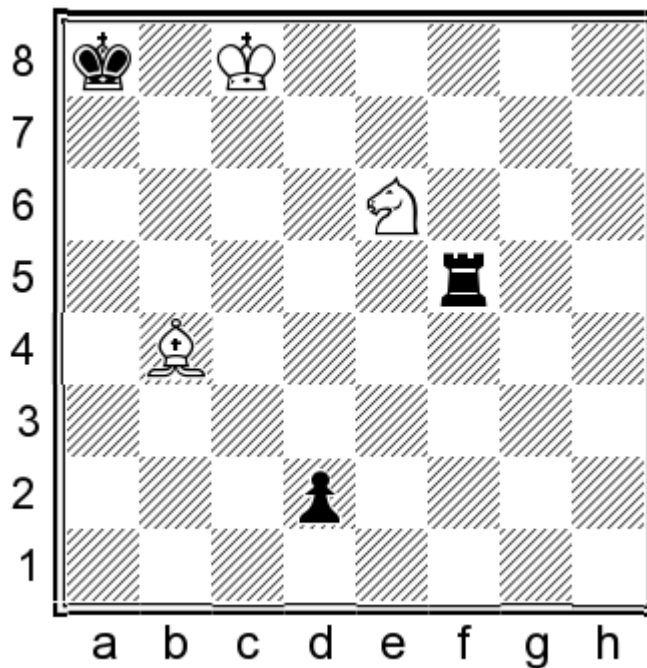
3.Nf5!

White sacrifices one of his knights in order to deflect the rook to a less favourable square.

3...Rf5 4.Ne6

Bringing the other knight into position.

4...d2 5.Bb4!



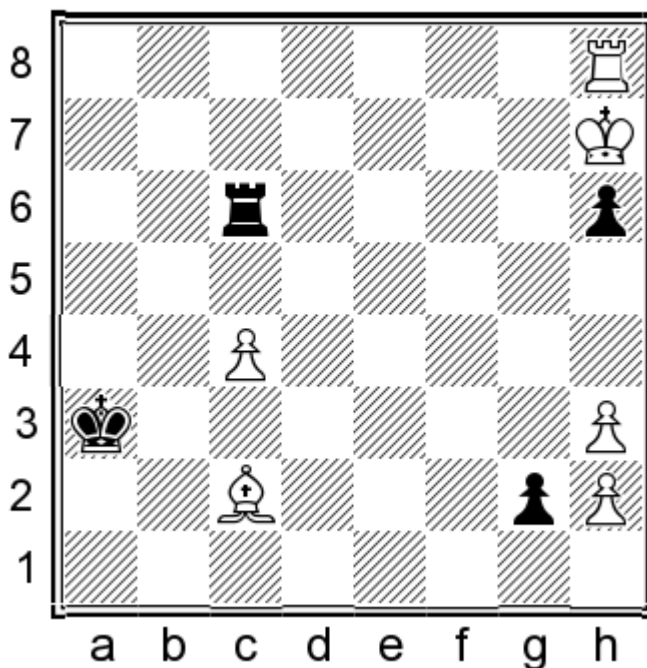
Bron's move, which does work in these circumstances. There are now two variations:

A) 5...d1Q 6.Nc7+ Ka7 7.Bc5+ Rxc5 stalemate, as in Bron's study;

B) 5...d1B This is the point. 6.Bc5! Draw, since the mate threat on c7 can only be averted with an exchange sacrifice. The black rook is unfortunately placed. It is important that White postpones the knight check on c7. From e6 the knight protects the bishop on c5.

Sometimes it looks easy to prevent promotion. But then the position turns out to contain an unexpected problem.

Grinblat, 'Israel Ring Tourney' 1988



White to play and win

If White plays 1.Rg8 immediately, there follows 1...Rc7+ and surprisingly enough, the white king cannot escape the checks. If it goes to h8, Black plays his rook to the 8th rank as well, pinning the white rook.

Therefore White must give check first.

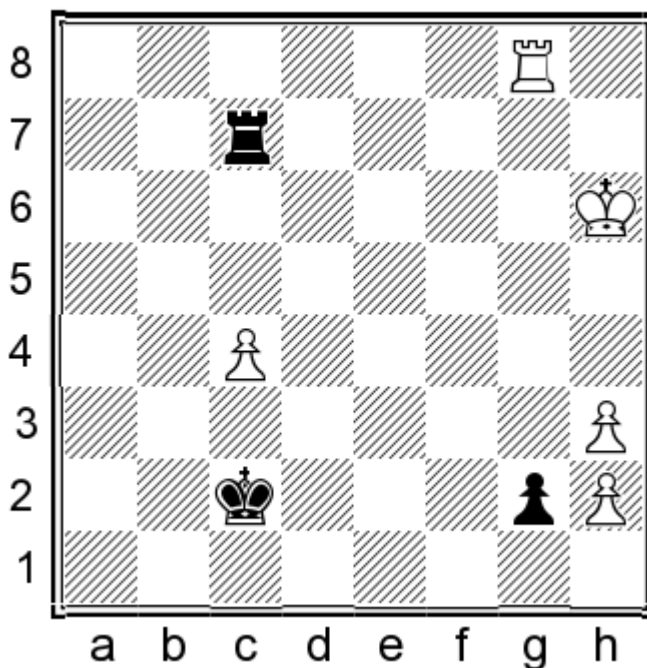
1.Ra8+ Kb2 2.Rb8+ Kxc2

Black must take the bishop, otherwise White will put his rook on the first rank.

3.Rg8

Now he can play this.

3...Rc7+ 4.Kxh6!



The white king first walks to h4, in order to force Black to take his c-pawn.

4...Rc6+ 5.Kh5 Rc5+ 6.Kh4 Rxc4+ 7.Kh5

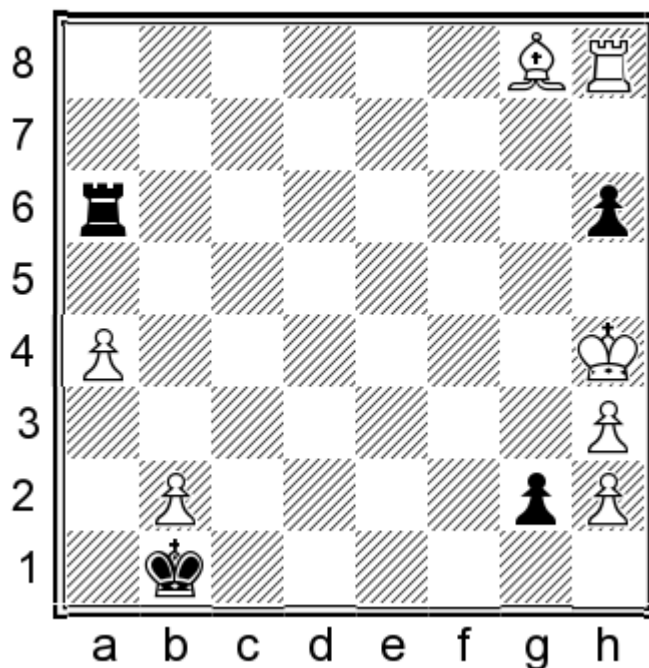
And now, up again.

7...Rc5+ 8.Kh6 Rc6+ 9.Kh7 Rc7+ 10.Kh8

And wins. Now the black rook cannot move to the 8th rank, since it will be taken with check.

The study is based on a pretty idea, but its execution leaves a little to be desired. The white sacrifices are passive; neither the bishop nor the c-pawn contributes anything. My search for a livelier version produced the following result.

Timman 2011



White to play and win (after Grinblat)

The starting position already contains a tempting try. 1.Bh7+ is insufficient, in view of 1...Ka1 2.Rg8 Rxa4+ and Black has perpetual check. The white bishop is in the way.

1.Ba2+!

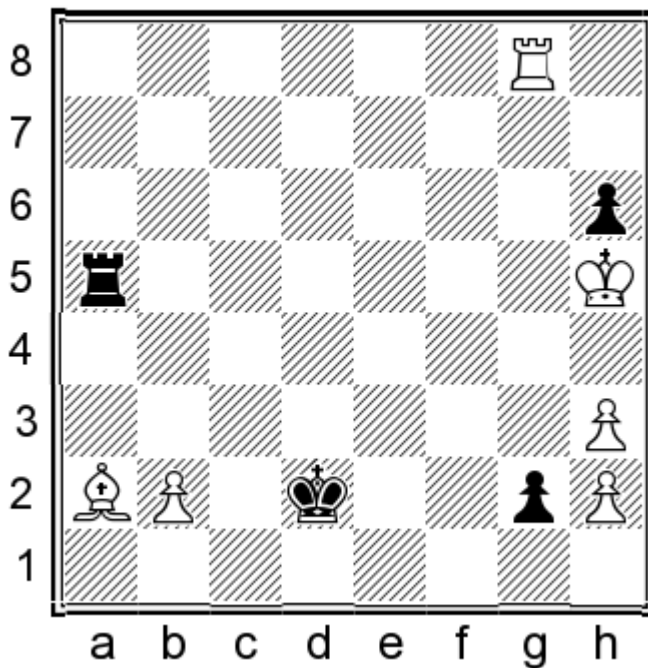
This bishop check forces the black king to leave the b-file.

1...Ka1

The side variations contain echoes of Grinblat's idea:

A) 1...Kxb2 2.Rb8+! Kxa2 3.Rg8 Rxa4+ 4.Kh5 Ra5+ 5.Kxh6 Ra6+ 6.Kh7 Ra7+ 7.Kh8 and wins, entirely according to Grinblat's scheme;

B) 1...Kc1 2.Rc8+! Kd2 3.Rg8 Rxa4+ 4.Kh5 Ra5+



5.Bd5!. This bishop sacrifice forces the rook to move to the d-file.
5...Rxd5+ 6.Kxh6 Rd6+ 7.Kh7 Rd7+ 8.Kh8, and wins.

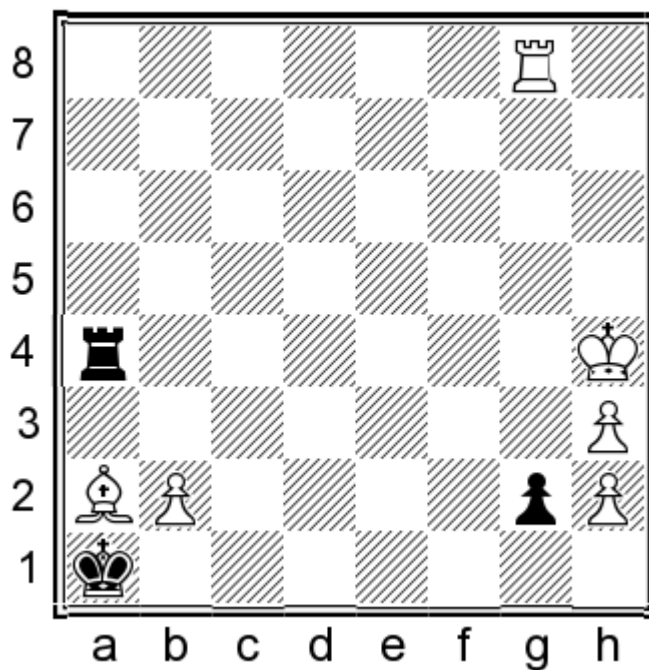
2.Rg8 Rxa4+ 3.Kh5

First the king collects the black h-pawn. 3.b4 Rxa2 would spoil the win.

3...Ra5+ 4.Kxh6 Ra6+ 5.Kh5

The king goes back again.

5...Ra5+ 6.Kh4 Ra4+



7.b4!

Forcing the rook to go to the b-file.

**7...Rxb4+ 8.Kh5 Rb5+ 9.Kh6 Rb6+ 10.Kh7 Rb7+ 11.Kh8 Rb8
12.Rb8 g1Q 13.Rb1+**

The final point.

13...Qxb1 14.Bxb1

And wins.

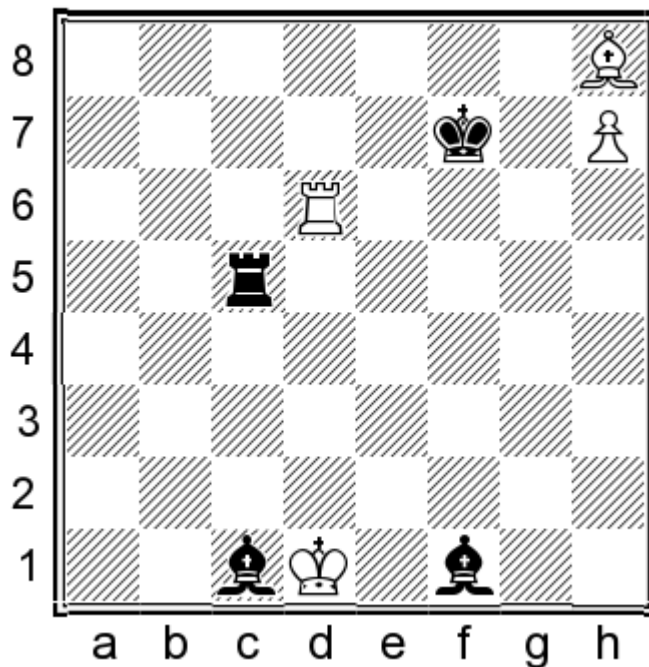
Chapter 4

Various promotion combinations

The Ortueta-Sanz combination is the most famous promotion combination. However, promotions can be forced in all kinds of interesting ways.

Let me start with a study that is linked to one of the miniature studies in Chapter 1.

Timman 1987



White to play and win

It looks logical to start with 1.Be5. Then, on 1...Rc8, 2.Rc6! is the winning move. But Black has a better option. After 1...Bg5! 2.Bb2 Rc8 White cannot win.

1.Rf6+ Ke8

After 1...Ke7 2.Rxf1 White would win immediately thanks to the threat of 3.Bf6+. Now the capture on f1 would yield White nothing, because Black would put his rook on h5.

2.Rf8+!!

Also insufficient was 2.Bg7 in view of 2...Rh5 3.Bh6 Rxf6 4.Rxf6 Bb2 and Black holds. The rook sacrifice opens the path to e5 for the bishop.

2...Kxf8

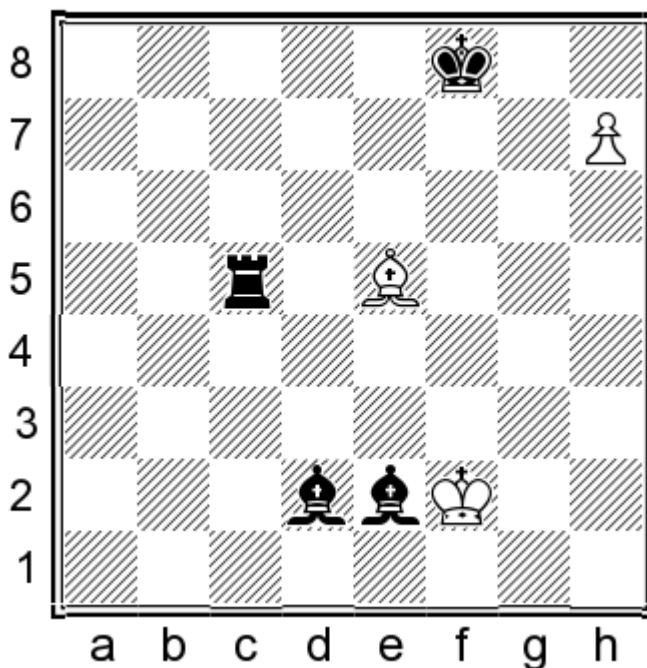
Now the starting position is again on the board, without the white rook. A further difference is that the black king is on the back rank. This is of cardinal importance for White, as now he can threaten to promote with check.

3.Be5

The black rook is cut off. Now Black only has bishop checks left.

3...Be2+ 4.Ke1! Bd2+ 5.Kf2!

White leaves the second bishop untouched as well. He must keep preventing effective rook checks by Black.



5...Be3+ 6.Kg2!

This is the only square for the king. After 6.Kg3 Bf4+! 7.Kxf4 Rc4+ 8.Kg5 Rg4+ Black would succeed in giving his rook for the h-pawn.

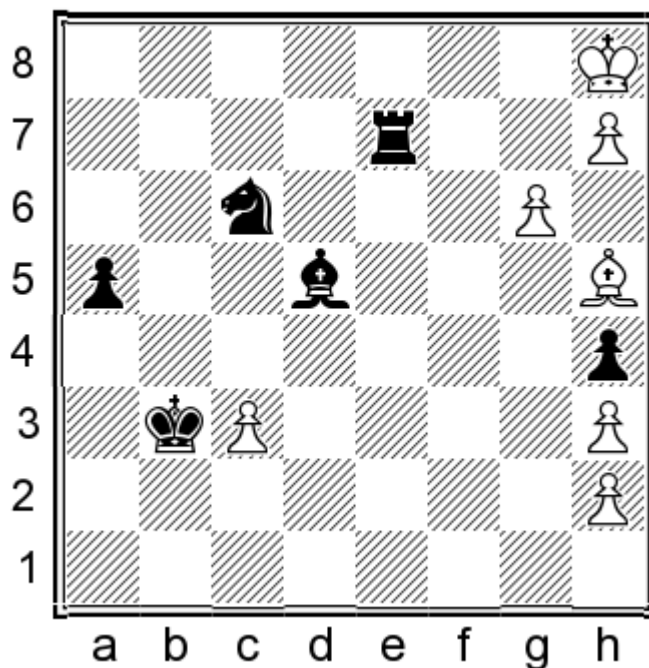
6...Bf1+ 7.Kg3!

White consistently refuses to take bishops. Now 7...Bf4+ is not effective in view of 8.Kxf4 Rc4+ 9.Kg5 or 9.Kg3 and Black has no good rook checks left. This means that Black has run out of resources. After 7...Bf2+ White cannot take this bishop either, but both 8.Kf3 and 8.Kh2 suffice for the win.

Incidentally, g3 was the only square for the king. After 7.Kh1? Bg2+! Black would draw in a way we know from the miniature study in Chapter 1.

The following study is a great sacrificial slugfest.

Timman 2005



White to play and win

White is a lot of material behind, but his mighty passed pawns compensate for that.

1.g7

Threatening to promote.

1...Re8+!

Black sacrifices a full rook with the sole purpose of vacating the e7-square for his knight.

2.Bxe8 Ne7

Now the promotion of the g-pawn is much less effective. White has to tread very carefully to achieve the promotion of the h-pawn.

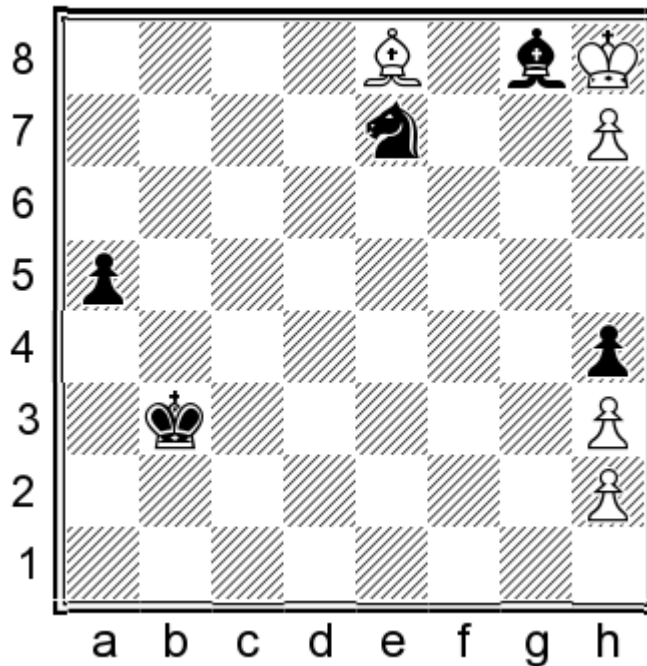
3.c4!

The aim of this pawn sacrifice is to open the long diagonal. The purpose of this will become clear eight moves later.

3...Bxc4 4.g8Q

This pawn promotion actually boils down to a pawn sacrifice that serves to vacate the square g7 for the king.

4...Bxg8



5.Bf7+!!

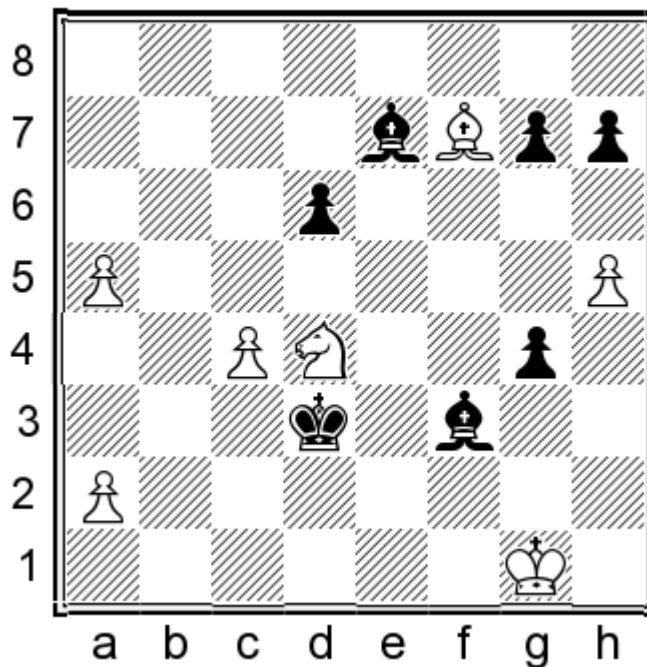
After two pawn sacrifices, White also offers his bishop into the bargain. The idea is to draw the g8-bishop out to a less favourable square.

Capturing on g8 is insufficient. White has an extra bishop, but with the wrong rook pawn he cannot win.

5...Bxf7 6.Kg7 Ng6 7.Kxf7 Nh8+ 8.Kg7 a4 9.Kxh8 a3 10.Kg8 a2 11.h8Q

Now the purpose of White's 3rd move becomes clear. Black cannot promote.

This study won 6th prize in the John Nunn 50 Jubilee Tourney.



White to play and win

It is clear that the passed a-pawn is White's chief trump card. However, before he can march with this pawn, White first has to take a few precautionary measures.

1.h6!

The point of this pawn sacrifice will become clear after a few moves.

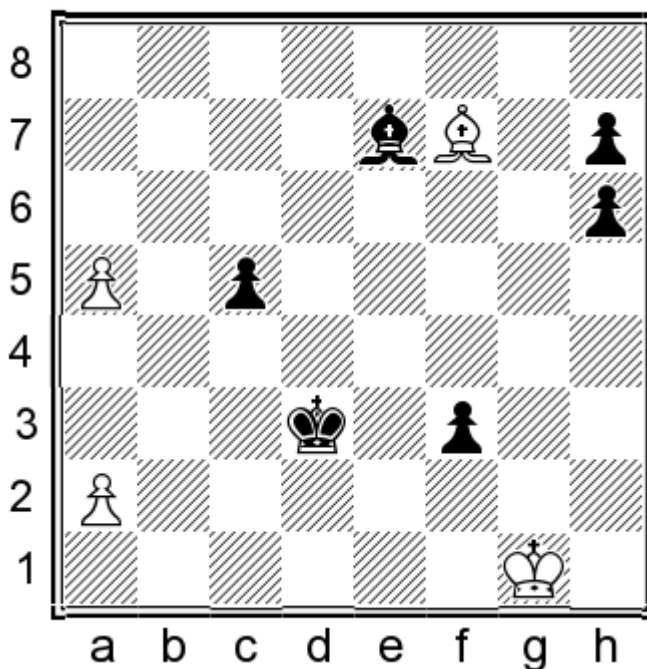
1...gxh6

The alternatives lose:

A) 1...g5 2.Bd5! Bf6 3.Nc6 and the a-pawn decides. By playing the g-pawn to g5, Black has deprived his bishop of the square g5, and as a result the bishop is dominated;

B) 1...g6 2.Nxf3 gxf3 3.Kf1 Bd8 4.a6 Bb6 5.Bg8 and White obtains a decisive passed h-pawn.

2.Nxf3 gxf3 3.c5! dxc5



4.Bc4+!!

A magnificent bishop sacrifice, with which White keeps the a7-g1 diagonal closed. As a result, the white a-pawn can march on freely.

4...Kxc4 5.a6 Kd3 6.Kf1!

Otherwise the black c-pawn becomes too dangerous.

6...c4 7.a7 c3 8.a8Q c2

The black c-pawn is still dangerous, and White has to keep playing accurately.

9.Qxf3+

First the f-pawn is eliminated with check.

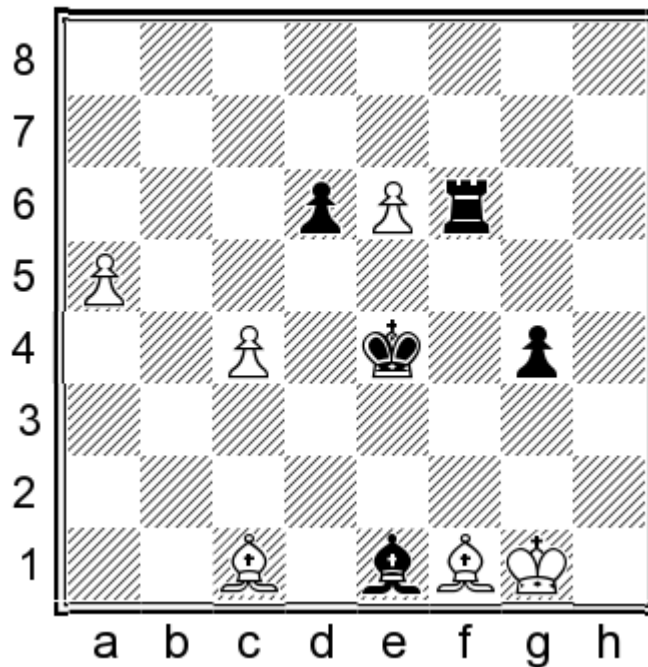
9...Kd4 10.Qf2+!

Forcing the king back to the third rank.

10...Kd3 11.Qe2+ Kc3 12.Qe3+ Kb2 13.Qb3+ and White wins.

Eleven years later I composed a much better version with this idea.

Timman 2019



White to play and win

Pushing the passed pawns yields nothing, so White is going to support his e-pawn.

1.Bg2+ Kd3 2.Bd5

Now White threatens to promote his e-pawn. Black has to come up with special defensive measures to stop this.

2...Bf2+ 3.Kg2 Bh4 4.Bg5!

A very powerful move. If 4.e7 Black has 4...Rf2+ 5.Kg1 Re2, winning the e-pawn.

4...Bxg5 5.e7 Rf2+!

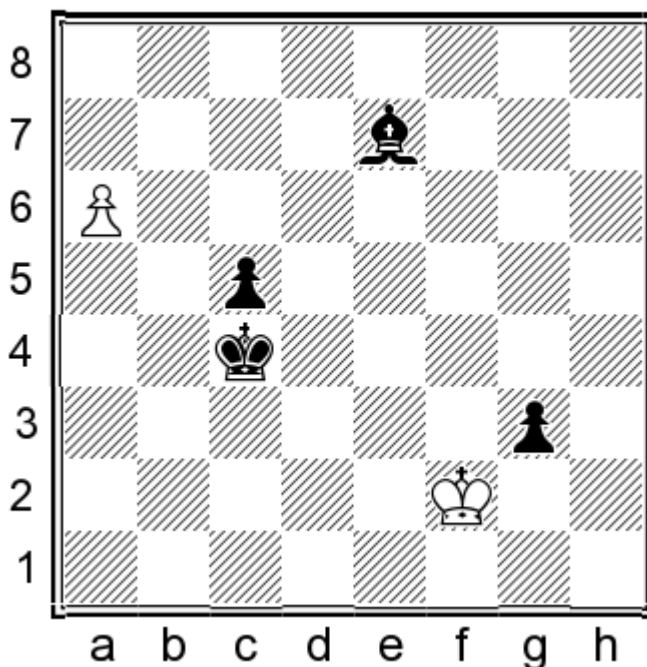
Black has to sacrifice his rook to win the white e-pawn.

6.Kxf2 Bxe7 7.c5!

The well known stroke. After 7.a6 Bf6 Black stops the a-pawn.

7...dxc5 8.Bc4+! Kxc4 9.a6 g3+

A critical moment.



10.Kg1!

Who wouldn't play 10.Kg2 ? Surprisingly Black holds in that case. The crucial line is 10...Kb3 11.a7 c4 12.a8Q c3 13.Qd5+ Kb2 14.Qb7+ Ka2 15.Qxe7 c2 and Black is going to play for stalemate, e.g. 16.Qe1 Kb2 17.Qb4+ Ka2 18.Qc3 Kb1 19.Qb3+ Ka1 and White can't make progress.

10...Kb3 11.a7 c4 12.a8Q c3

The alternative 12...Bc5+ loses after 13.Kf1! g2+ and now 14.Qxg2! The white king is close enough to handle the c-pawn.

13.Qd5+!

An important check. Not 13.Qb7+? because of 13...Bb4.

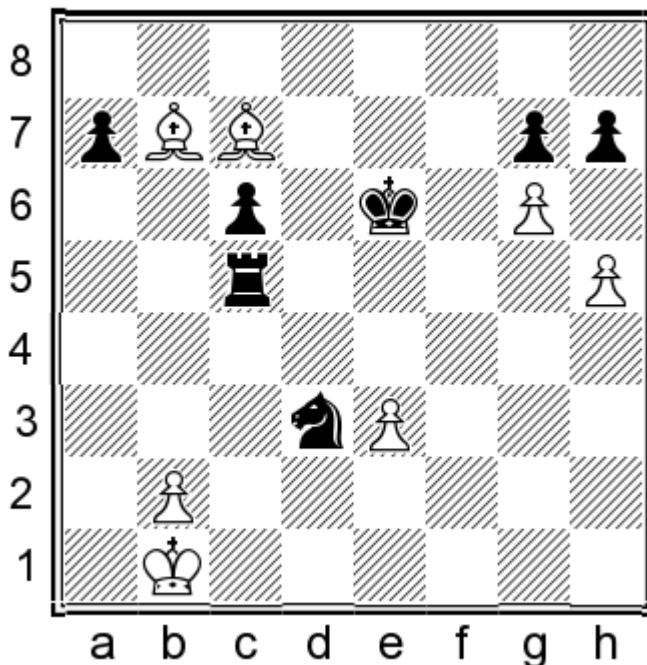
13...Kb2 14.Qb7+ Ka2 15.Qxe7

and wins, e.g.

**15...c2 16.Qe1 Kb2 17.Qb4+ Ka2 18.Qc3 Kb1 19.Qb3+ Kc1
20.Kg2 Kd2 21.Qb2 Kd1 22.Kf3 c1Q 23.Qe2#**

In the following study White must first sacrifice a bishop and then create a 'nerve square' in order to force promotion.

Timman 2009



White to play and win

White is an exchange down, so speedy action is required. However, 1.h6 achieves nothing as Black has the simple 1...hxg6 2.hxg7 Kf7. So first of all, the black king must be diverted.

1.Bc8+ Ke7

On 1...Kf6, 2.Bd8+ is immediately decisive.

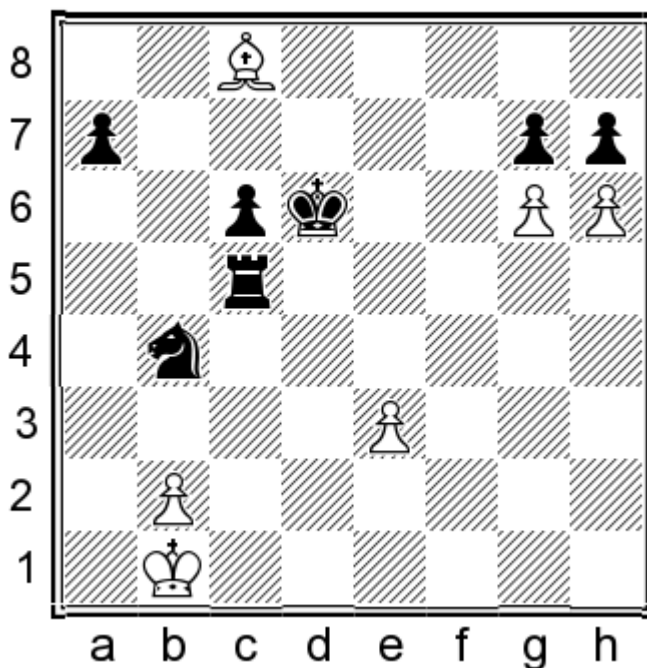
2.Bd6+!

This bishop sacrifice deflects the black king from the kingside.

2...Kxd6 3.h6!

The time is ripe to set up the 'nerve square'. Black can take neither of the two pawns. But he has a hidden resource up his sleeve.

3...Nb4!



A subtle knight move. Black weaves a mate threat into the position. Consequently, White cannot resolve the 'nerve square': 4.gxh7 would fail to 4...Rh5 and 4.hxg7 to 4...Rg5. In both cases Black would emerge as the winner.

4.b3!!

An astonishing quiet move. White postpones the choice of pawn capture. Meanwhile, Black's mate threat is prevented.

4...Rh5

The alternative was 4...Nd3 in order to play for a perpetual check. After 5.hxg7 Rc1+ 6.Ka2 Rc2+ 7.Ka3 Rc1 White decides the game by creating space for his king with 8.b4.

5.hxg7 Rh1+ 6.Kb2 Rh2+ 7.Kc1

The king can only run away along the first rank. Otherwise it would be caught in a mating net.

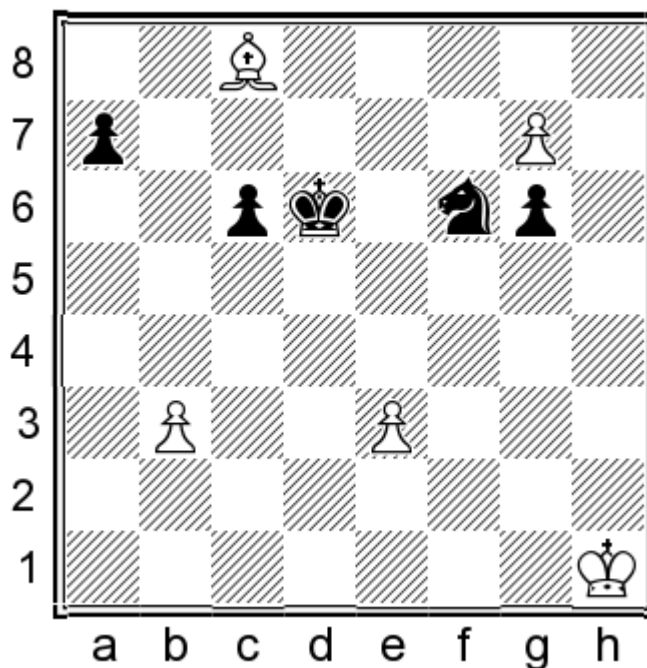
7...Na2+ 8.Kd1 Nc3+ 9.Ke1

It looks as if the white king escapes to the kingside without trouble. However, Black manages to stop the g-pawn by sacrificing his rook.

9...Rh1+ 10.Kf2 Ne4+ 11.Kg2 Nf6 12.Kxh1

The king has travelled a long way and ends up in the opposite corner.

12...hxcg6



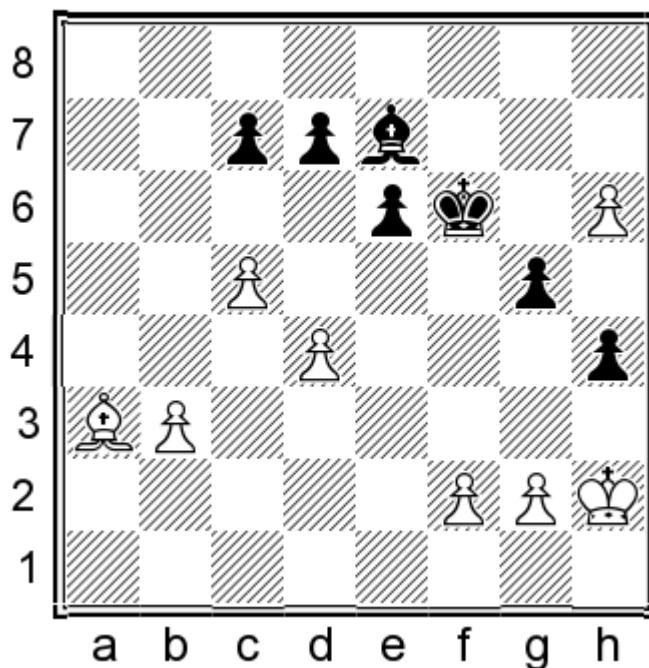
Threatening 13...Ke7, after which Black could look to the future with confidence. But White has a method at his disposal to cut off the black king:

13.Ba6! Ke7 14.Bc4

And wins.

In the following study, White also tries to take profit from two remote passed pawns.

Timman 2010



White to play and win

White has an extra pawn, but the far advanced h-pawn is threatened with extinction. Swift action is called for.

1.b4

Threatening 2.b5, after which White would have a winning majority on the queenside. Black's reply is therefore forced.

1...c6 2.f4!

The point of this pawn sacrifice is that the b8-h2 diagonal is obstructed.

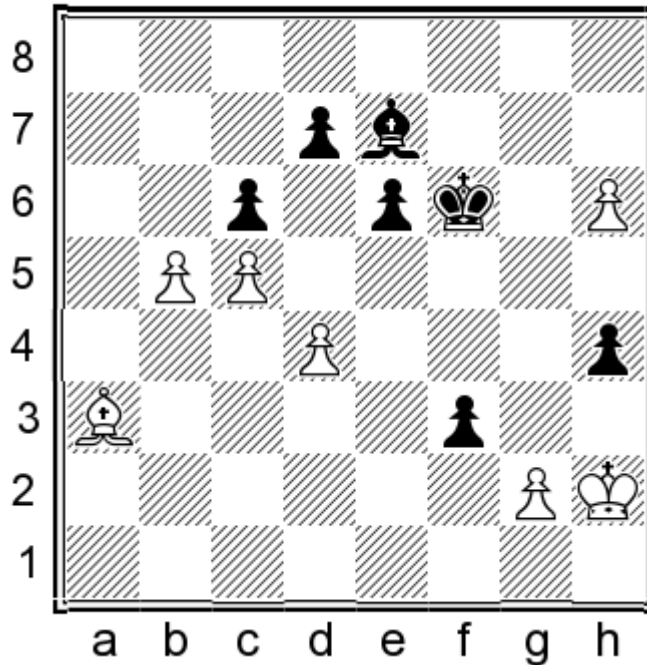
The intention behind this will become clear later on.

2...gxf4

The alternative was 2...Bd8 in order to pre-empt the coming breakthrough combination. White then wins with a thematic

variation: 3.fxg5+ Kxg5 4.h7 Bf6 5.b5! cxb5 6.c6! dxc6 7.Be7! and the h-pawn decides.

3.b5! f3!



4.Kg1!

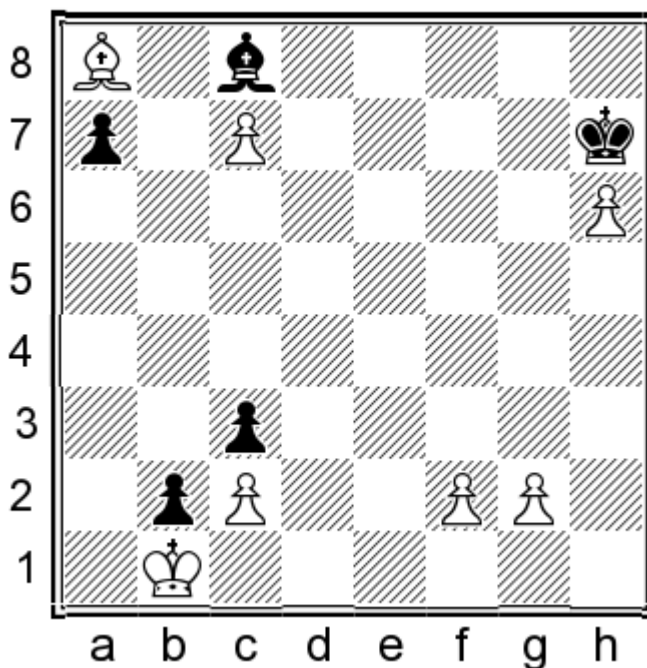
Not 4.gxf3 on account of 4...cxb5 5.c6 Bd8 and Black has a bishop check in reserve.

4...cxb5 5.c6! Bd8 6.Be7+!

And wins. Black must allow the promotion of either the c- or the h-pawn.

The Austrian judge Alois Wotawa is known for his original ideas in endgame studies. In the following study he has built in a hidden mechanism to achieve the pawn promotion.

Wotawa, 'Schach Magazin' 1949



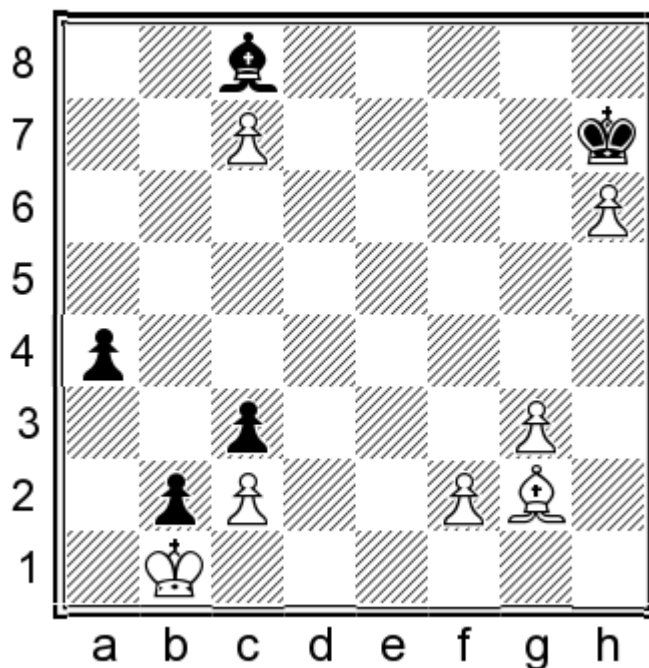
White to play and win

The intended solution is:

1.g3

A quite remarkable little move. White vacates the square g2 for the bishop. With this late fianchetto White prepares a combination with which the black bishop will be cut off from play.

1...a5 2.Bg2 a4



Black's counterplay is assuming threatening proportions. It's high time for White to lay his cards on the table.

3.f3!!

The point of the fianchetto. The white bishop lies in ambush in order to carry out the combination.

3...a3 4.Bh3!

Just in time.

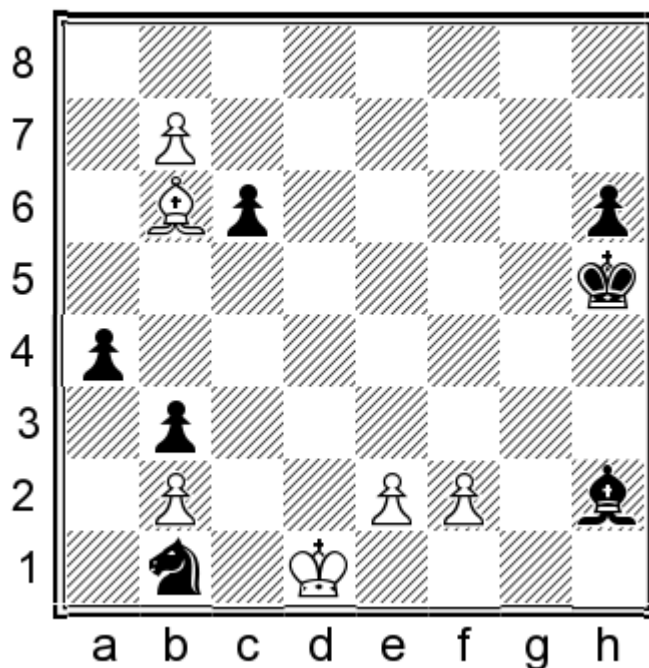
4...Bxh3 5.g4

And wins.

The problem is that White can also win with 1.f4 or 1.Be4+ Kxh6 2.f4. The white pawns are too strong. We could start the study one move later, but then it would be a rather dull affair.

Wotawa published another study on this theme in the same issue of Schach Magazin.

Wotawa, 'Schach Magazin' 1949



White to play and win

First of all, White will have to put things right on the queenside.

1.Kc1 a3 2.Kxb1 a2+ 3.Ka1

The white king is again boxed in on the queenside, the threat is 4.Ba7.

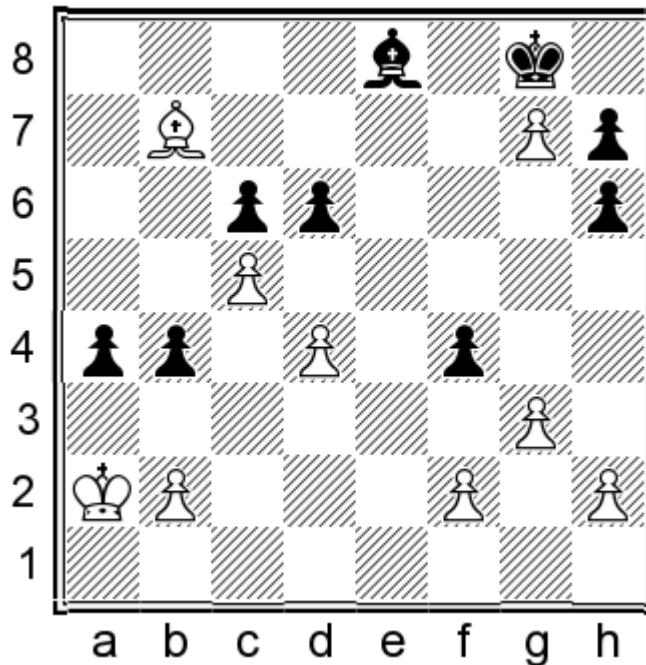
3...Bb8 4.f3

Not a fianchetto, but it still works.

4...Kg5 5.Bg1!! Kf5 6.e3! Ke6 7.Bh2 Bxh2 8.f4

And wins.

This version is correct, but it makes a rather crude impression. With his king White collects a knight that has no further function. It seemed to me that the theme with the white bishop lying in ambush deserved a better execution.



White to play and win

A quite natural starting position. Since 1.cxd6 Bd7 yields nothing, White has to make a breaking move:

1.d5! dxc5 2.dxc6 Bf7+

Heading for d5. Otherwise Black cannot stop the passed pawn.

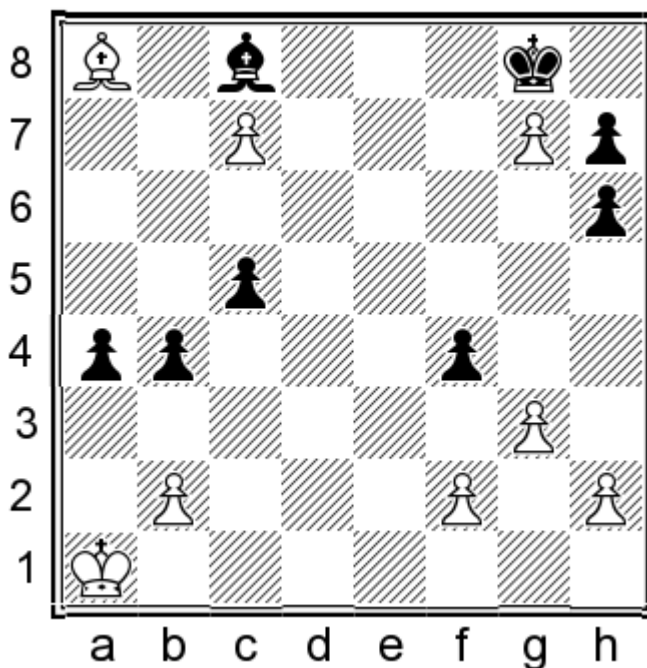
3.Ka1!

Only much later will it become clear why this is the right square for the king.

3...Bd5 4.Ba8

The only way to make progress. White threatens 5.c7 Be6 6.Bb7, winning the bishop.

4...Be6 5.c7 Bc8



Black has just managed to hold his ground. Now White sets an ambush with his bishop.

6.Bg2!!

Wotawa's fianchetto.

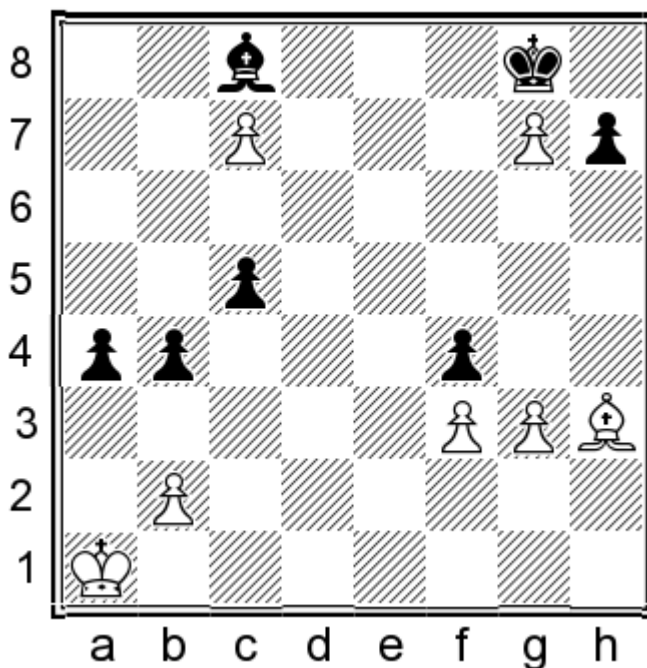
6...h5

The only way to try and stop White executing his plan. On 6...f3 7.Bxf3 Kxg7, 8.h3! would have been winning.

7.f3! h4 8.Bh3!!

The point of the previous. Black cannot take the bishop.

8...hxg3 9.hxg3



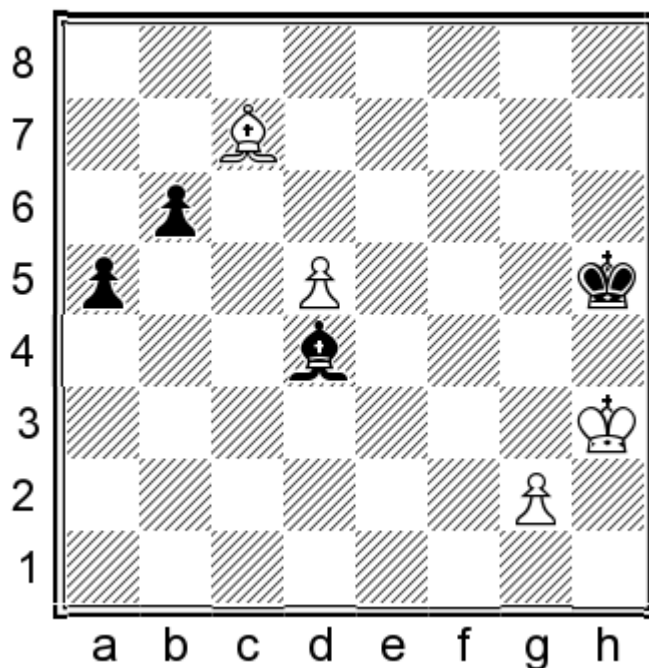
Now Black has a choice between two options:

A) 9...fxg3 10.Bxc8 g2 11.Bf5! g1Q+ 12.Bb1 Now the point of White's 2nd move becomes clear. The queen cannot stop the b-pawn.

B) 9...Bb7 If White now continues with 10.gxf4, he cannot win due to the fact that Black has a passed pawn on the kingside. Therefore White must play very accurately: 10.Be6+ Kxg7 11.g4! Kf6 12.c8Q Bxc8 13.Bxc8 Kg5 14.Bd7 and White wins by the smallest of margins.

Wotawa later elaborated on the theme in a slightly simpler study, with less material, as follows:

Wotawa, 'Schach Magazin' 1951



White to play and win

A perfectly natural starting position. The first move is obvious.

1.d6 Be5 2.Bb8

This principle, to move the bishop one square further away in order to achieve promotion, stems from the Czech composer Jindrich Fritz. Later in this chapter we will meet him again.

2...Bf6 3.d7 Bd8

Again Black has apparently managed to avoid the loss of his bishop. However, White has a nice trick up his sleeve.

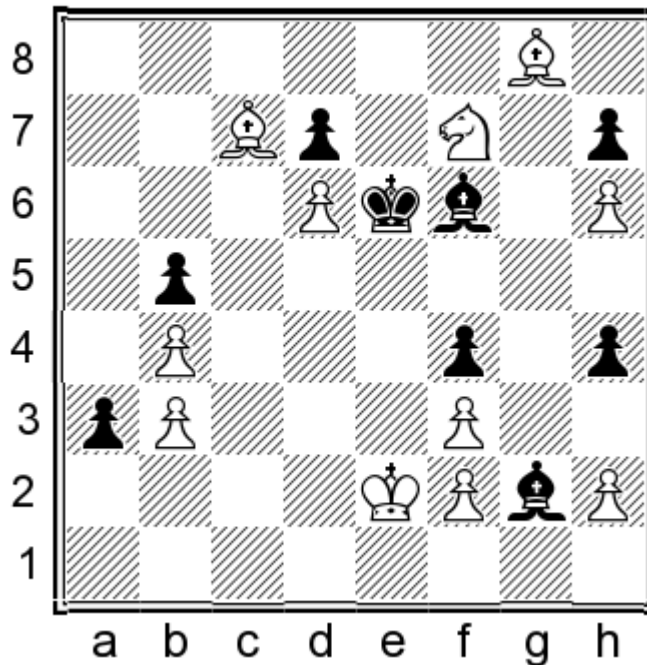
4.Bg3! a4 5.Bh4

Basically this is the same principle, but now both kings are involved in the combination. The black bishop is drawn to a critical square on the short d8-h4 diagonal.

5...Bxh4 6.g4+ and wins.

In the following study White achieves the promotion with two successive bishop sacrifices.

Timman 2009



White to play and win

There are only minor pieces on the board. Apart from the black king's bishop, they are all more or less scattered over the board. White is a piece up, but the black a-pawn can become very dangerous. Evidently, White must give a discovered check with his knight.

1.Nd8+ Ke5 2.Nc6+!

White sacrifices his knight in order to create a passed d-pawn.

2...dxc6

The alternative was 2...Kf5. After the follow-up 3.Bxh7+ Ke6 4.Bg8+ Kf5 White must pull out all the stops to stay on top. The only good move is 5.Bb6! in order to force Black to take on c6. There follows 5...dxc6 6.d7 a2 7.Bd4! Bxd4 8.d8Q Bf1+ 9.Kd2! Bc3+ 10.Kc2! a1Q 11.Qd7+ and Black gets mated.

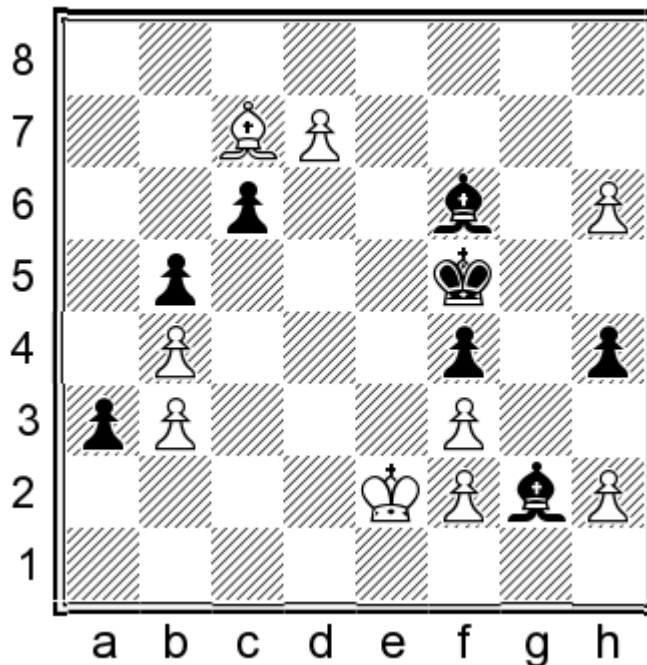
3.d7+ Kf5 4.Bxh7+ Ke6

And now for the bishop sacrifices.

5.Bf5+!!

Insufficient for the win was 5.Bb1, since after 5...Kxd7 6.Bxf4 Bh3 7.Bc1 a2! 8.Bxa2 Bf5 the white king's bishop would be cut off from play. The text move forces the black king to go to an unfavourable square.

5...Kxf5



6.Be5!!

Absolutely stunning.

6...Bf1+!

Bishop sacrifices from both sides. White cannot take, as then the black a-pawn promotes with check.

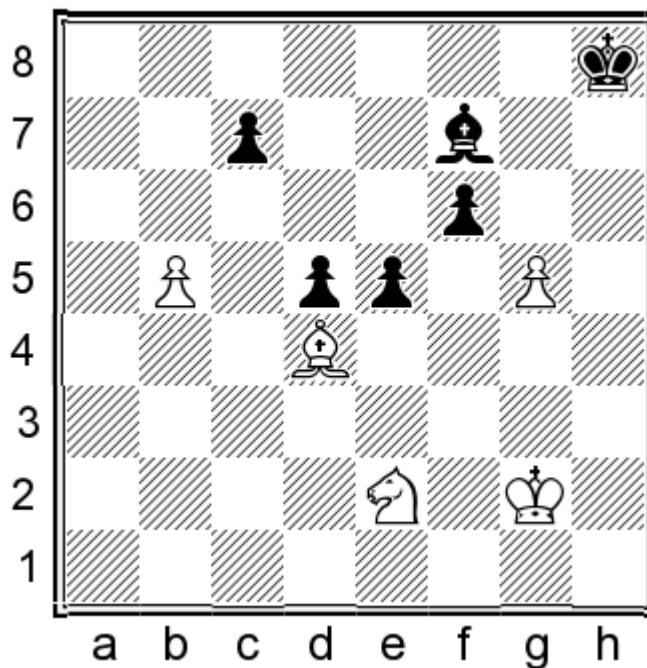
7.Kd2! Kxe5 8.h7 a2 9.d8Q a1Q

If Black took on d8, the white queen would prevail over the bishop pair after the promotion.

10.Qxf6+ Kxf6 11.h8Q+ and wins.

In the next study White strives for domination of the enemy bishop.

Timman 2010



White to play and win

White is a piece up, but he is running the risk that both his pawns will disappear from the board. So he has to try and prevent one pawn being traded off. But first of all he has to choose the right square for his bishop.

1.Bc5!

The introduction to a magnificent combination. Insufficient for the win was 1.Bc3 on account of 1...Kg7 2.Ba5 Be8 3.Nc3 d4 4.gxf6+ Kf7! and White cannot protect both his pawns from elimination.

1...Kg7

Now the threat is again 2...Be8, with an immediate draw.

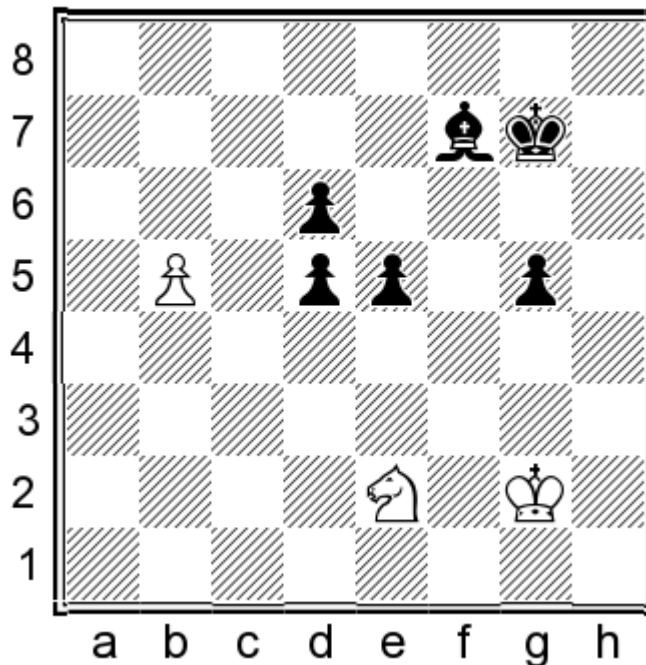
2.Be7!

An important move. White forces his opponent to capture on g5.

2...fxg5 3.Bd6!!

The brilliant point of the previous move. Now on 3...Be8 White plays 4.Bxe5+, followed by 5.Nd4, with an easy win. Therefore Black has no choice. He must take the bishop.

3...cxd6



4.Nd4!!

The second piece sacrifice. White prevents Black advancing his d-pawn and also deprives the bishop of the square e6. The b-pawn cannot be stopped any more, even though it is only on b5.

4...exd4 5.b6 d3

Now White has to watch his step. He has only one winning move, and all other moves lose.

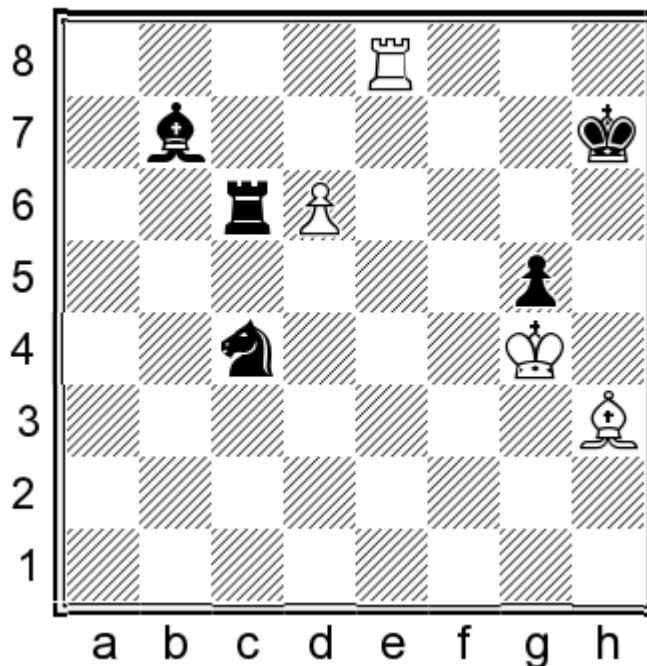
6.Kf1!

The right square for the king. After 6.Kf2 g4 7.b7 g3+ Black would win.

6...Bh5 7.Ke1

The black bishop is still dominated. The promotion of the b-pawn can no longer be prevented.

Timman 1990/2011



White to play and win

This is an old study that I corrected several decades later. It looks as if the promotion of the d-pawn can be achieved without trouble.

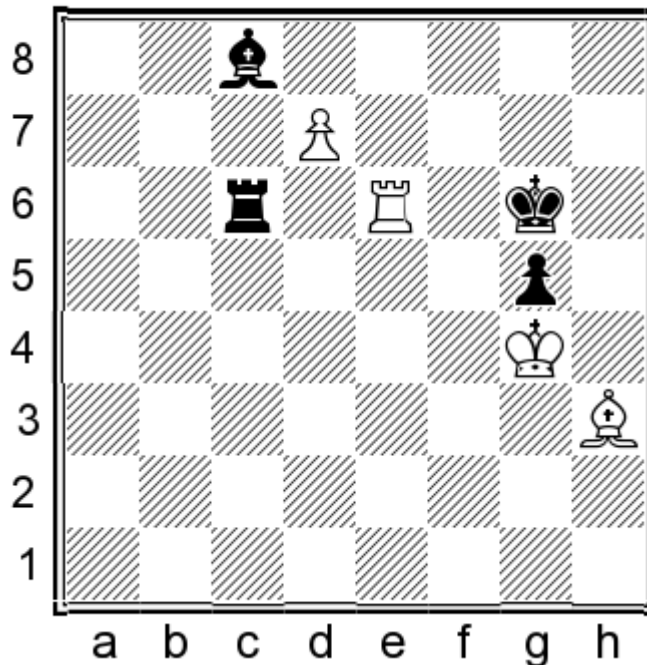
1.d7 Ne5+!

Insufficient was 1...Rd6, since the endgame that arises after 2.Kxg5 Kg7 3.d8Q Rxd8 4.Rxd8 is won according to the tablebases, e.g. 4...Ne5 5.Be6! Bc6 6.Rg8+ Kh7 7.Kf6, and the king penetrates with devastating effect.

2.Rxe5 Bc8

The point of the previous move. Because the white rook has been deflected from the 8th rank, Black can pin the pawn that is about to promote. However, White has an unpinning mechanism at his disposal.

3.Re7+ Kg6 4.Re6+!!



A lot of traffic on the c8-h3 diagonal! Black cannot take the rook.

4...Kf7 5.d8Q

The point of the previous move. The rook check served to unpin the white passed pawn.

5...Bxe6+ 6.Kh5!

The only correct king move. White has to leave the g-pawn in peace for the time being, since after 6.Kxg5 Rc5+ 7.Kh6 Bxh3 8.Qd6 Rc8! Black would build an impregnable fortress.

6...Bxh3

From this moment on everything goes according to the tablebases, though of course I did not know that when I composed the study.

7.Qd5+

Driving the rook to a less favourable square.

7...Re6 8.Qf3+ Kg7

The only square for the king. White cannot capture the bishop, because then there is a rook check on h6.

9.Qc3+ Kh7

Black keeps preventing the capture of the bishop. But now White can drive his king to the back rank.

10.Qc7+

From here on several ‘waste-of-time duals’ will crop up. This is a term that signifies that other moves are also sufficient, but they only delay the winning process, e.g. by move repetition. At this point there were the duals 10.Qd3+ and 10.Qc2+. I will not mention them in the following.

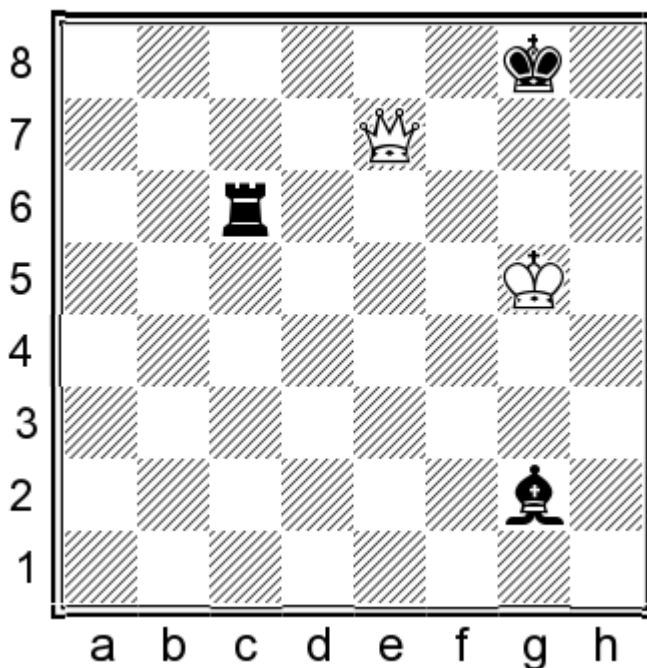
10...Kg8 11.Kxg5

Finally White has found time to take the g-pawn. Black now has to move his bishop to the long diagonal in order to avoid immediate defeat.

11...Bg2 12.Qd7

Methodically, White tries to gain territory.

12...Rc6 13.Qe7



So far I had found all the moves by myself in 1990. It seemed to me that White should be winning, although I couldn't see clearly how to go about it.

What I didn't realize was that here a situation of mutual zugzwang has arisen. Both sides' pieces are on their best squares.

13...Bh1

The most tenacious defence.

14.Kf5

Now that Black has no check on h3, this is strong. The black rook now has to move to a less favourable square.

14...Rh6 15.Qd8+

Here there is a real dual. 15.Qe3 also leads to mate in 41.

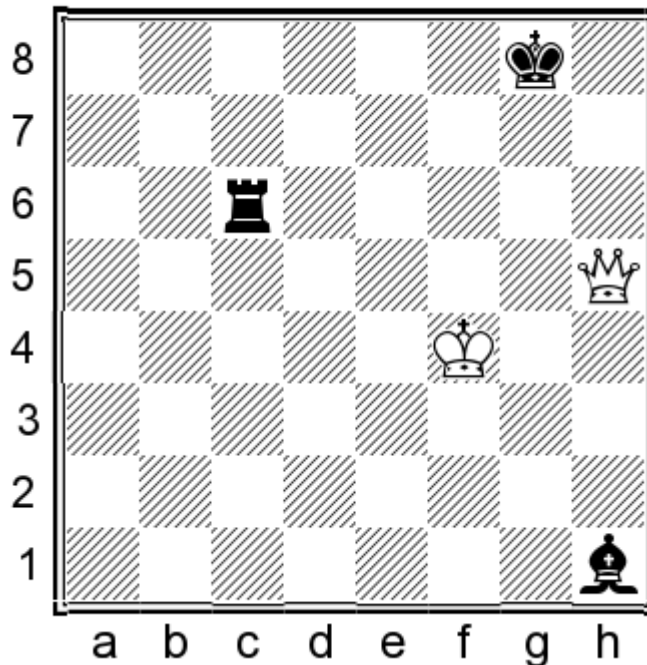
15...Kh7 16.Qg5

Forcing Black to play his bishop.

16...Bf3 17.Qe7+ Kg8 18.Kg5 Rc6 19.Kf4 Bh1

This is almost the same position as a few moves earlier, only now the white king is on f4 instead of f5.

20.Qe8+ Kg7 21.Qe5+ Kg8 22.Qh5!



This attack on the bishop is lethal.

22...Rc1

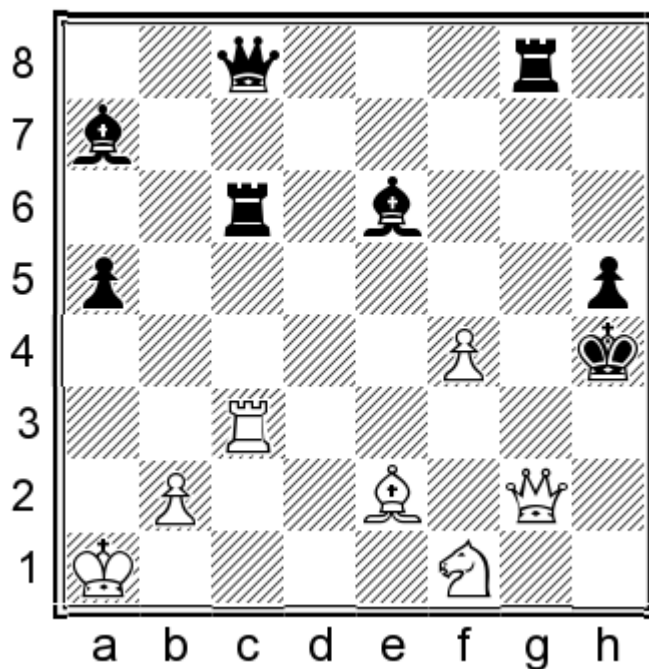
A last desperate line of defence.

23.Ke3 Rf1 24.Qg6+ Kf8 25.Ke2

And White wins the bishop.

The Novotny theme signifies that a piece is placed on the intersection between a diagonal of the opponent's bishop and a file (or rank) on which his rook operates. This theme occurs in problems and studies as well as practical games.

In the Czech problem composer Anton Novotny's original problem, the interference was performed by a bishop, in his second problem it was performed by a knight. Both problems were published in the *Leipziger Illustrierte Zeitung* in 1854. One year later he came up with the following problem, where the theme was repeated.



Mate in 3 moves

This looks a little like a position from a game. First White will have to set things right on the queenside, since the interference move 1.Bg4 fails to 1...Rxc3.

1.Rc5!

Threatening mate in 1.

1...Bxc5

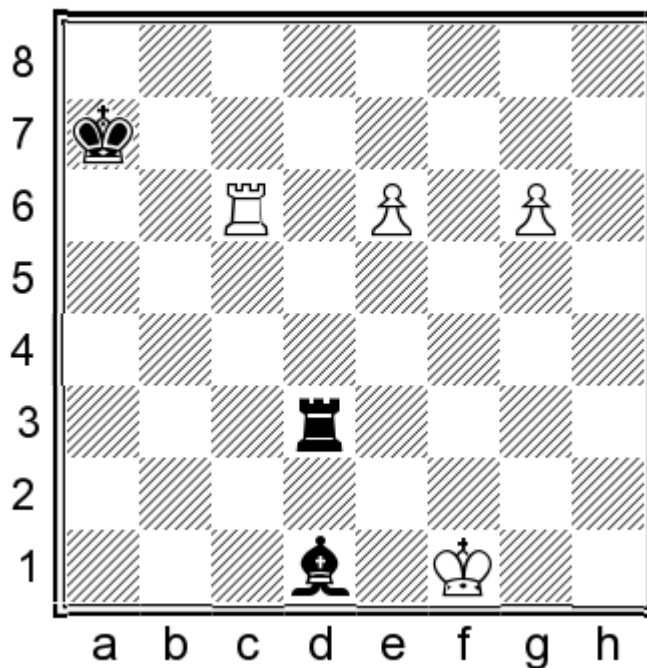
Black is forced to close the c-file for the rook, as 1...Rxc5 was not possible in view of 2.Qf2+ and mate.

2.Bg4!

After the interference on the queenside, White moves the battle scene to the kingside. This interference move with the bishop is the only move that wins. Black is mated on g3 or h2.

In studies, the Novotny mostly serves to enforce a pawn promotion. As an example I give a very good study made by the Hungaro-American grandmaster and study composer Pal Benkö.

Benkö, 'Magyar Sakkélet' 1977



White to play and win

In this miniature, as so often, a pawn promotion is the main point of the Novotny theme. White has to choose whether he wants to promote the e- or the g-pawn. In the first case the intersection of the Novotny is on e6, in the second it is on g6.

1.e7

Insufficient is 1.g7 on account of 1...Rg3 2.e7 Bh5 3.Rg6 Rxc6 (not 3...Bxc6, as then White has the winning intermediate move 4.Kf2) 4.e8Q Rf6+ 5.Ke1 Bxe8 6.g8Q Bd7! and Black has built a fortress.

1...Re3 2.g7 Bb3

Everything appears to be ready for the Novotny, but closer inspection shows that White has to be patient.

3.Rc7+!

After 3.Re6 Rxe6 4.g8Q Bc4+ White cannot win. Therefore he introduces an intermezzo. With the rook check he protects the e-pawn, which gives him time for a zwischenzug with the king.

3...Ka6

The only square for the king. After 3...Kb6 4.Rc3 White would win immediately.

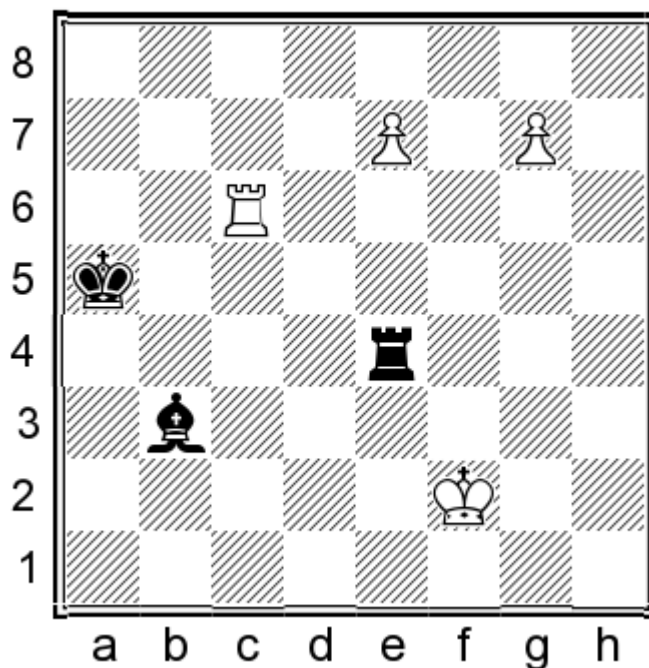
4.Kf2

On this square the king is better placed, as there will be no bishop checks later on.

4...Re4 5.Rc6+

It's time for the Novotny theme.

5...Ka5



6.Re6!!

With his king on a safe square, White's interference is now lethal.

6...Rxe6 7.g8Q Rf6+ 8.Kg1!

Another safe square for the king.

8...Bxg8 9.e8Q

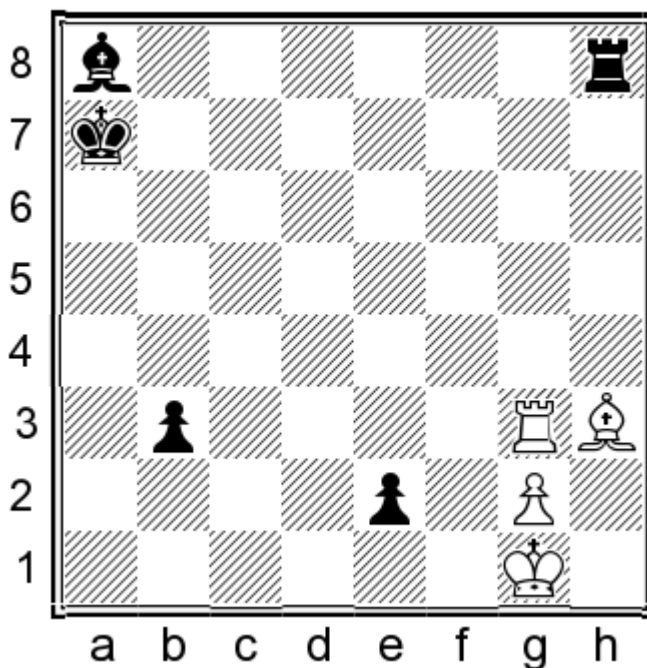
And wins. Black loses a piece.

Benkö received first prize for this study in the competition organized by the Hungarian magazine.

The only thing missing in this study is the thematic sacrifice with which one of the enemy pieces is drawn beyond the intersection point.

So far we have seen a knight and a rook occupy the intersection point. A bishop can also do it.

Timman 2011



White to play and win

White is a pawn behind. He must try and eliminate the far-advanced e-pawn.

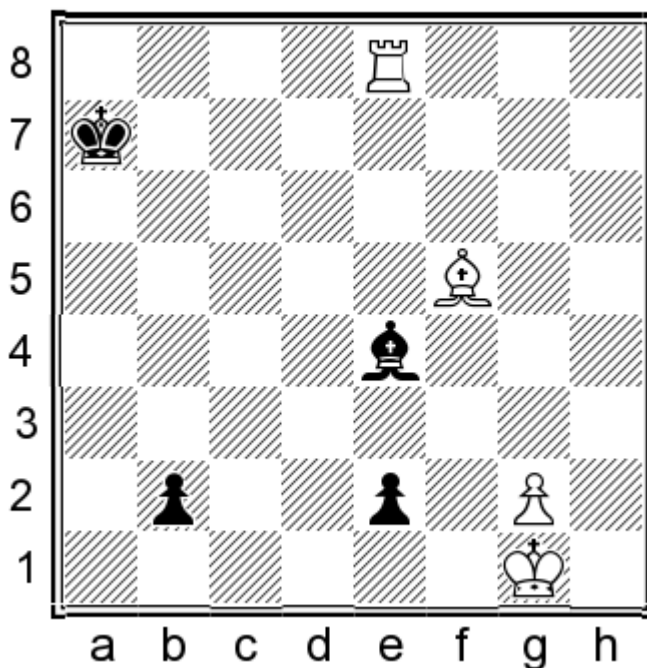
1.Re3

Insufficient was 1.Kf2 in view of 1...Re8 2.Ke1 Bd5, and Black keeps both pawns.

1...Re8!

The thematic sacrifice, drawing the white rook beyond the intersection point. A dangerous alternative was 1...Bf3. Then White has to play very accurately to hold his ground. He has to avoid the rook ending, and 2.Kf2 Bh5! 3.Ke1 Rb8 is also prospectless. The only road to the draw runs as follows: 2.Bf5! Rf8 3.Bd3 Be4! 4.Bxe2 Bc2 5.Bc4 b2 6.Ba2 and White holds by a thread.

2.Rxe8 b2 3.Bf5 Be4!



Here is the Novotny. But now White has an incredible saving clause:

4.Ra8+!!

This anti-Novotny sacrifice enables White to stop both passed pawns.

4...Bxa8 5.Kf2 Bxg2 6.Kxe2

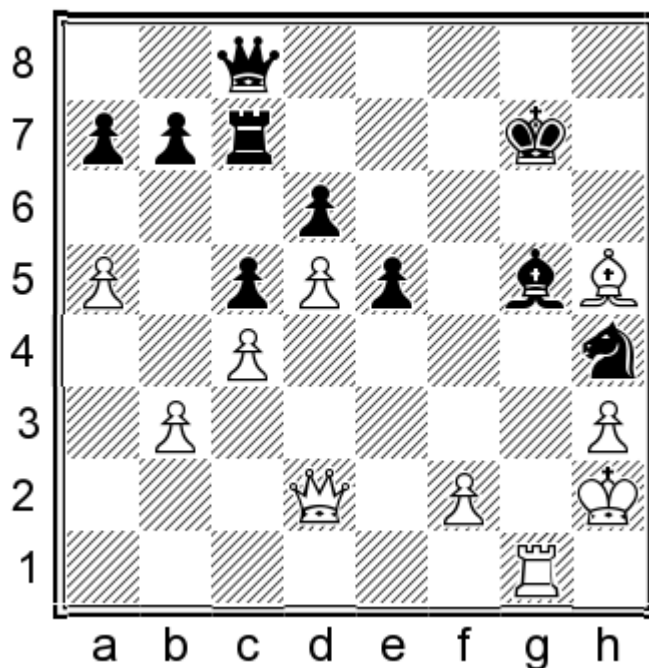
Draw.

I have thought for a long time that a Novotny with a queen as interfering piece would be very unlikely. Until 2004, that is, when Forster's voluminous biography of Amos Burn came out. In this book, Forster included a casual game that was played in 1910. The combination it contains had been lying hidden for 94 years.

MacDonald

Burn

Liverpool 1910



Position after 33.Bh5

It looks as if the open g-file gives White a decisive attack. However, Burn comes up with a fantastic resource.

33...Qg4!!

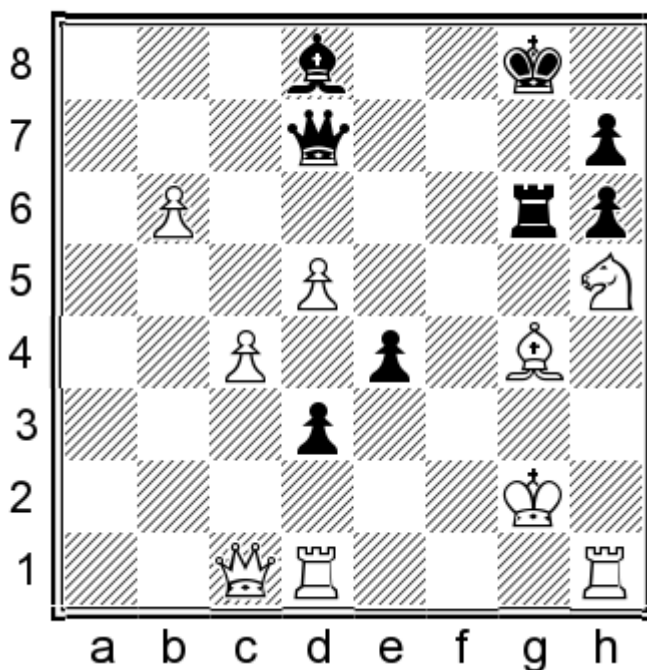
A pure Novotny with the queen. Not only is the g-file obstructed for the moment, the short d1-h5 diagonal is also temporarily closed off. White has to liquidate to an endgame:

34.Rxg4 Nf3+

Now White could have obtained an advantage with 35.Kg3 Nxd2 36.Rxg5+ Kh6 37.Rf5. From here on he can activate his king via h4 in order to gain the initiative. However, MacDonald played 35.Kg2 and after 35...Nxd2 36.Rxg5+ Kh6 37.h4 Nxb3 Black eventually managed to win the game.

Burn's 33rd move belongs to the most beautiful moves in the entire history of chess. I have incorporated it into the following study, and added a few extra points.

Timman 2011 (after MacDonald-Burn)



White to play and win

White is a rook up, but the open g-file is giving him headaches. Black's attack can become dangerous, especially with his far advanced passed pawns in the centre.

1.Rh4!!

The thematic sacrifice, drawing the black bishop beyond the intersection point g5. Black has to take the rook, as otherwise he will be left with too little material for the attack.

1...Bxh4 2.Qg5!!

Burn's Novotny with reversed colours.

2...Rxg5

Under these circumstances, too, this capture represents Black's best chance.

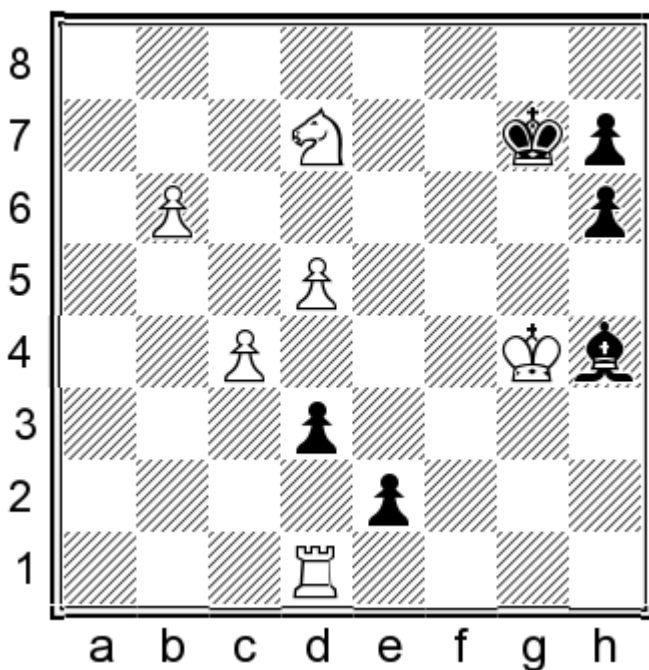
3.Nf6+ Kg7 4.Nxd7

White has regained the queen. Now, however, a pawn race starts, with strong passed pawns on both sides.

4...Rxg4+ 5.Kh3 e3 6.Kxg4

It's a close call. The immediate 6.b7 was insufficient for the win in view of the following attractive line: 6...e2 7.Re1 Bg3! 8.Kxg4 d2 9.Rxe2 d1Q 10.Kxg3 Qb3+ 11.Kg2 Qxb7 12.Re7+ Kh8! and White cannot win.

6...e2



7.Rg1!

Again, the g-file is the scene of action. The rook is lying in ambush. On 7...d2 White now has 8.Kf3+, winning.

7...Bf2 8.b7 Bxg1 9.b8Q e1Q

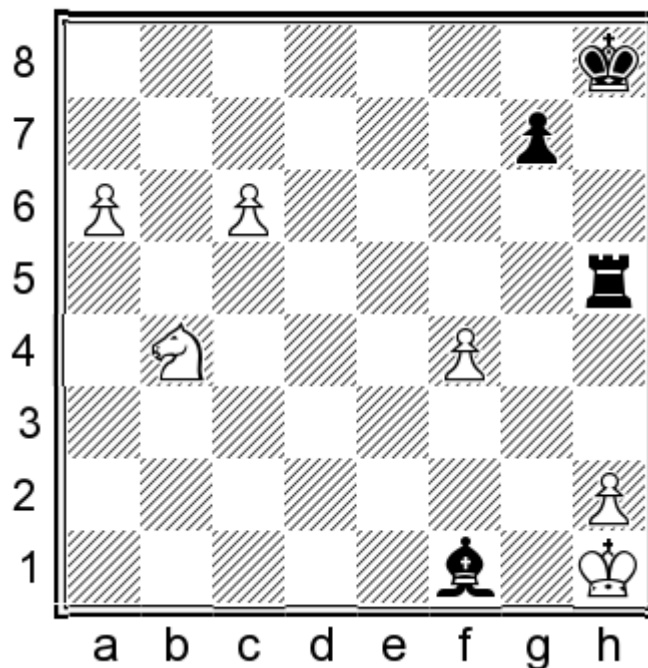
The race has ended in a tie, but with the new queens on the board White has a mating attack.

10.Qf8+

With mate next move.

In principle, you cannot achieve an interference of a diagonal and a line with a pawn – after all, the pawn is already on the line of the rook. But it can interrupt a rank on which the rook is standing, and this motif has served as the basis for a study.

Herbstman 1929



White to play and win

A typical Novotny position. White has to try to promote one of his queenside pawns.

1.c7 Bh3

Black has to try and stop the a-pawn with his rook.

2.f5!!

Here is the pawn Novotny. Black has to capture with the bishop, closing off the 5th rank for his rook.

2...Bxf5 3.a7 Be4+ 4.Kg1 Rg5+ 5.Kf2!

Not 5.Kf1 on account of 5...Rf5+, followed by 6...Rf8, and Black wins.

5...Rc5

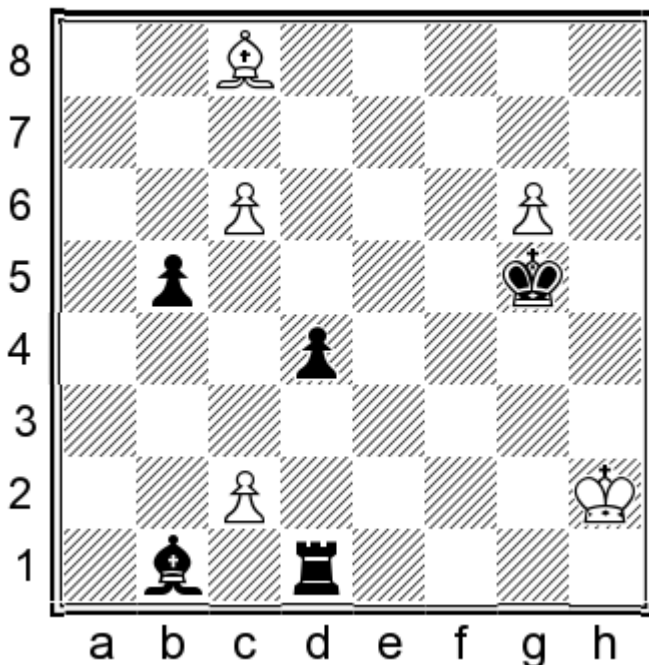
Now 5...Rf5+ would fail to 6.Ke3, attacking the bishop.

6.Nc6!

This knight Novotny immediately decides the battle.

It seemed interesting to create a study where the Novotny theme is linked with an en-passant capture. I did realize that this would merely be a pseudo-Novotny. The result looks like this:

Timman 2010



White to play and draw

The white pawns are still more than one square away from promotion, and so White has to take some unusual measures to maintain the balance.

1.Bf5!!

A stunning bishop sacrifice. The g-pawn is protected and the black king is decoyed to f5, so that White can promote with check later on. Insufficient was 1.g7 Ba2 2.Bf5 Kf4! 3.c7 Bd5, when the white king is trapped in a mating net.

1...Kxf5

After 1...Re1 2.g7 Re8 3.Bd7 White would reach a tenable bishop ending.

2.g7 Ba2

Things look gloomy for White, but he has a miraculous escape:

3.c4!!

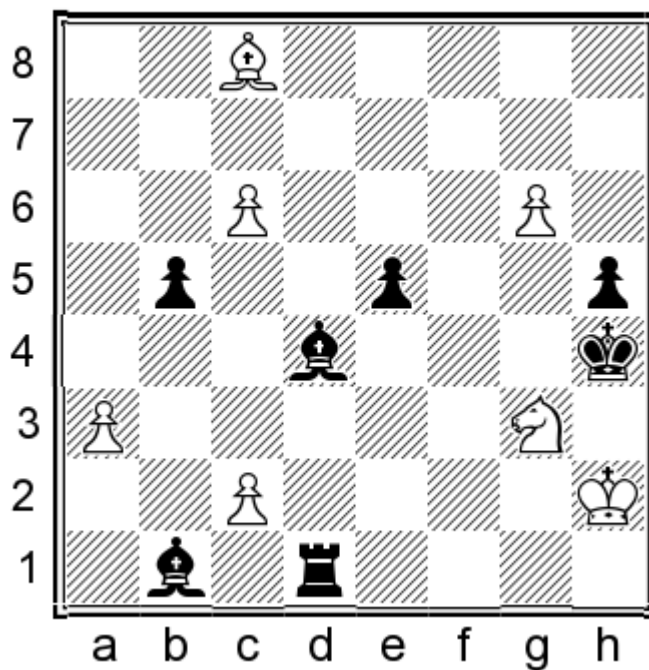
No matter how Black takes this pawn, the c-file will be closed.

3...dxc3 4.c7

Draw.

The following study is a slight elaboration on this theme.

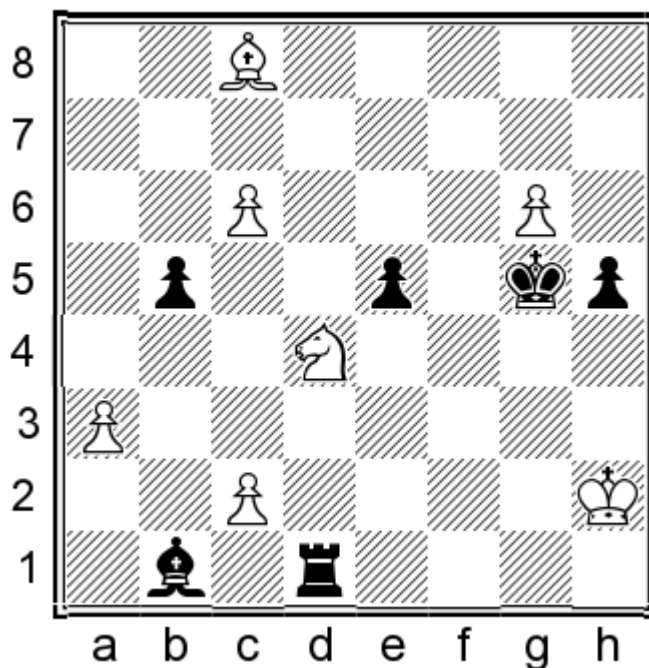
Timman 2010



White to play and draw

First two introductory moves.

1.Nf5+ Kg5 2.Nxd4

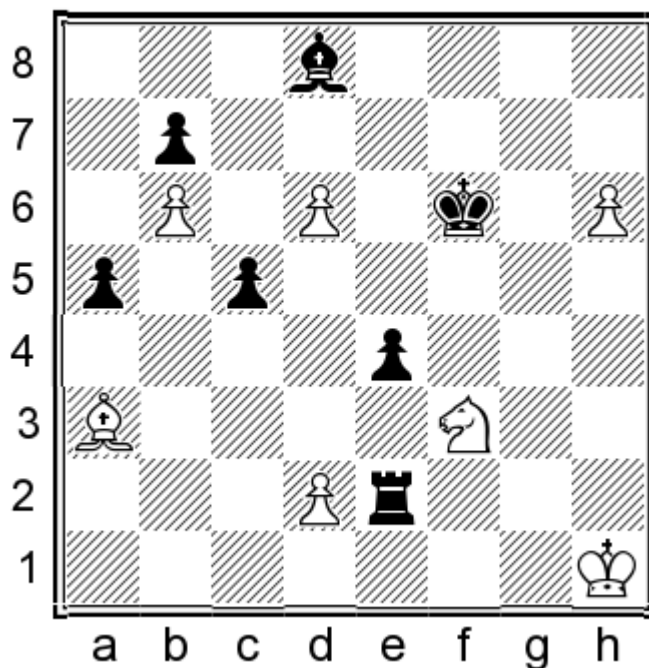


Black can capture the knight in two ways:

- A) 2...Rxd4 3.g7 Ba2 4.c4!! Rd2+ 5.Kg1 Bxc4 6.c7 with a draw;
- B) 2...exd4 3.Bf5!! The same sacrifice as in the previous study.
3...Kxf5 4.g7 Rd2+ 5.Kg1! Ba2 6.c4!! dxc3 7.c7 and again Black cannot win.

Twelve years later I succeeded in improving on these studies.

Timman 2022



White to play and draw

White has two passed pawns on the 6th rank, but they don't seem very threatening for Black. Sharp action is needed.

1.Ng5!

This attacks the black e-pawn.

The alternative 1.Ne5? is insufficient because of 1...Rxd2 2.h7 Kg7 3.Nf7 Kxh7 4.Nxd8 e3 and Black wins.

1...Kf5!

The other main line is 1...Kxg5 2.h7 Bf6 and now the thematic 3.Bb2! Bxb2 4.d4! White forces the promotion of one of his pawns. After 4...exd3 5.d7 d2 6.d8Q+ Kg4 7.Qg8+ he has a perpetual.

Another alternative was 1...Kg6, when White holds after 2.h7 Bf6 3.d7 Rxd2 4.Nxe4 Rd1+ 5.Kg2 Bh8 6.Nxc5.

2.h7 Bf6 3.Bc1!

It is absolutely necessary to protect the d-pawn. Insufficient is 3.Bxc5? because of 3...Rxd2.

3...e3!

The main idea of this pawn thrust is to open the d-file for the rook.

4.d4!

The only way to keep the d-file closed for the black rook.

4...Rd2!

The most challenging move. The alternative was 4...Kg6. After 5.Ne4 Re1+ 6.Kg2 Rxc1 7.d7 Rh1 8.Nxf6 e2 9.d8Q e1Q 10.Qg8+ Black has no winning chances.

5.Nf3

The knight returns to its original post.

5...Rd1+ 6.Kg2 e2 7.Bg5!

Now the white bishop strikes at the other side. Insufficient was 7.d7? because of 7...e1Q 8.Nxe1 Rxd4 9.Bg5 Rxd7! 10.Bxf6 Rxh7 and wins.

7...e1Q 8.Nxe1 Kxg5 9.d7! Rxd4 10.Nf3+

The knight moves back again to secure the draw.

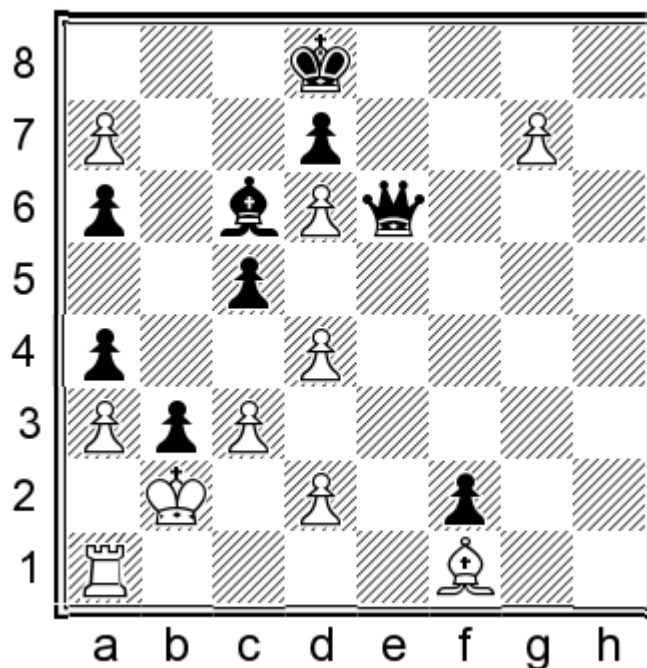
The Ukrainian study composer Vladislav Tarasiuk, who awarded me first prize for the study as a judge of the G Skovoroda-300 tourney, wrote in his jury report: ‘The best study of the competition with a complete game plot. The introduction is connected with the finale exceptionally harmoniously and gracefully: the white pieces step by step weaken the position of the enemy and logically escape with a forked blow of the ubiquitous white knight, which begins and ends the duel on the square from which the game began. Yes, the idea of conducting passing pawns to the transformation square is often used in the author’s ideas, but the judge was captivated by the echo of the game of different pieces on the same square (1.Ng5! and 7.Bg5!) – the fight begins with the tactical sacrifice of the white knight, and

then the bishop becomes the hero. Such moves, found by the famous Netherlands grandmaster-practitioner, certainly decorate chess.'

The move c2-c4 (or d2-d4) never fails to be spectacular, but it never results in a real Novotny. The en passant capture closes off the c-file for the black rook.

It is, however, possible to make studies where a pawn is moved to the intersection point of two diagonals. This is called the 'Plachutta theme', after the Austrian problem composer Josef Plachutta who invented it in 1858. A Plachutta is also possible when a file and a rank are crossed by an enemy piece. The famous French endgame study composer Henri Rinck has made an adaptation of this theme.

Rinck, 'Gazette de Lausanne' 1932



White to play and win

White has two passed pawns that are about to promote. With two thematic piece sacrifices he creates a Plachutta.

1.Bc4!

Drawing the queen beyond the critical point.

1...Qxc4 2.Rh1!

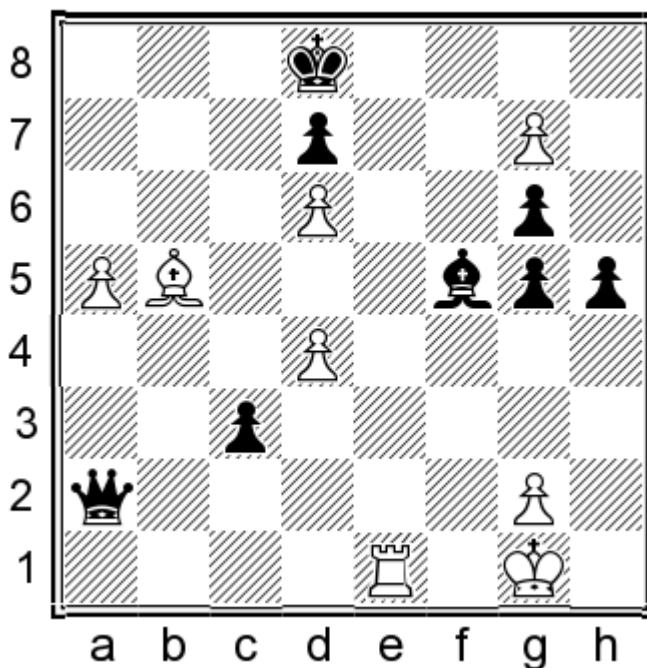
And now the bishop.

2...Bxh1 3.d5!

And mate is unavoidable.

This study received first prize in the tourney of the Swiss newspaper. To be frank, this surprised me. The study does not contain any surprises, and Rinck uses many superfluous pawns for his adaptation of the theme. Hardly a typical situation. Usually Rinck was a past master when it came to economic use of material. Probably the study received first prize because in the 1930s there were not yet many studies with the Plachutta theme. However, I thought it ought to be possible to make a better adaptation of the theme. In general, in studies with a queen on the board you have to use a lot of material to get everything right. But in this case it turned out to be possible to build in many interesting points from a natural position.

Timman 2011



White to play and win

Black has a large material superiority, but the white g-pawn is very dangerous and the a-pawn can become dangerous as well.

1.a6 c2

Black has to look for counterplay. On 1...Qd5 the most convincing win for White is 2.Kh1 Bh3 3.Bf1.

2.Kh2!!

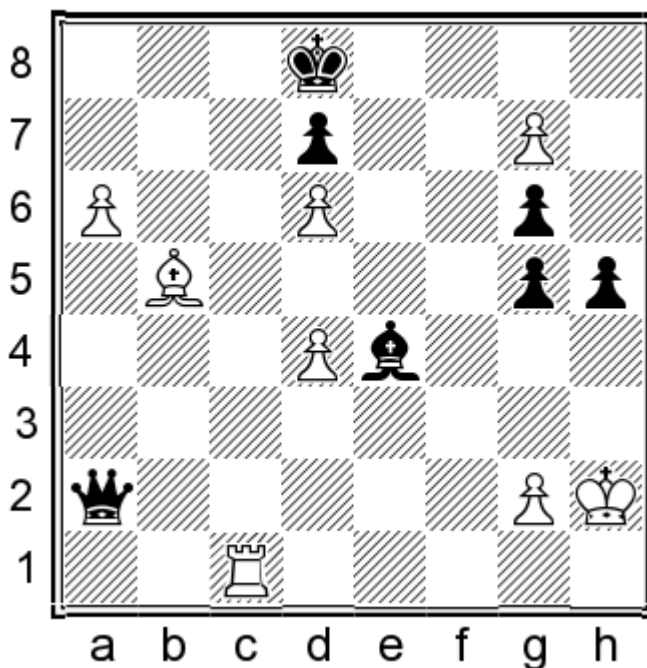
A marvellous quiet move. It was tempting to play 2.a7. Then 2...Be6 is met by the winning 3.Rxe6 c1Q+ 4.Bf1. However, Black has 2...Be4!, winning after 3.Rxe4 c1Q+ 4.Kh2 Qca3!.

With the text move White prepares further actions.

2...c1Q

Black sacrifices his c-pawn to create counterthreats. Useless was 2...Be4 in view of 3.Rf1 and the bishop has to go back again.

3.Rxc1 Be4



Now what? On 4.Be2, 4...Qg8 is sufficient.

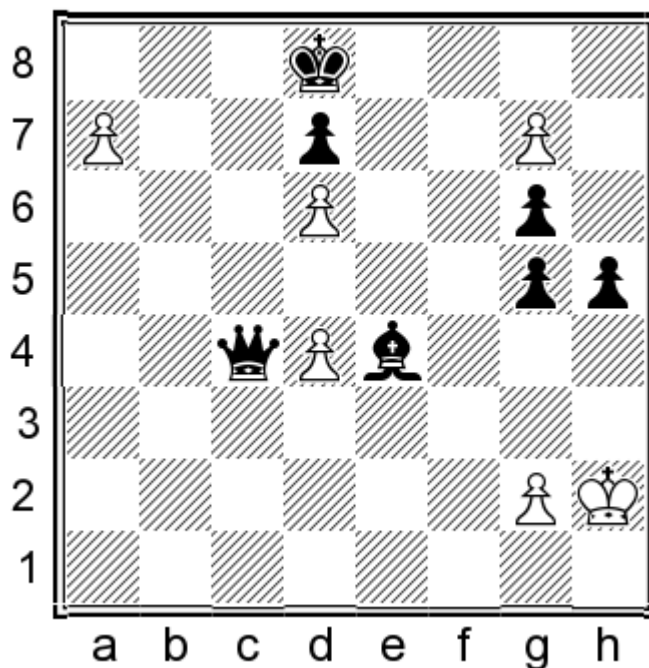
4.Rc2!!

This rook sacrifice not only serves to prevent mate, but it also forces the black bishop to leave the long diagonal.

4...Bxc2 5.Bc4!!

Just like in Rinck's study, White sacrifices a rook and a bishop to realize the Plachutta. The queen is drawn beyond the critical square b3 and now it can only try to stop the g-pawn. Insufficient was 5.a7 in view of 5...Bb3, after which White runs out of options.

5...Qxc4 6.a7 Be4



7.d5!

The Plachutta. Black must capture with the bishop in order to avoid immediate mate. It is astonishing how safe the white king is, though protected by one pawn only. Because the black bishop had to go to e4, the 4th rank is closed off for the queen.

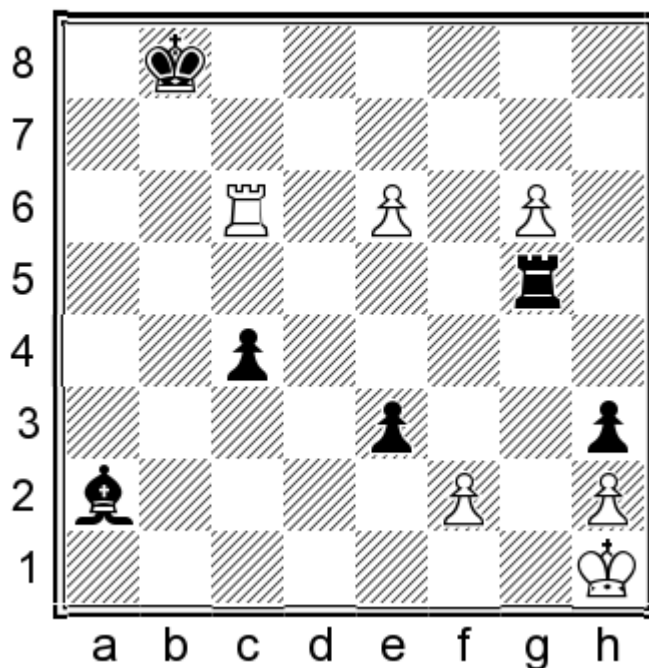
7...Bxd5 8.g8Q+ Bxg8 9.a8Q+ Qc8 10.Qa5+ Ke8 11.Qe5+ Be6
 11...Kf7 is met by **12.Qe7#**. The capture on g8 has blocked an important escape square for the king.

12.Qh8+

And wins. In three moves the queen has moved from one corner square to another.

Analogously to the Double Prokes, there are also Double Novotnys. With this I mean Novotnys with the same piece, so Herbstman's study does not meet this demand. Jindrich Fritz composed a magnificent study that also served as a source of inspiration for Benkö.

Fritz, 'Lidova Demokracie' 1950

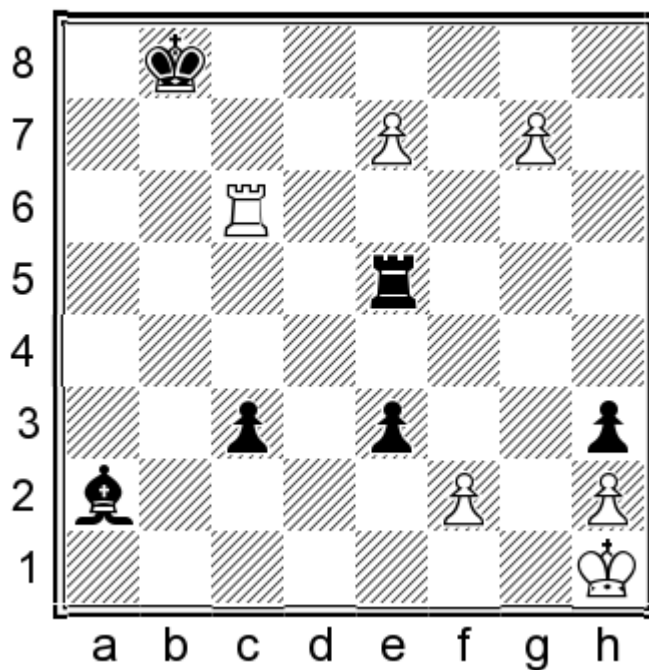


White to play and win

Black has dangerous counterplay. White has to play sharply in order to gain the upper hand.

1.e7 Re5 2.g7 c3

Opening the a2-g8 diagonal and at the same time bringing one of his own passed pawns closer to the promotion square.



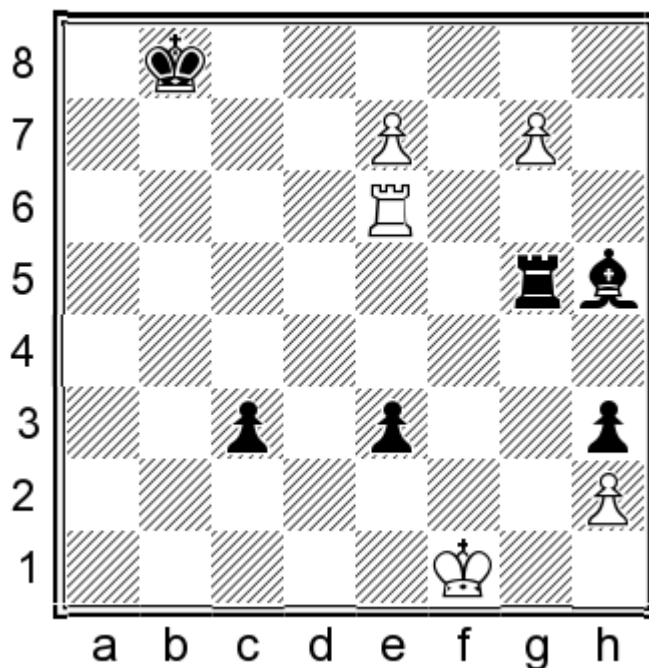
3.Re6!!

The first Novotny.

3...Bd5+ 4.f3!

Otherwise Black can take on f2 with check.

4...Bxf3+ 5.Kg1 Rg5+ 6.Kf1 Bh5



Black has built up a new line of defence. But now comes the second Novotny.

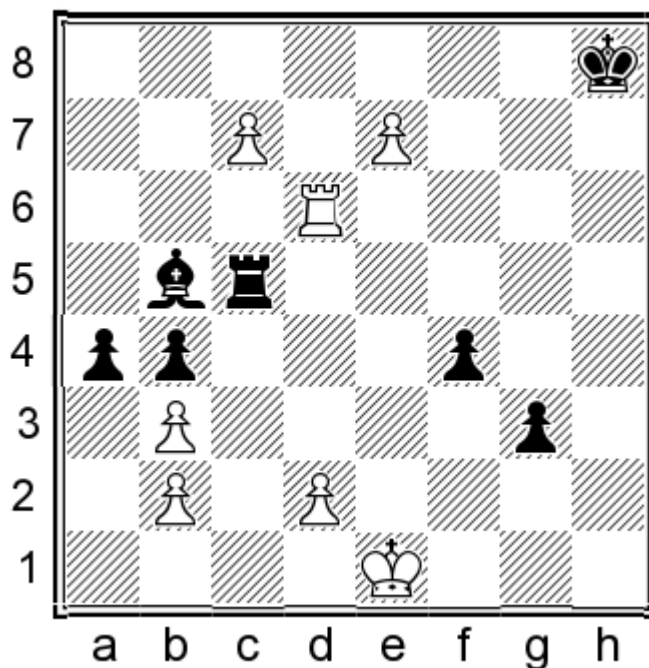
7.Rg6!!

The intersection point has been shifted. White wins.

There is no doubt that this construction, with a rook as the interfering piece, is the most manageable.

Eight years after Fritz, the Hungarian study composer L. Zoltan succeeded in activating a third Novotny in one study.

Zoltan 1958 (version Timman 2023)



White to play and win

This is my version of the study. It is much more economic than the original that had a black knight on c1 – that was captured without moving – and three superfluous pawns.

1.Rc6!

The first Novotny is forced, since 1.Rd8+ is losing after 1...Kg7 2.c8Q Rxc8 3.Rxc8 f3.

1...Re5+ 2.Kd1 Be2+

The bishop is on its way to g4 to stop the white c-pawn.

3.Kc1 Bg4 4.Re6!

The second Novotny.

4...Rc5+ 5.Kb1 Bf5+

Now White must be careful.

6.d3!

A pawn sac to divert the black bishop.

6...Bxd3+ 7.Ka2 axb3+ 8.Kxb3 Bb5

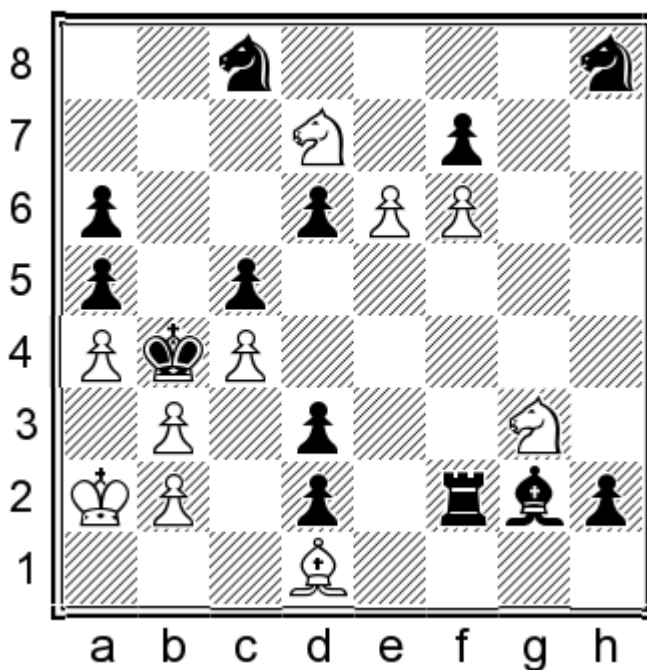
The black rook and bishop have switched roles again.

9.Rc6!

The third Novotny. White wins.

The Israeli endgame study composer Noam Manella has made a study in which a knight functions as the interfering piece twice. The version he published in The Problemist in 1991 contained some snags. However, it wasn't hard to repair the study.

Manella, 'The Problemist' 1991(correction Timman 2011)



White to play and win

To the original version, a white pawn on h5 and a black knight on h6 have been added. The white knight has been moved from g5 to g3, and also a first move by White with the e-pawn has been added.

1.e7 Re2

Black has to try and stop the pawn.

2.Ne4!!

The first Novotny.

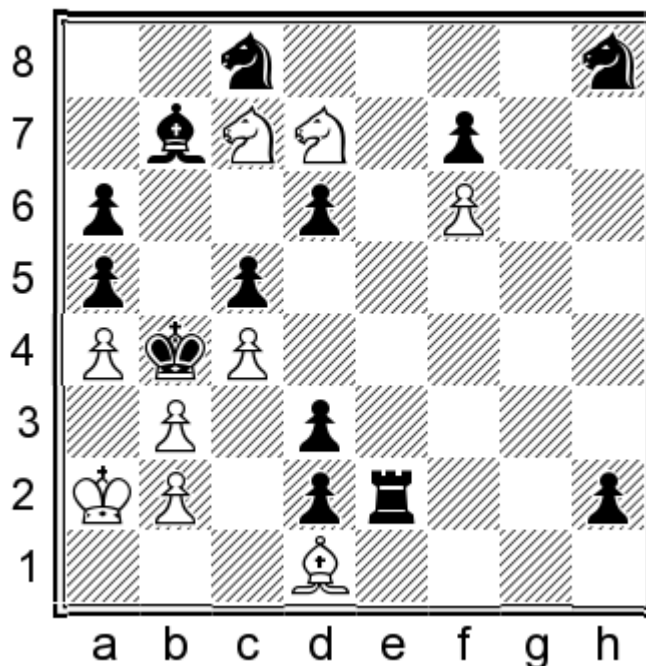
2...Bxe4

Forced, since after 2...Rxe4 3.Nb8 Black would get mated quickly. He cannot cover both the a6- and the c6-square at the same time.

3.e8N!

The Phoenix Principle. The promoted knight aims for the square c7. Insufficient was 3.e8Q? on account of 3...Bb7 and Black draws the long end of the stick.

3...Bb7 4.Nc7



4...Re6

With all his might Black will try to protect the squares a6 and c6.

5.Nb8 d5 6.Nc6+!

The second Novotny. There are two mate patterns now:

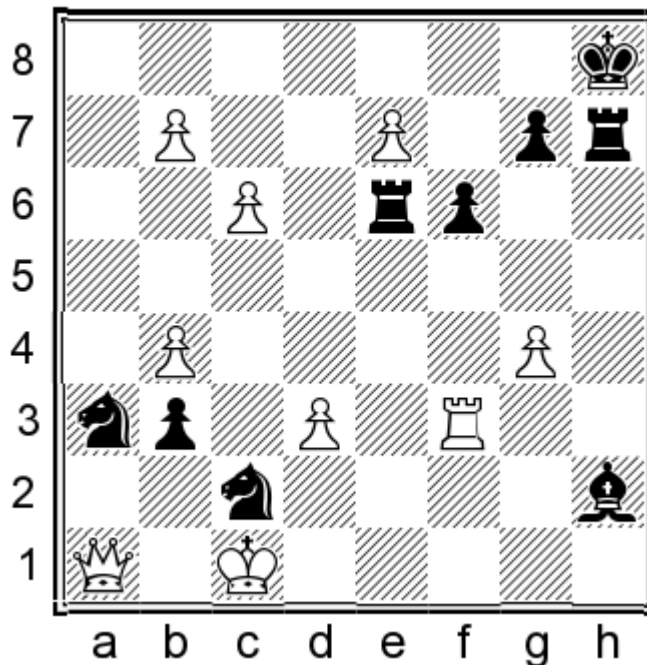
A) 6...Bxc6 7.Nxa6 mate;

B) 6...Rxc6 7.Nxd5 mate.

In both cases, the promoted knight gives mate.

I invented a new challenge: a Double Novotny with a queen as the interfering piece. Here is the result:

Timman, 'Karl' 2021



White to play and win

1.Re3!

A rook sac, preparing the queen sacrifice. After 1.Qc3 Bc7 Black is holding.

1...Rxe3

Forced. After 1...Bf4 2.b8Q+ White wins easily.

2.Qe5!

The first Novotny.

2...b2+ 3.Kd2

The only square for the king.

3...Nb1+

Black keeps on checking, forcing the king to the e-file. After 3...b1N+ 4.Kc1 there would be no more checks.

4.Kxc2 Na3+ 5.Kd2 Nb1+ 6.Kxe3 Rh3+

Black has made square h7 available for his king and is ready to take the white queen.

7.Qg3!

The second Novotny.

7...Rxxg3+ 8.Kf2 Rh3 9.e8Q+ Kh7 10.Qe4+ Kh8 11.Qg2!

A very important finesse. White prepares the promotion of his queenside pawns.

11...Rh4 12.Ke3!

Now White is ready to take the bishop.

12...Nd2!

Black is also preparing promotion.

13.Qxh2! Nf1+ 14.Kd4 Nxh2 15.c7!

Accuracy till the end. White has to promote his c-pawn first, since 15.b8Q+ Kh7 16.c7 Nf3+ 17.Kd5 b1Q 18.c8Q Qxd3+ leads to a perpetual.

15...Kh7 16.c8Q b1Q 17.b8Q Rxxg4+ 18.Kc5 Qc2+ 19.Kd6 Qxd3+ 20.Ke7

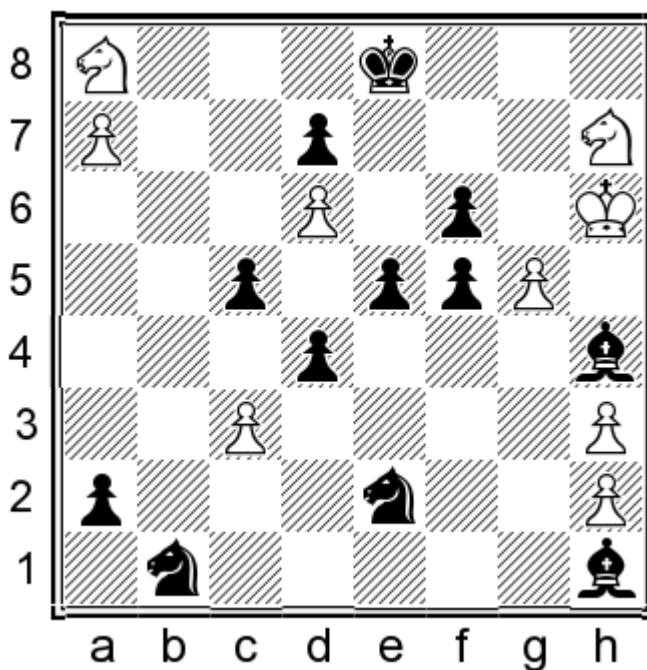
Bringing the king in safety on the kingside.

20...Re4+ 21.Kf8

And wins.

There is also such a thing as a Plachutta followed up by a Novotny, with a knight as the interfering piece. With the following study, the brilliant Polish study composer Jan Rusinek won first prize in the tourney organized by the magazine Problem.

Rusinek, 'Problem' 1976



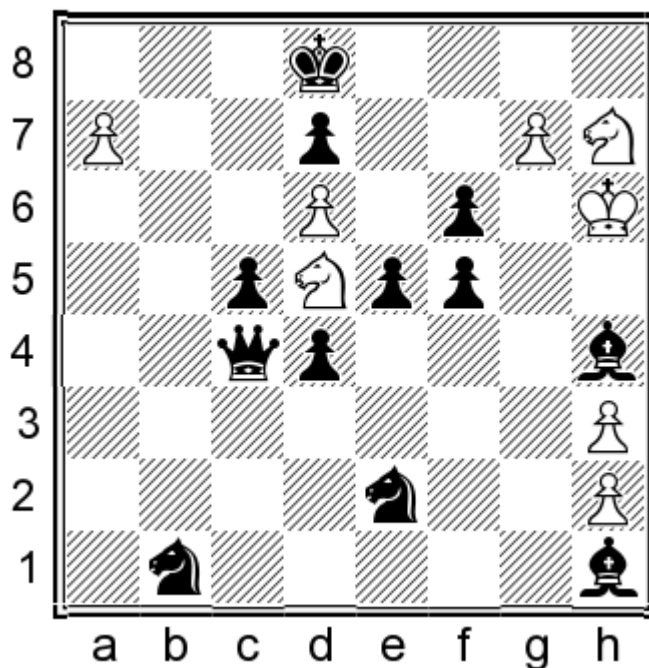
White to play and draw

This is a quite complex position. Black has a considerable material advantage and he also threatens to promote his a-pawn. White will have to rely on his a- and g-pawns.

1.Nc7+ Kd8 2.g6 a1Q 3.g7 Qa2 4.c4!

Preparation for the Plachutta. The queen is deflected from the a-file.

4...Qxc4 5.Nd5!!



The Plachutta.

5...Qc1+ 6.Nf4!

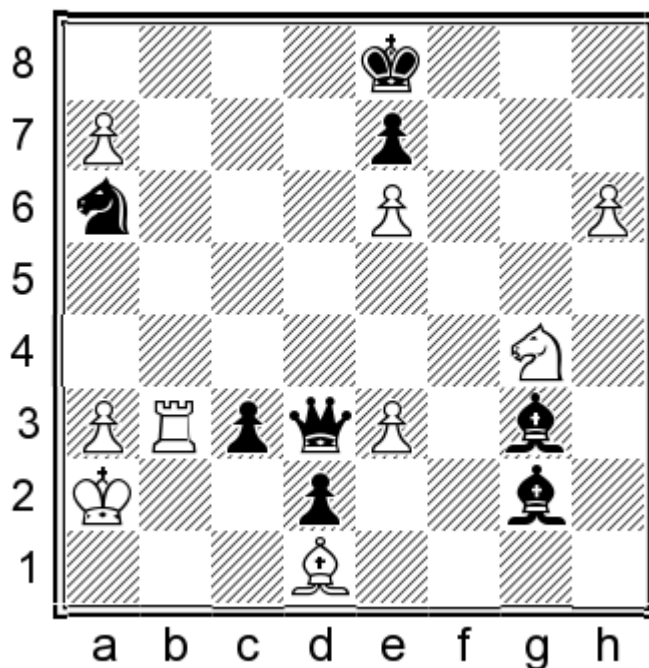
The point of this move is that after 6...Qxf4+ 7.Kg6 Black has no checks on the g-file.

6...Qg1 7.Ng2!!

The Novotny. The intersection point has been shifted from d5 to g2. Now Black has nothing better than a check on c1, after which White can repeat the moves.

Is it possible to compose a study with a Double Plachutta? I succeeded in doing this; the result is not very impressive, but it works.

Timman 2023



White to play and win (first publication)

At first sight White's passed pawns are not impressive.

1.e4!

The first Plachutta.

1...Bxe4

On 1...Qxe4 White has 2.a8Q+ Qxa8 3.h7 and the h-pawn can't be stopped.

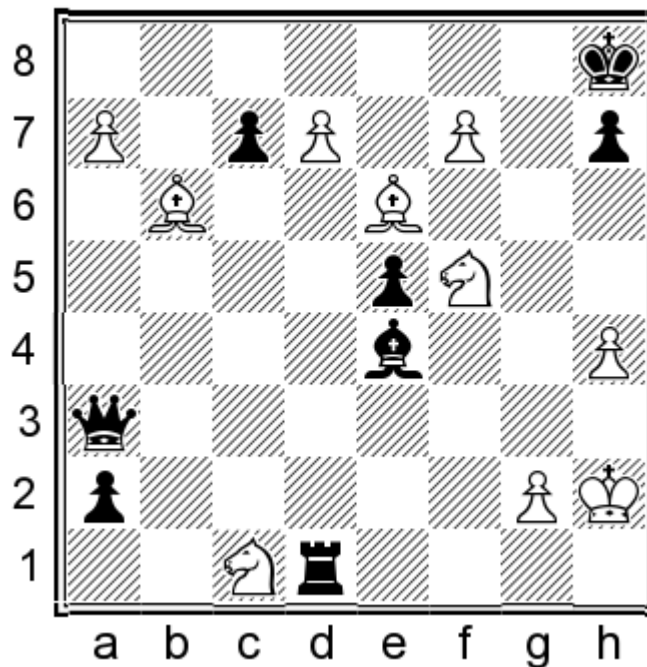
2.h7 Qd4 3.Ne5!

The second Plachutta.

3...Bxe5 4.h8Q+ Bxh8 5.Rb8+ Qd8 6.Ba4+

Or 6.Bh5+. White wins.

In 2021 I also managed to implement a Plachutta and two Novotny's, all on one file, in a study.



White to play and win (first publication)

White has three passed pawns on the 7th rank, but he must first deal with Black's threat of 1... Rh1+, followed by mate.

1.Nd3!

A Plachutta!

The alternate knight sacrifice 1.Nd4? doesn't work because of 1...Qe7! and Black wins.

1...Rxd3 2.Bd4!

This is 'just' a bishop sacrifice. Not immediately 2.Bd5? because of 2...Rh3+! 3.gxh3 Qb2+ and mate follows.

2...Rxd4 3.Bd5!

The first Novotny.

3...Rxd5 4.Nd6!

The second Novotny and at the same time the fourth piece sacrifice on the d-file. White has sacrificed all of his minor pieces!

4...Qxd6 5.a8Q+ Kg7 6.Qg8+ Kf6 7.f8Q+ Qxf8 8.Qxf8+ Ke6 9.Qe8+

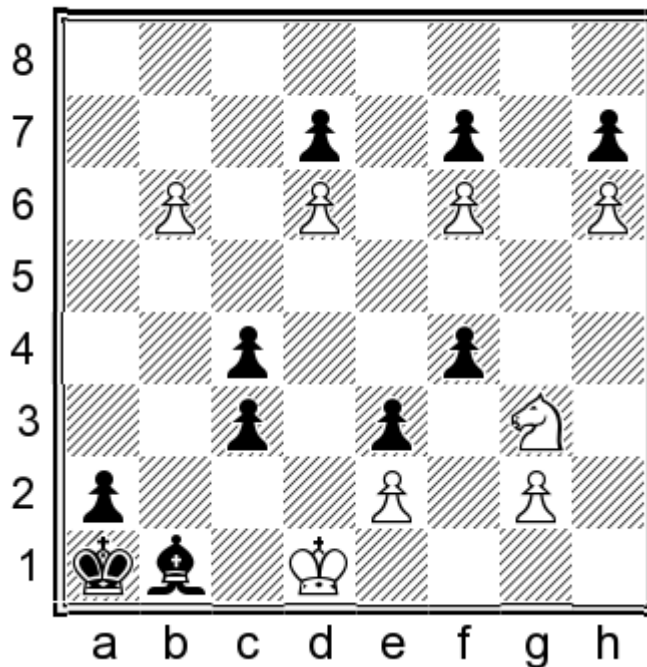
White wins.

Chapter 5

Knight promotions

Late summer 2010. In a hotel room in Antwerp I was thinking about the possibilities of studies with multiple knight promotions. Quite soon I had finished the following study.

Timman 2010



White to play and win – Mate in 13 moves

This study has a main line in which White gives a forced mate in 13. This means that in a certain way, it can also be seen as a problem. First of all White has to prevent the pawn on c3 from becoming dangerous.

1.Kc1

Insufficient was 1.b7 f3! 2.gxf3 c2+ 3.Kc1 c3 and whatever White does, Black will be stalemated.

1...c2

Now 1...f3 fails to 2.exf3! c2 3.Ne2 c3 4.Nd4 with mate next move.

2.b7

It is time to think of promotion. After 2.Nf5 f3 White would not have time to give mate.

2...fxg3

2...f3 would be met by 3.b8Q, with mate soon.

3.b8N!

The 'Phoenix Principle': the knight that has been captured on g3 rises from its ashes on b8.

3...c3 4.Nc6

This was the intention of the knight promotion. By offering his knight to be captured, White avoids the stalemate.

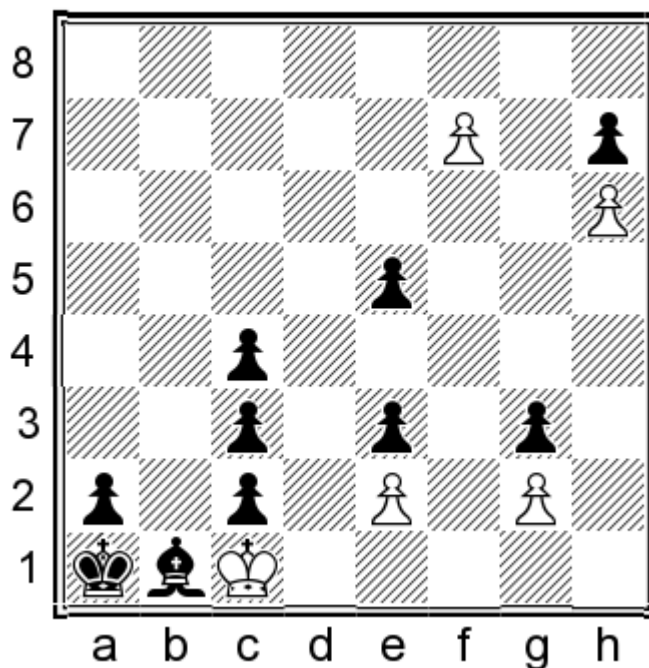
4...dxc6 5.d7 c5 6.d8N!

The procedure is repeated. The previous knight has been sacrificed, and a new knight arises.

6...c4 7.Ne6

Again White is in time to avoid stalemate.

7...fxe6 8.f7 e5



9.f8N!

The third knight promotion.

9...e4 10.Ng6

This knight too is sacrificed immediately.

10...hxg6 11.h7 g5 12.h8Q

Finally the purpose of all these knight promotions becomes clear; this promotion enables White to work his way to the enemy king. Incidentally, White could also have promoted to a bishop.

12...g4 13.Qxc3

Mate.

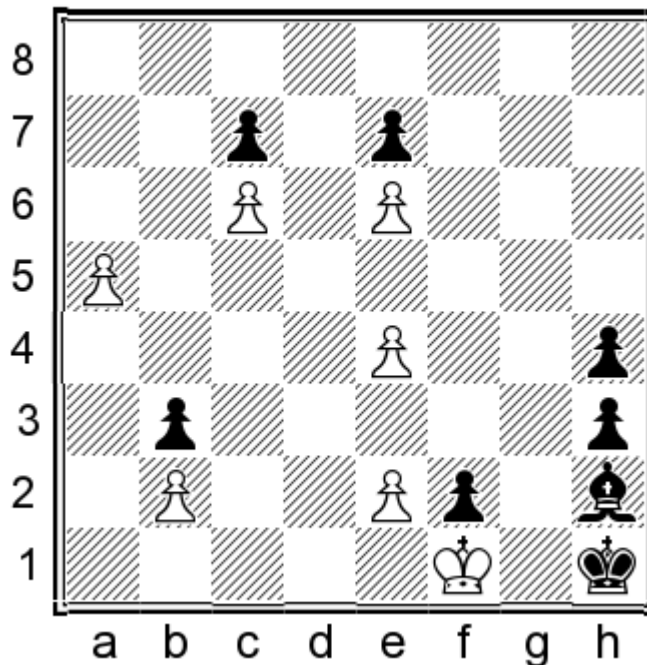
In Antwerp I was the guest grandmaster during the 4th Inventi tournament. It seemed a nice opportunity to show this study to the audience. It was received with enthusiasm. Two weeks later I met Yochanan Afek in Wageningen during a competition game for the club of the same name for which we both played. Afek was clearly less impressed.

‘I hope you didn’t spend too much time on this,’ he remarked. At my negative answer he continued: ‘This theme was first used in the beginning of the previous century by the Jewish-Romanian study composer Sigmund Herland. Many versions have followed after that, sometimes with a total of five knight promotions.’

This stimulated me to investigate the theme further. As I delved deeper into the subject, new chess vistas were opened up before me. In the end I had seen so many knight promotions that my head started swimming.

I shall give a short overview, in chronological order where possible. Herland’s study may indeed be the first with the type of knight promotion that I had discovered in Antwerp. His study – and in fact many that will follow in this chapter – can also be seen as a problem. I will not mention this aspect again in the following.

Herland, ‘Deutsches Wochenschach’ 1913



White to play and win

This looks a lot like my construction. First White promotes his a-pawn.

1.a6 Bg1

Black is going to lock himself in.

2.a7 h2 3.a8N!

Black has one move left with his hindmost h-pawn.

3...h3 4.Nb6 cxb6 5.c7 b5 6.c8N! b4 7.Nd6

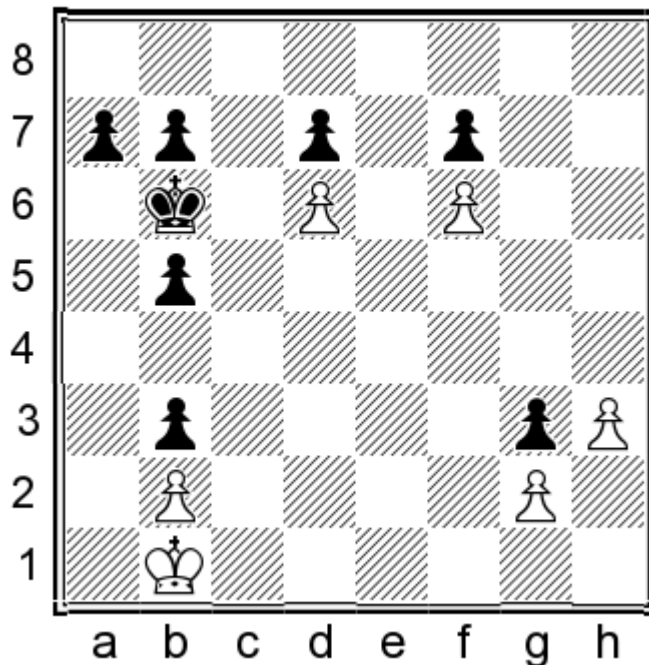
The familiar pattern.

7...exd6 8.e7 d5 9.e8Q

And wins. An elegant study, but with a modest set-up.

It is not certain that Sigmund Herland was the first to compose such a study. In Harold van der Heijden's database the following study can be found.

F. Fritz



White to play and win

A pure pawn ending. White has to promote his h-pawn.

1.h4 Ka5

He cannot stop the h-pawn. Therefore the king heads for a4 to wedge itself in.

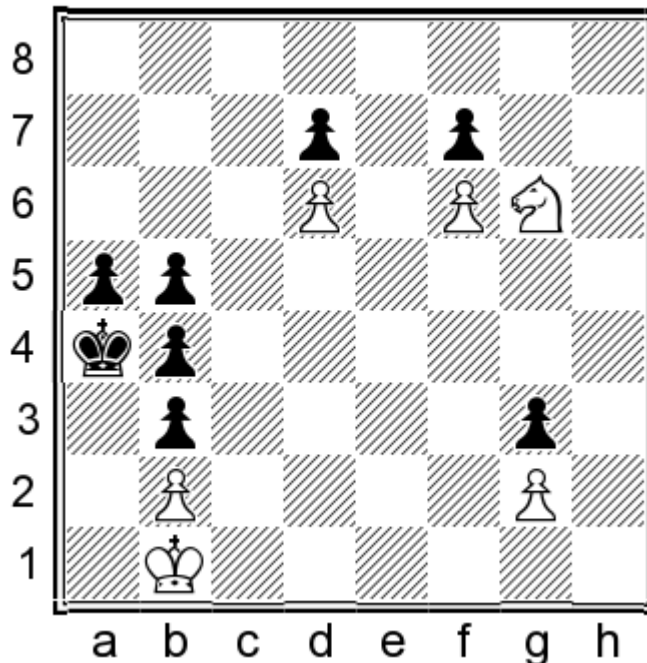
2.h5 Ka4 3.h6 b4 4.h7 b5

This is given as the main line in the database. The alternative 4...a5 demands more of White. I will return to this later on, in another context.

5.h8N!

This is necessary to prevent stalemate.

5...a5 6.Ng6



Starting up the mechanism again.

6...fxg6 7.f7 g5 8.f8N! g4 9.Ne6 dxe6 10.d7 e5 11.d8N!

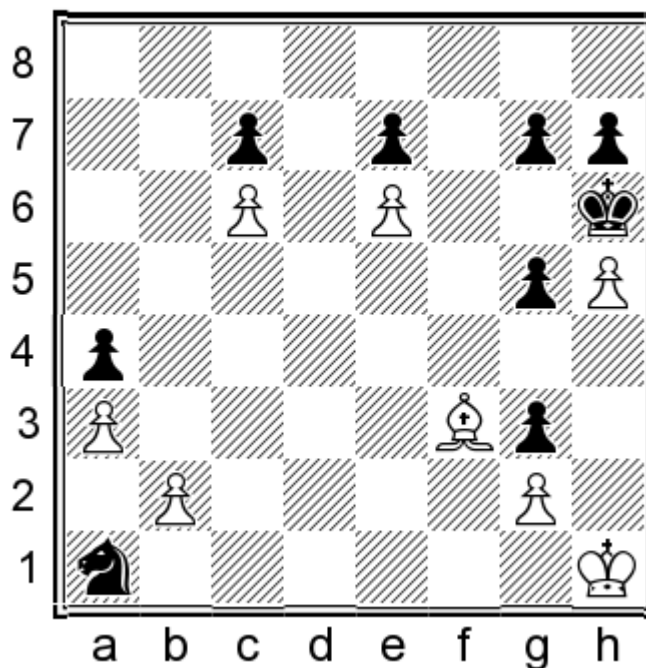
And now White can choose the route along which he wants to give mate.

This study differs from Herland's in that Black has active counterplay; he has to put his king into a stalemate position, which is a well-known theme in the world of endgame studies.

It is unclear when this study was made. In the database it has been adorned with the label 'source unknown'.

Who was F. Fritz? He should certainly not be mixed up with Jindrich Fritz, who featured so prominently in the previous chapter. When I asked Van der Heijden himself, he couldn't give me a satisfactory answer. In any case we know for certain that the great Russian Alexey Troitzky did not know him. This is proved by the following study, which has been erroneously labelled incorrect.

Troitzky, '64' 1934 (Timman 2011)



White to play and win

My contribution to this study is very modest: I have moved the white king from g1 to h1. Nevertheless, we will see that this is an improvement.

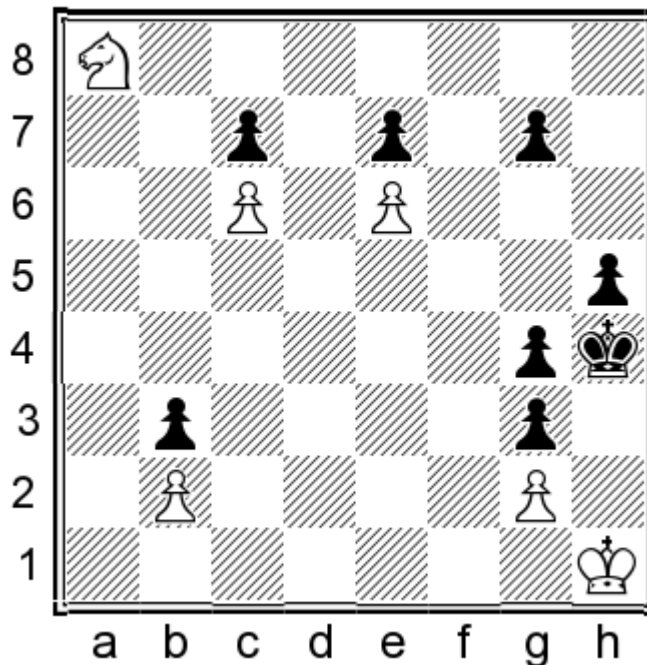
1.Bd1

Threatening to capture on a4, which results in a pawn ending by force.

1...Nb3 2.Bxb3 axb3 3.a4 Kxh5 4.a5 Kh4

From this point onwards the study is, apart from my relocation of the white king, a mirrored version of the previous one.

5.a6 g4 6.a7 h5 7.a8N!



7...g6

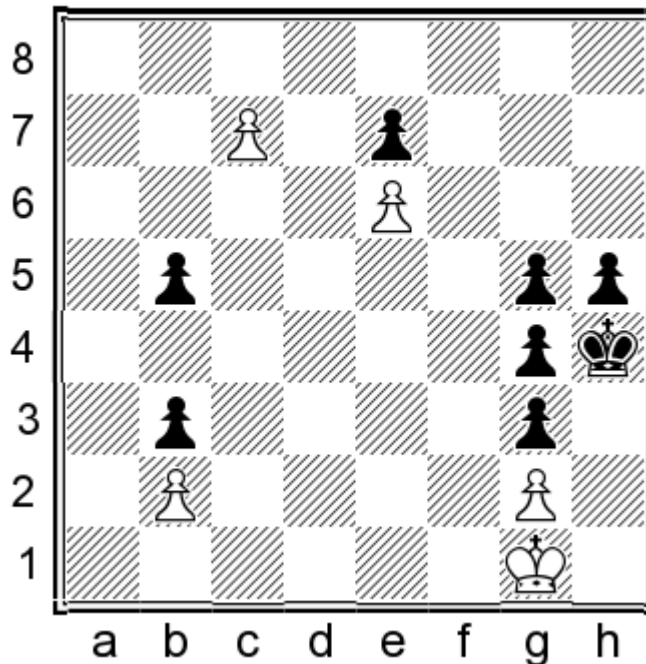
This little move was considered to be the refutation of the study. Black postpones the choice of either boxing in his king or letting it out via the escape square g5. 8.Nxc7 is met by 8...g5, with inevitable stalemate, while 8.Nb6 Kg5 doesn't lead to a win either.

However, White is not obliged to move his knight. Now we come to my relocation. With the king on g1 White would have two winning moves – in other words, the study would contain a dual.

8.Kg1!

The only move that wins.

8...g5 9.Nb6 cxb6 10.c7 b5

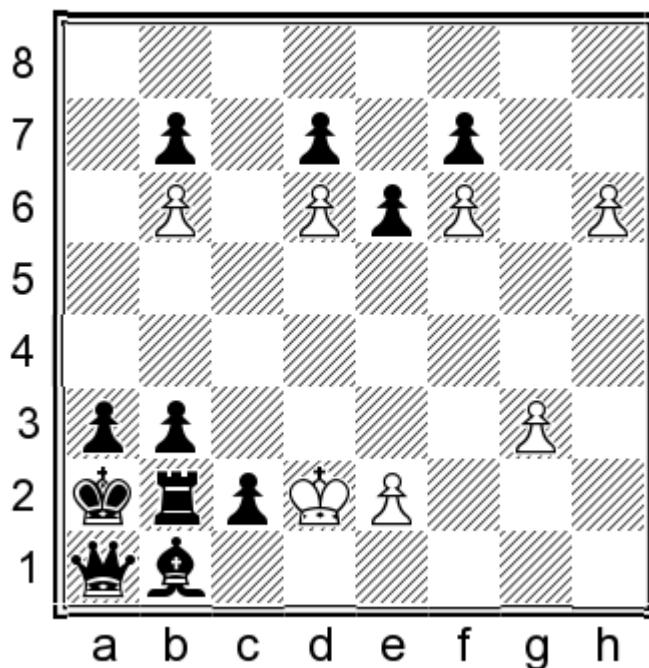


11.c8N! b4 12.Nd6 exd6 13.e7 d5 14.e8N!

And again White can choose how he will give mate here.

Remarkably enough, there are more imitators of Herland's study than of Fritz's or Troitzky's. The reason is that more knight promotions are possible if the enemy king is anchored in the corner. Four years before Troitzky's study, a follow-up on Herland's study was published.

Novikov, '64' 1930



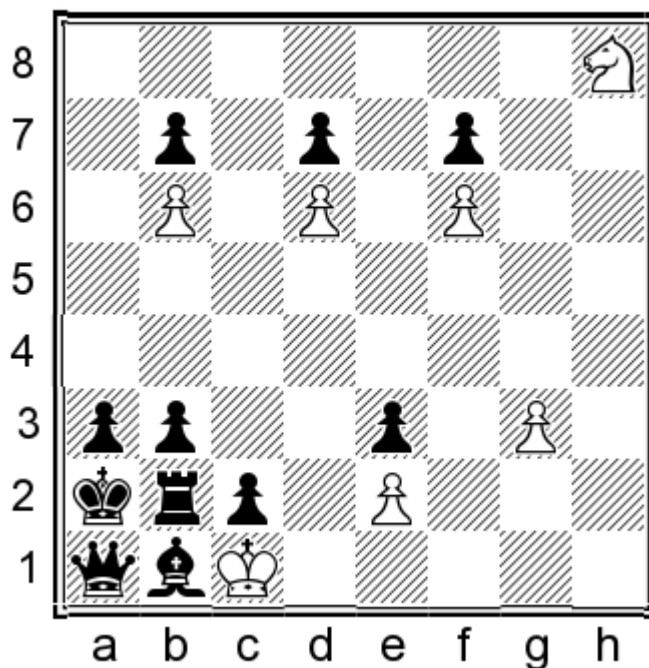
White to play and win

Anyone who knows anything about retrograde analysis will notice that the bishop on b1 has to be a promoted piece, since the bishop on c8 can only have been captured on its starting square. The first move of the solution is obvious.

1.Kc1

The enemy forces on the queenside must be kept under control.

1...e5 2.h7 e4 3.h8N! e3



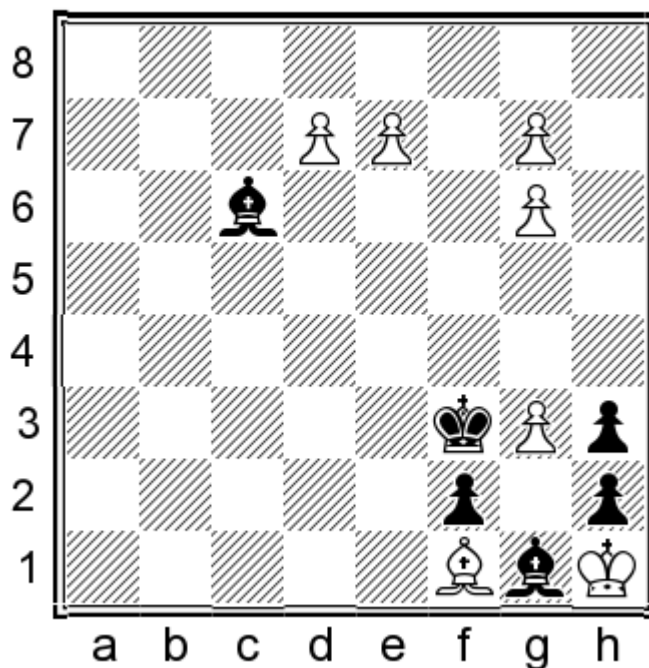
**4.Ng6 fxc6 5.f7 g5 6.f8N! g4 7.Ne6 dxe6 8.d7 e5 9.d8N! e4
10.Nc6 bxc6 11.b7 c5 12.b8N!**

That's the fourth knight! Now White again has two routes to give mate.

We see that the number of knight promotions has risen from two to four. Now, study composers faced a challenge. Would it be possible to build in a total of five knight promotions? The English chess author and study composer Harold Lommer worked intensively on this task.

Lommer had a habit of making record-breaking studies. For example, in 1933 he had won first prize in a tournament organized by the Journal de Genève with a study that contained all possible promotions (in study circles this task is given the term Allumwandlung, in short: AUW). In itself, that study is not so special. Much more attractive was the one Lommer published a little later.

Lommer, 'Feuille d'Avis de Lausanne' 1933



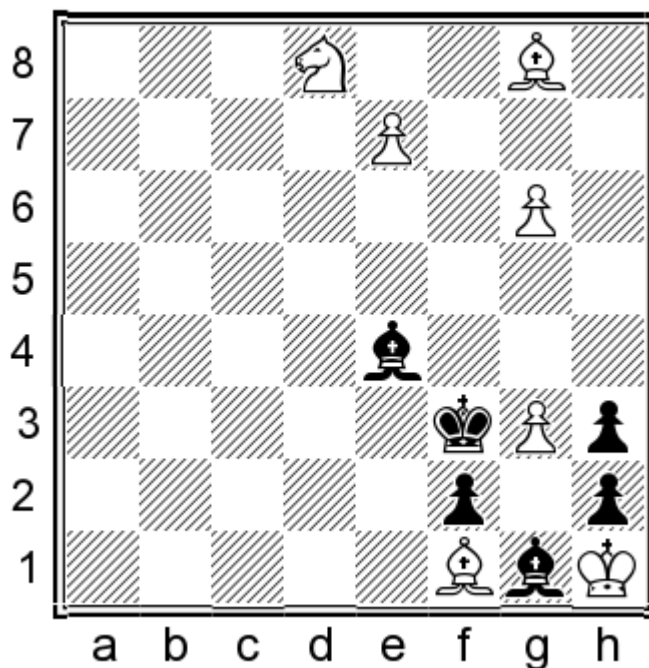
White to play and win

Black threatens mate, and so the knight promotion is forced.

1.d8N Bd5

Now White has to pay attention. After 2.g8Q Ke3+! 3.Qxd5 Black would be stalemated.

2.g8B!! Be4

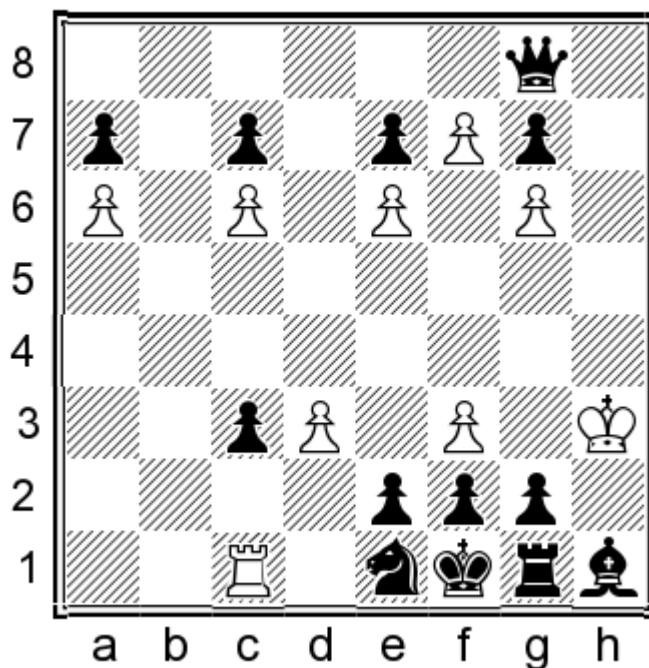


3.e8R!!

For the same reason White must promote his third pawn to a rook. No *Allumwandlung*, since the regular queen promotion fails, but still the study is quite beautiful because the starting position is so natural.

Lommer took up any new challenge eagerly. In 1934 he published the following study.

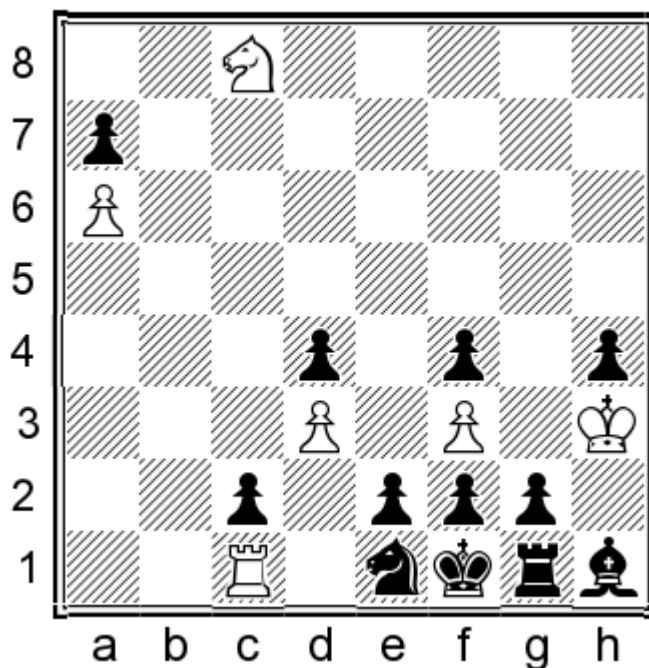
Lommer, 'Journal de Genève' 1934



White to play and win

The first move is not very elegant. In 1968, in an article entitled ‘The Phoenix principle in the End-Game’ in the endgame study magazine EG, Lommer returned to this study. On the task of realizing five knight promotions in one study he wrote: ‘...It confirmed my belief that the first promotion could only be achieved by the capture of a Black Rook or a Black Queen’. Now, more than four decades later, we can conclude that this still holds true.

**1.fxg8N c2 2.Nh6 gxh6 3.g7 h5 4.g8N! h4 5.Nf6 exf6 6.e7 f5
7.e8N! f4 8.Nd6 cxd6 9.c7 d5 10.c8N d4**



The first four knights have promoted without a problem. But now the troubles start. White has a prosaic win here with 11.Kg4: 11...h3 12.Kxf4 h2 13.Nb6 axb6 14.a7 b5 15.a8Q b4 16.Kg3 b3 17.f4! b2 18.Qf3 and mate next move. This problem is typical for studies with a record number of knight promotions: the construction around the black king has to be very solid. Otherwise White will be able to find his way to the black king with a regular queen promotion.

11.Nb6

The thematic path.

11...axb6 12.a7 b5 13.a8N

The fifth knight.

13...b4 14.Nb6 b3 15.Nc4 b2 16.Nd2#

Not only Lommer was working on knight promotions. In Russia, Liburkin was interested in manufacturing a correct and ultimate version. Lommer writes:

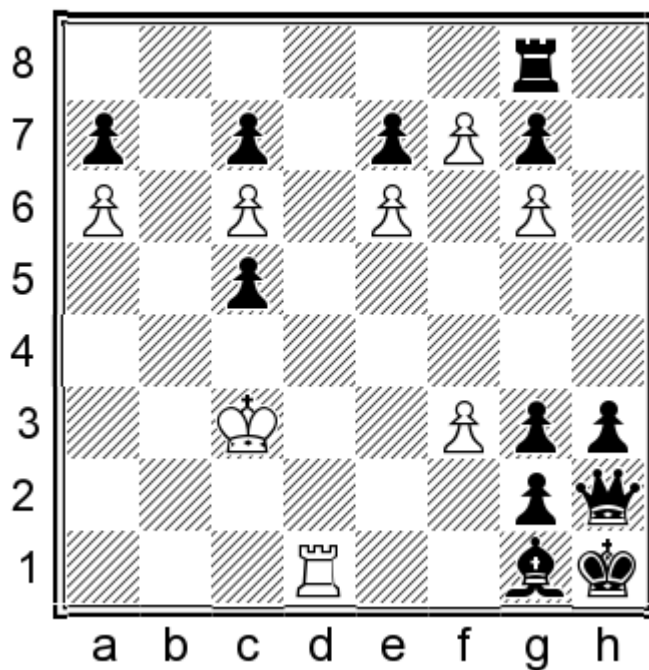
‘As far back as in 1935 I published a 5-fold effort in the Journal de Genève, but some time later I received a letter from the great

Russian composer M.S. Liburkin, telling me that he had found a "cook" and had corrected it for me. At that time I was busily engaged in the publication of 1234 Modern Endgame Studies and just had the time to replace it by Liburkin's under his own name. I thought I was doing this great composer justice, all the more as his composition was far superior to mine. Unfortunately I did this person a great disservice, for later, when I had more time, I checked it carefully, finding two bad cooks...'

This passage raises several questions. Firstly, Lommer's memory must have played tricks on him, since he had published his study one year earlier. It is interesting that in Stalinist times it should have been possible for a Russian to get hold of the Journal de Genève and also to react to it in a letter. In chess study circles, Russian emigrants must have done some courier work.

Somewhat puzzling is the fact that three studies by Liburkin have found their way into the original Dover edition of 1234 Modern Endgame Studies. Besides the incorrect study that Lommer also gives in his article, the other two look as follows:

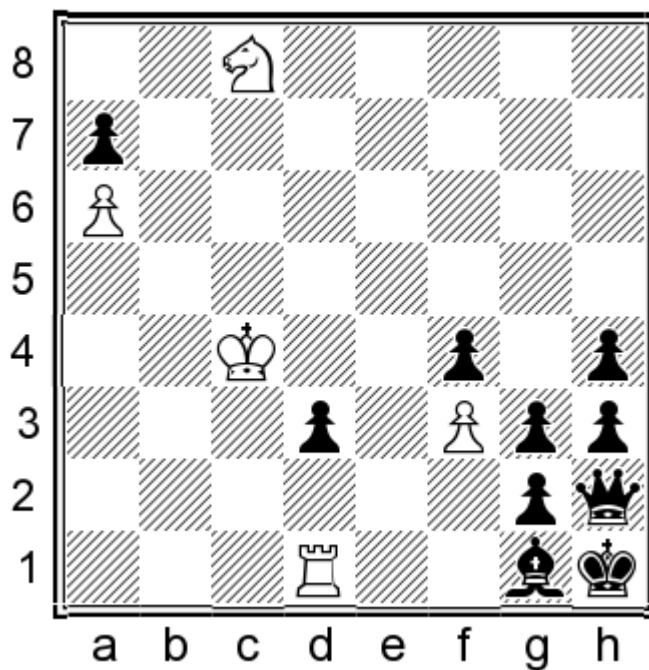
Liburkin 1938



White to play and win

Again White has to start with the ugly capture:

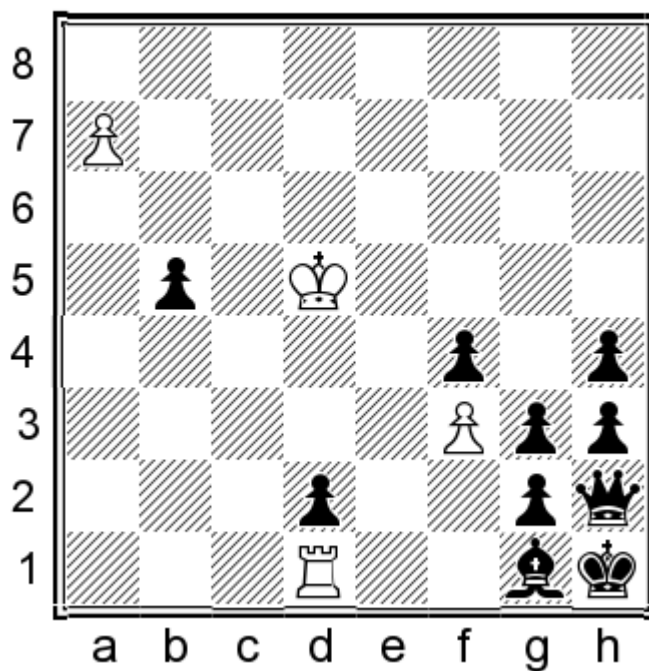
**1.fxg8N c4 2.Nh6 gxh6 3.g7 h5 4.g8N! h4 5.Nf6 exf6 6.e7 f5
7.e8N! f4 8.Nd6 cxd6 9.c7 d5 10.c8N d4+ 11.Kxc4 d3**



12.Kd5

There is a dual here. First 12.Nb6 also leads to the desired result. In this phase of a study such a dual is not really a big problem.

12...d2 13.Nb6 axb6 14.a7 b5



15.a8N!

The fifth knight!

15...b4 16.Nb6

The finale requires a delicate touch. The knight must be manoeuvred to c3, and there is only one route available.

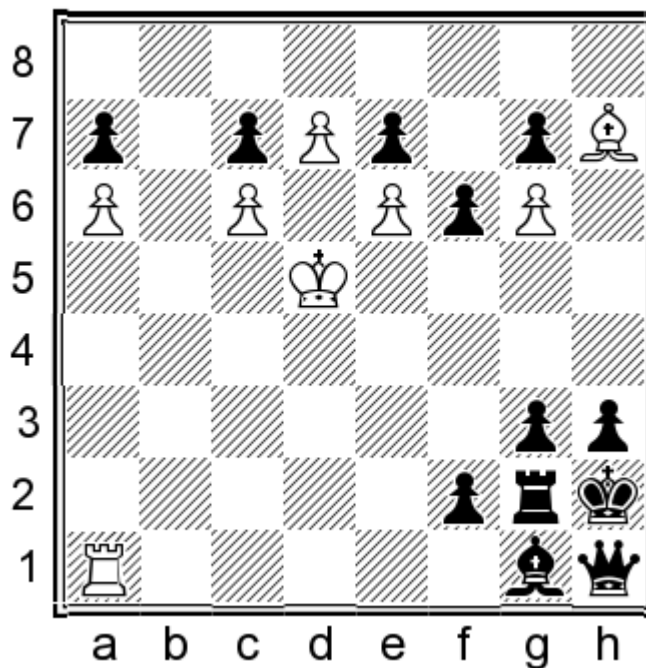
16...b3 17.Na4 b2 18.Nc3 b1Q 19.Rxb1 d1Q+ 20.Nxd1

The stalemate is prevented and Black has to move the bishop.

20...Be3 21.Nf2

Mate.

Liburkin 1938



White to play and win

Liburkin started this study with an admirable pawn move, namely 1.d8N. However, there is something wrong with the starting

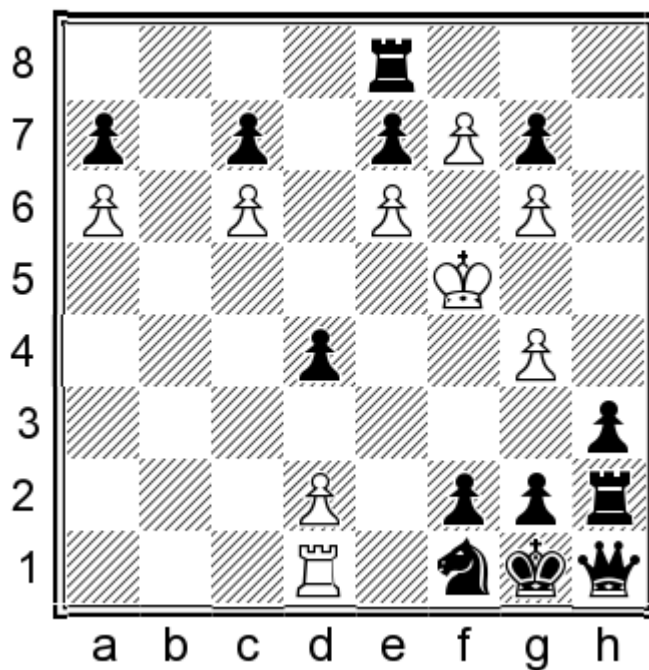
position. Just as in Novikov's study, the bishop on g1 has to be a promoted piece. And that is not all. When I showed this position to my wife Geertje, she immediately remarked that the position could not have been reached with regular play. Geertje is an expert on retrograde problems. She pointed out that Black still has all his pawns and can therefore not have a promoted piece. This makes the starting position illegal and the solution, however refined, irrelevant. 'Geertje is probably the only person to notice this after all these years,' Afek remarked. Yet it is possible that Lommer had discovered it as well. With uncommon fierceness, he devoted himself to the task of composing a study with five knight promotions. He describes this as follows:

'I tried to clinch these five elusive horses in 1945 and again in 1946 in the British Chess Magazine, but both versions were found incorrect. I cannot remember how many times I have tried to achieve this quest in the last 30 years(!), but each time I failed dismally. As I dealt with the knight promotions, I thought of the stubborn mule and continued working whenever I was in the mood.' These are all too familiar signs of addiction. If Liburkin's last study version had been correct, Lommer would probably not have gone to all this trouble.

Incidentally, Lommer wasn't the only one working on knight promotions. In 1935, the Dutch study composer Th.Kok published a study with four knight promotions, and eight years after that the Finn Veikko Karhia followed suit with the same number. I won't give these studies, as they do not add anything significant to the one by Novikov.

Lommer's last attempt looked as follows:

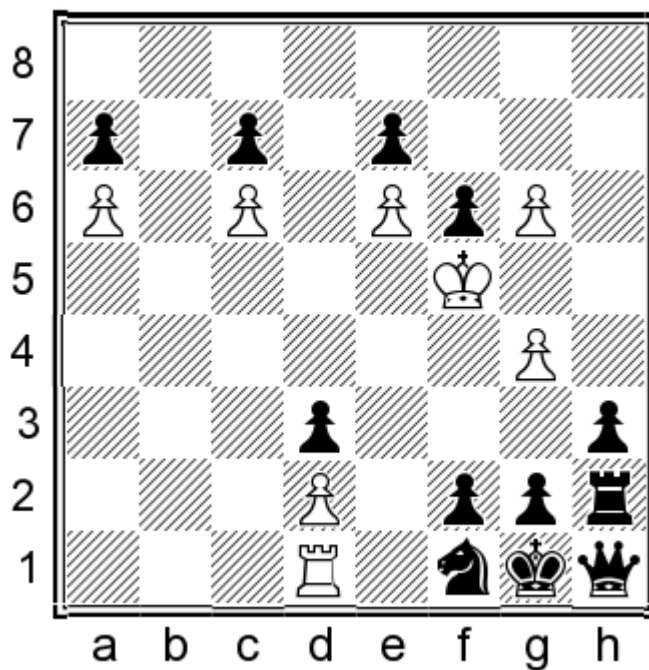
Lommer, 'Szachy' 1965



White to play and win

The pawns are again poised to promote.

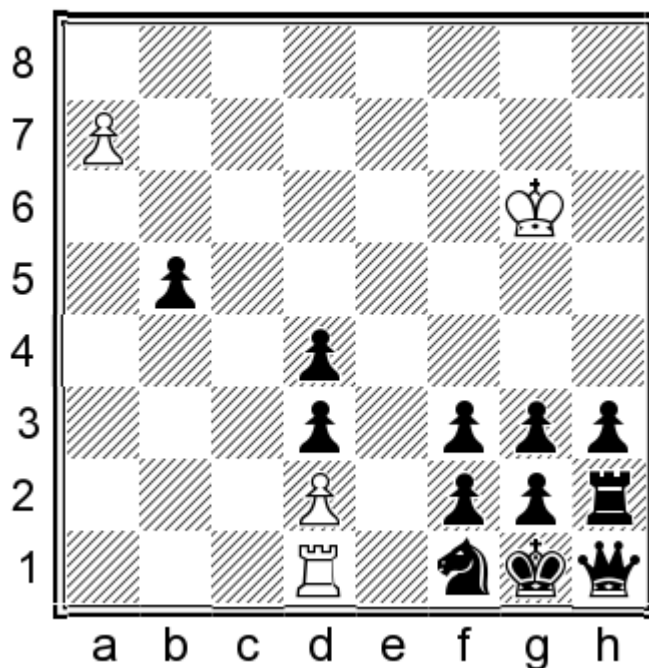
1.fxe8N d3 2.Nf6 gxf6



3.g5

Unfortunately, there is already a second solution here. With 3.Kf4 White achieves the same result.

3...fxg5 4.g7 g4 5.g8N! g3 6.Nf6 exf6 7.Kg6 f5 8.e7 f4 9.e8N! f3 10.Nd6 cxd6 11.c7 d5 12.c8N! d4 13.Nb6 axb6 14.a7 b5



15.a8N!

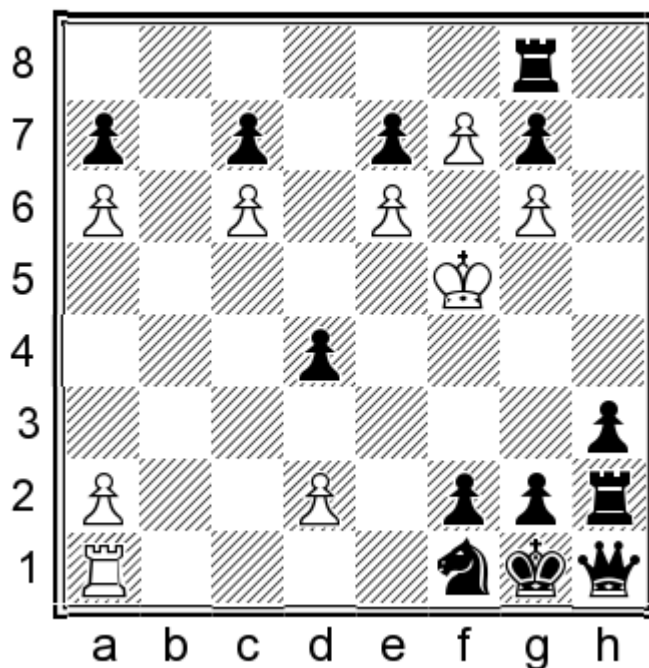
The fifth knight.

15...b4 16.Nc7

And the knight will make its way to f3.

A dual on move 3 – this significantly devaluates the study. There is, however, a fully correct study by Lommer with four knight promotions, where the final promotion is to an ordinary queen. The fifth knight is hidden in a side variation – the ‘try’, as it is called in study circles.

Lommer, ‘Szachy’ 1965



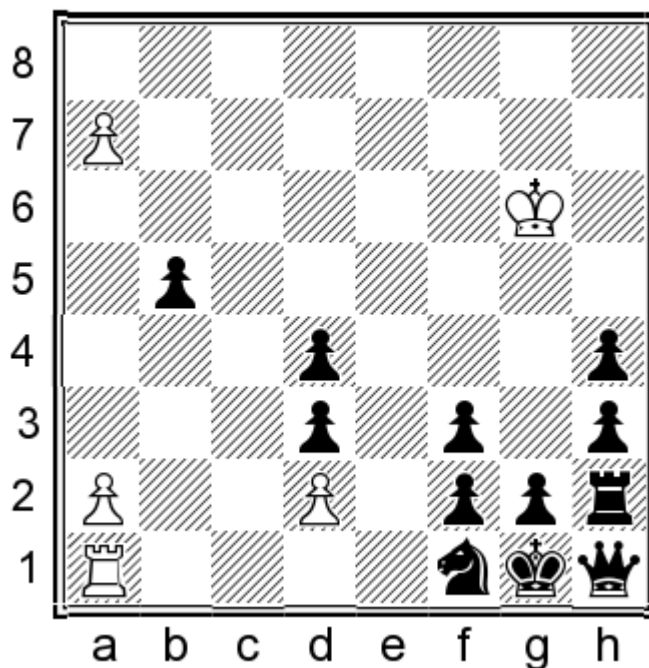
White to play and win

The solution develops quite schematically.

1.fxg8N d3 2.Nh6 gxh6 3.g7 h5 4.g8N! h4 5.Nf6 exf6 6.Kg6

The king again steps aside to yield passage to a black pawn.

**6...f5 7.e7 f4 8.e8N! f3 9.Nd6 cxd6 10.c7 d5 11.c8N! d4 12.Nb6
axb6 13.a7 b5**



14.a8Q

Unfortunately, 14.a8N is insufficient. After the continuation 14...b4 15.Nc7 b3 16.Ne6 bxa2 White would not be in time to give mate.

14...b4 15.Qxf3 b3 16.Qg4!

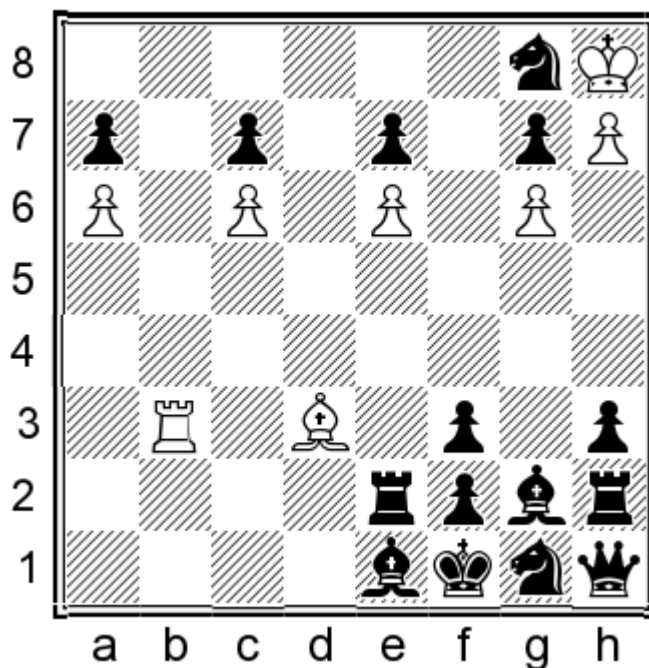
A pretty quiet move.

16...bxa2 17.Rxf1+ Kxf1 18.Qd1#

Thus, in 1965 we could take stock: only one Liburkin study with five knight promotions had stood its ground.

Six years after that, the Norwegian study composer Jarl Ulrichsen created a study with five knight promotions, without duals.

Ulrichsen, 'Stella Polaris' 1971



White to play and win

The pawns are standing in line, like narrow gates, which the Phoenix knights can dance through. The main line is clear and contains no surprises:

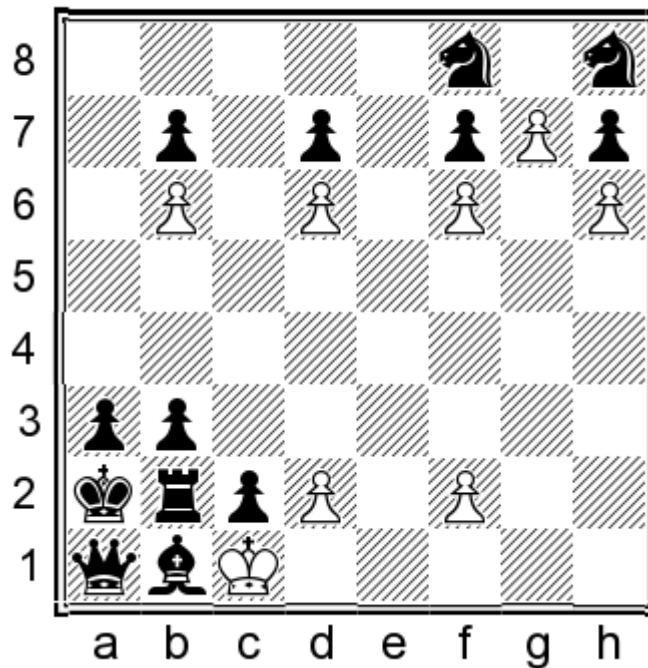
1.hxg8N Ba5 2.Rb1+ Be1 3.Nh6 gxh6 4.g7 h5 5.g8N! h4 6.Nf6 exf6 7.e7 f5 8.e8N! f4 9.Nd6 cxd6 10.c7 d5 11.c8N! d4 12.Nb6 axb6 13.a7 b5 14.a8N! b4 15.Nb6 b3 16.Nc4 b2 17.Nd2#

It was a very heavy construction that Ulrichsen used; all black pieces are on the board without joining the play. I am not sure if this was what Lommer had been searching for.

More than a decade later, the Ukrainian study composer Mikhail Zinar became involved. However, his first two versions in 1983 and 1984 contained irritating duals. This must have discouraged Zinar, who was a great expert on pawn endings. For many years he stopped

working on the theme. Only in 2008 did he come up with two fully correct studies with five knight promotions. The first was published in the Ukrainian Problemist, the second in the Uralski Problemist.

Zinar, 'Ukranian Problemist' 2008



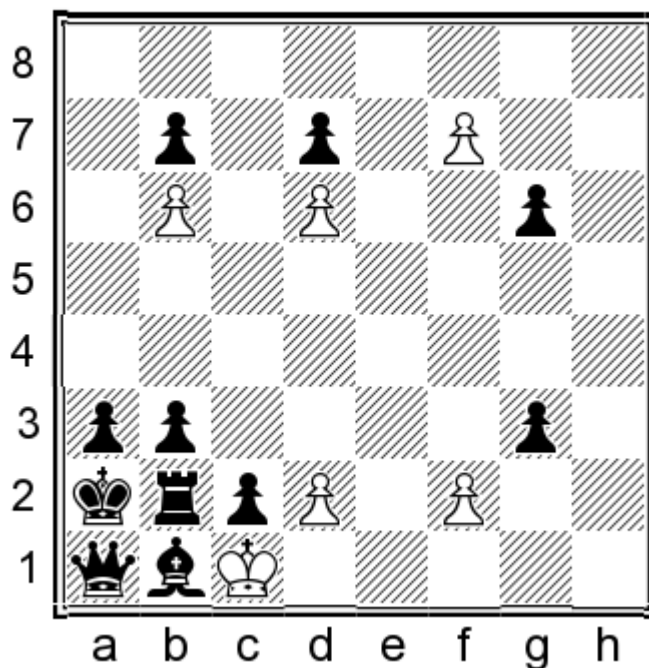
White to play and win

The construction in the lower left-hand corner is the same as Novikov's. On the construction in the upper right-hand corner, Zinar remarked in an article in the January 2011 issue of EG: 'Top right is the shape H – Cyrillic "N" for Novikov! – just the right dedication.'

1.gxf8N

The correct knight promotion. Now Black must move his remaining knight.

1...Ng6 2.Nxg6 hxg6 3.h7 g5 4.h8N g4 5.Ng6 fxg6 6.f7 g3



7.fxg3

White has to spend a tempo to take the pawn.

**7...g5 8.f8N g4 9.Ne6 dxe6 10.d7 e5 11.d8N e4 12.Nc6 bxc6
13.b7 e3 14.dxe3**

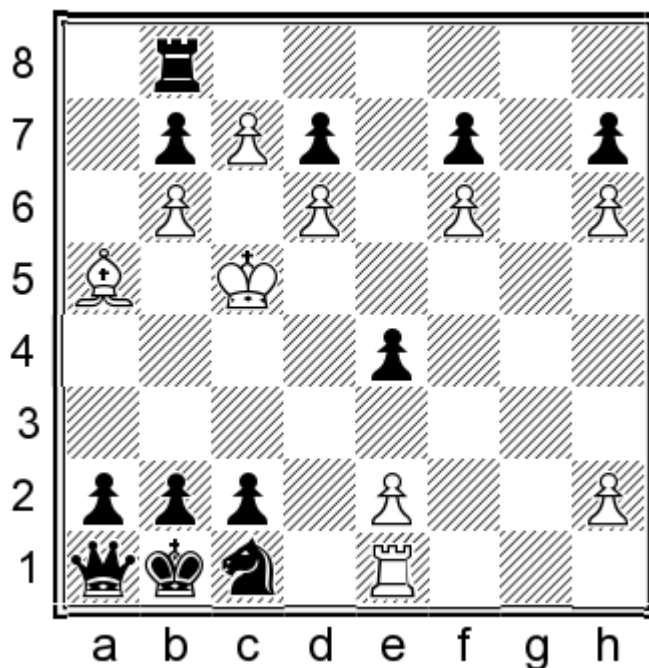
Again a time-out, to take the pawn.

14...c5 15.b8N

And the knight will give mate on b4.

Here is number two:

Zinar, 'Uralski Problemist' 2008



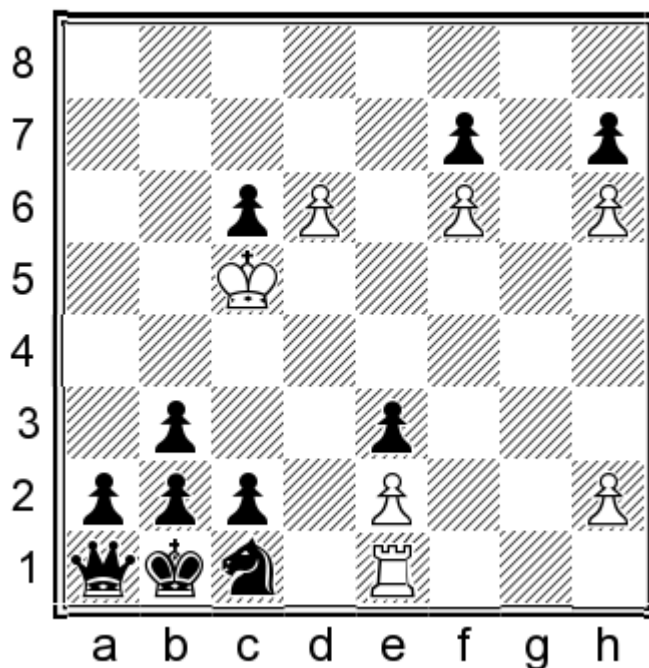
White to play and win

In this study, White's handling of his bishop is quite subtle.

1.cxb8N e3 2.Na6 bxa6 3.Bb4!

This is the right square for the bishop.

3...a5 4.b7 axb4 5.b8N! b3 6.Nc6 dxc6



7.Kb6

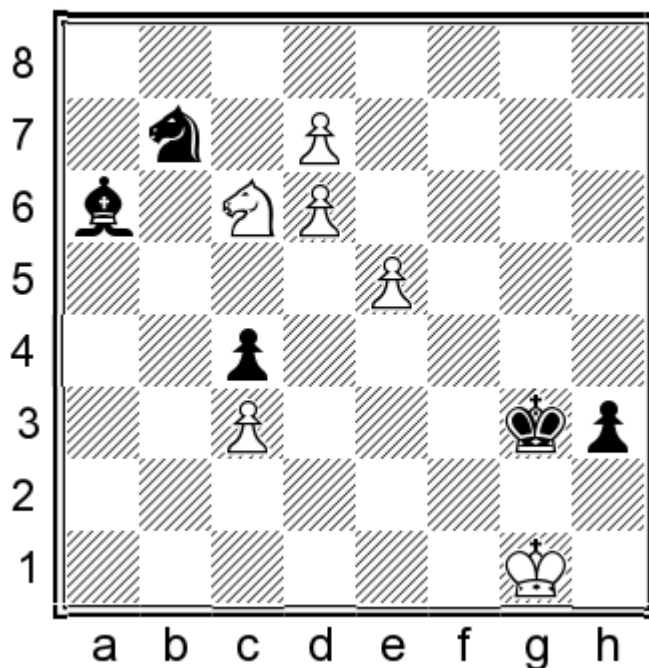
The king has to step out of the way again.

7...c5 8.d7 c4 9.d8N! c3 10.Ne6 fxe6 11.f7 e5 12.f8N! e4 13.Ng6 hxg6 14.h7 g5 15.h8N!

The fifth knight. Now White can again choose his route towards the mate on a3 or c3.

All those 30 years Lommer had been searching for this! Zinar also needed a quarter of a century to get the job done. Now, three studies with five knight promotions had been made without duals. But still Zinar wasn't satisfied and considered that a great number of knight promotions on the same promotion square could be realized, drawing inspiration from an old study.

Shmulenson, 1970



White to play and draw

The three white centre pawns will promote to knights.

1.e6 Nd8!

The best try.

An attractive side variation was 1...Bb5 2.Ne5 h2+ 3.Kh1 Ba4 4.e7 Bc2 5.Nd3! (in order to control the e4-square after promotion) 5...Ba4 6.Ne5 with move repetition.

2.e7!

Not 2.Nxd8? in view of 2...Bb5, and Black controls the board – White will be mated within a couple of moves.

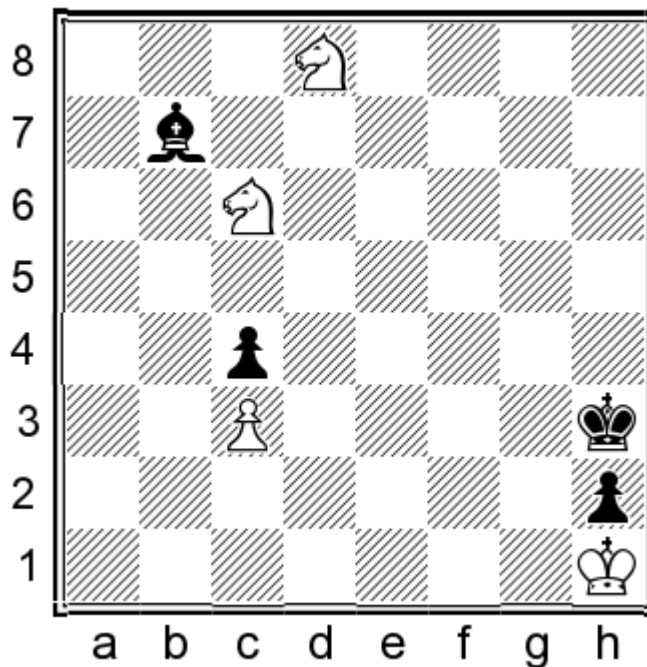
2...h2+ 3.Kh1 Bb7 4.exd8N!

The first knight promotion.

4...Ba8 5.Nb7 Bxb7 6.d8N

The second...

6...Ba8 7.d7 Kh3 8.Nb7 Bxb7 9.d8N



And the third.

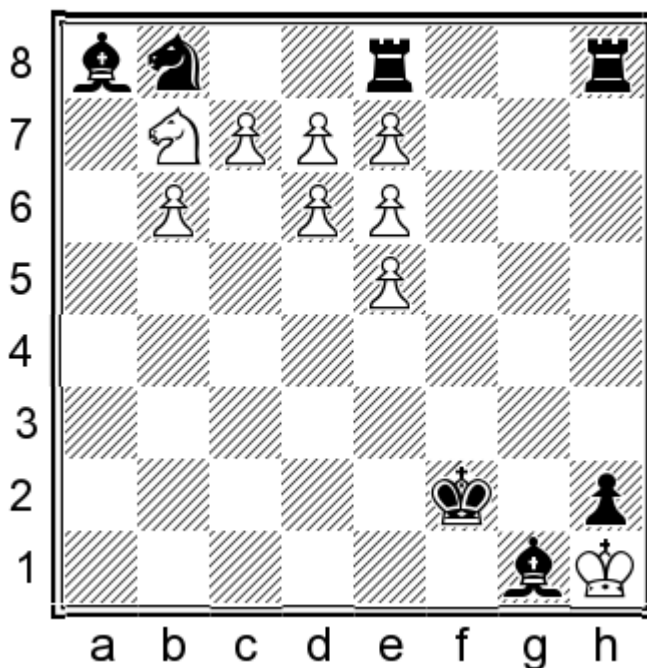
9...Ba8 10.Nb7 Bxb7

Stalemate.

For this study, Shmulenson received first prize in the 7th USSR Team Championship. The play is varied and interesting – only the number of knight promotions can be improved.

The Russian endgame composer Sochniev achieved four promotions, but Zinar managed to surpass that.

Zinar/Didukh, ‘EG’ 2009



White to play and draw

White has an army of seven pawns. Of these, only the b-pawn will not promote to a knight.

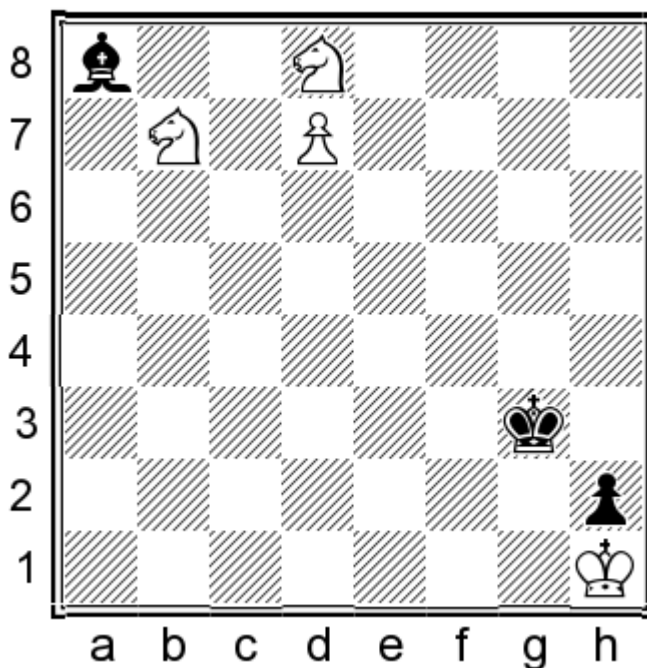
1.d8N Rxd8 2.exd8N Rxd8 3.cxd8N Nc6

The first three knight promotions have taken place. Now White advances his pawn front in order to achieve the next three as well.

4.e7 Nxd8 5.exd8N Kg3 6.e6

Another pawn on its way to a knight promotion.

6...Bxb6 7.e7 Bxd8 8.exd8N Kh3 9.d7 Kg3



10.Nc6

Here the Phoenix Principle makes its appearance. White sacrifices a knight in order to clear the promotion square for the next knight.

10...Bxb7 11.d8N!

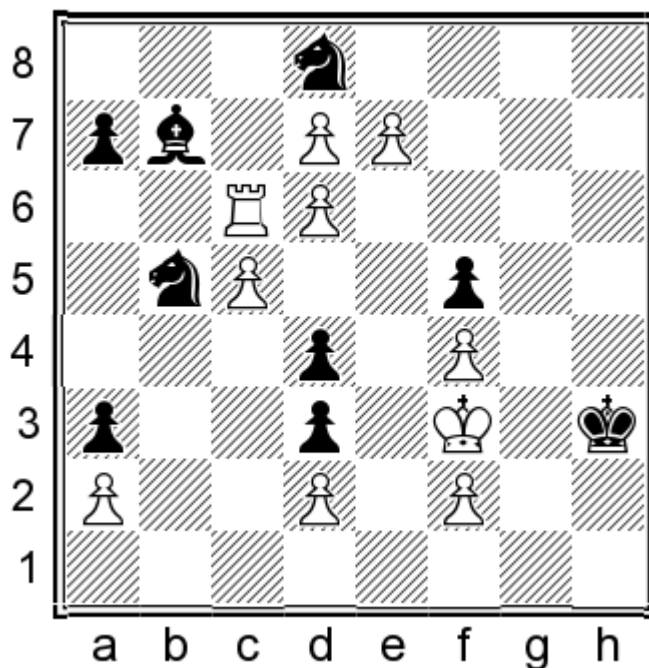
The sixth knight.

11...Ba8 12.Nb7 Bxb7

Stalemate.

Zinar made this study together with Sergey Didukh, a brilliant study composer from Ukraine. The number of knight promotions in this study is unparalleled. Yet it makes a somewhat artificial impression, especially since five of these six knight promotions are captures. Doubtlessly for this reason, Zinar started working on a study that would make a more natural impression. This is what he came up with:

Zinar 2010



White to play and draw

Again the battle will take place on the long diagonal.

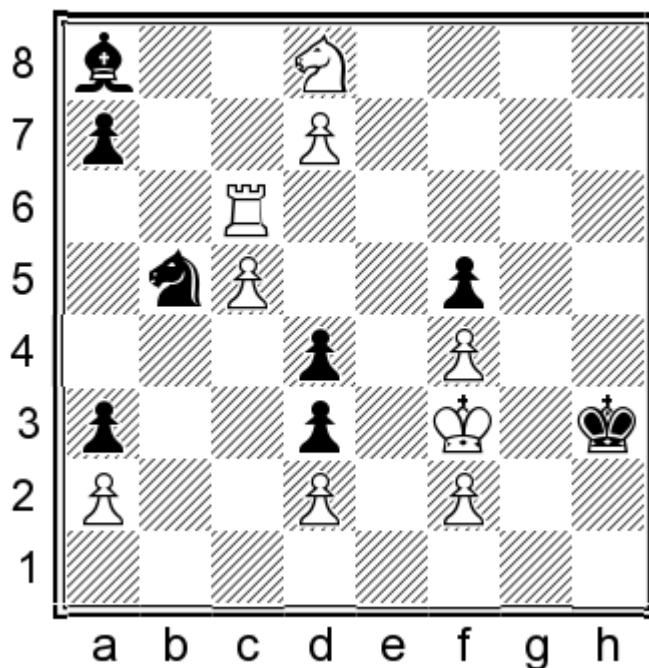
1.exd8N Ba8 2.Nb7

The first Phoenix knight is about to rise.

2...Bxb7 3.d8N! Ba8

Maintaining the tension on the long diagonal.

4.d7



4...Nd6

Black does all he can to eliminate the stalemate threat. Now the thematic 5.Nb7 is met by the winning 5...Nxb7. Therefore White must first take the knight.

5.cxd6 Kh2

Black can only wait.

6.Nb7 Bxb7 7.d8N! Ba8 8.d7 Kh3 9.Nb7 Bxb7 10.d8N! Ba8 11.Nb7

After the fourth knight promotion comes the fourth thematic knight sacrifice.

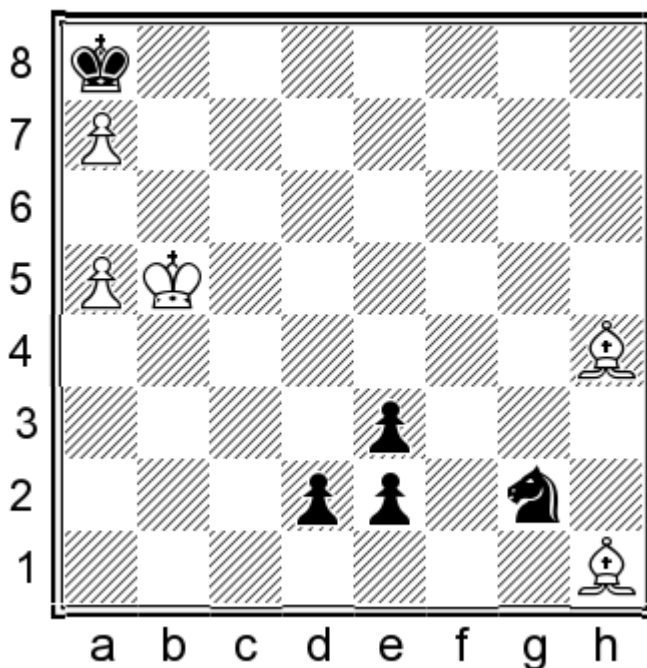
11...Bxb7

Stalemate.

There is a difference between minor promotions on one and the same square and minor promotions on different squares. The former serve as protecting moves, the latter as preparation for avoiding stalemate.

So far, a total of 63 knight promotions have been seen here. In all of them, except in Shmulenson's study, one element has been lacking: the lively play that is (usually) the hallmark of a good study. The following study by Zinar will please true study lovers.

Zinar 2010



White to play and win

It is clear that White must support his foremost a-pawn. He has a choice between two king moves.

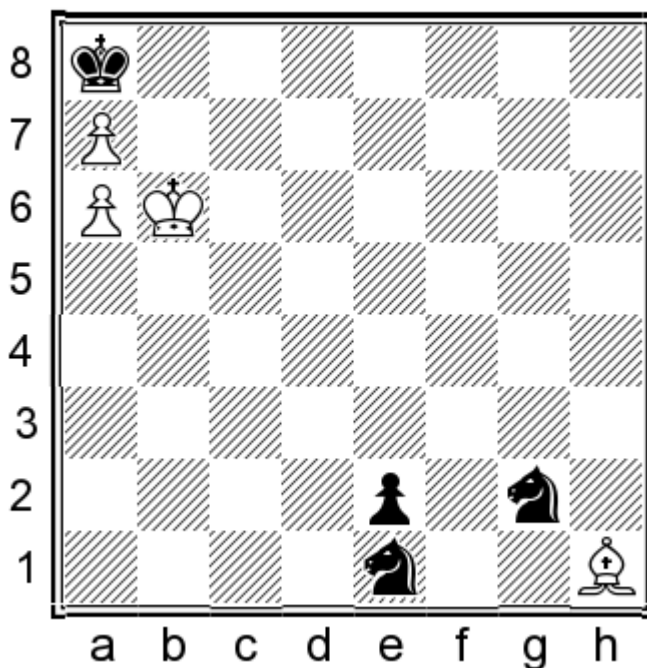
1.Ka6

Three moves further on we will see why this is the only winning move.

1...e1N

The knights make an appearance again, but this time they won't save Black.

2.Bxe1 dxe1N 3.Kb6 e2 4.a6



A situation of mutual zugzwang has arisen. Black is forced to make a thematic knight sacrifice.

4...Nf3 5.Bxg2 e1N 6.Bh3!

Now that Black does not have any dangerous passed pawns left, the white bishop can leave the long diagonal, and head for b7.

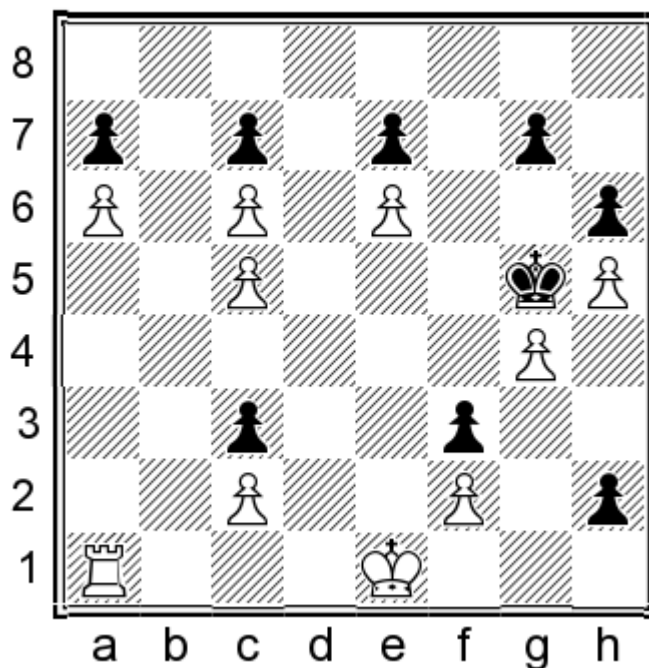
6...Nd3 7.Bc8 Nc5 8.Bb7+

And mate next move.

For this study Zinar received the special prize in the traditional Moscow Tourney.

Even prettier is the study that Zinar made one year later. He returned to the theme of the scattered knight promotions.

Zinar 2011



White to play and win

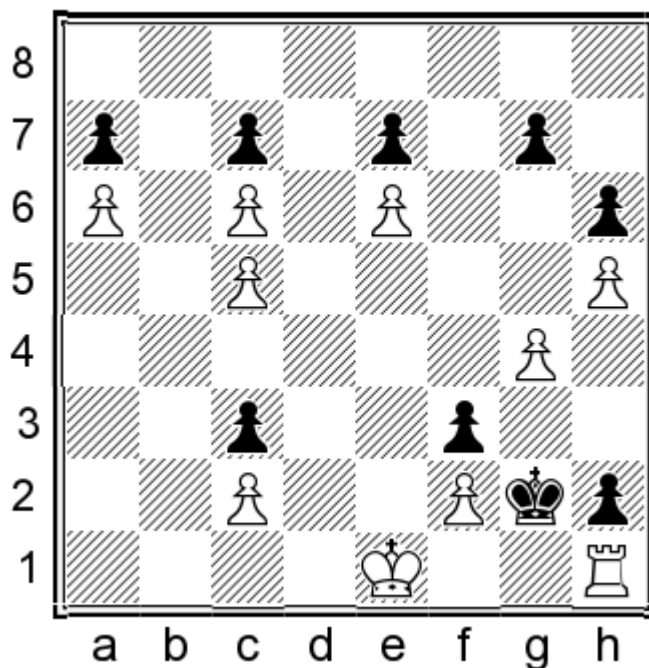
There's only one way to stop the black h-pawn:

1.0-0-0 Kh4

The best chance. After 1...Kxg4 2.Rh1 Kh3 3.Kd1 Kg2 4.Ke1 Kxh1 5.Kf1 g5 6.hxg6 h5 7.g7 h4 8.g8N! h3 9.Nf6 exf6 10.e7 f5 11.e8Q f4 12.Ke1 Kg2 13.Qg6+ White wins easily.

This winning method is not possible when the white g-pawn remains on the board.

2.Rh1 Kh3 3.Kd1 Kg2 4.Ke1



The white king returns in time to lock up his black colleague in the corner.

4...Kxh1 5.Kf1 g5 6.hxg6 h5 7.g7 h4 8.g8N!

The first knight promotion. There are no surprises in the remainder of the solution.

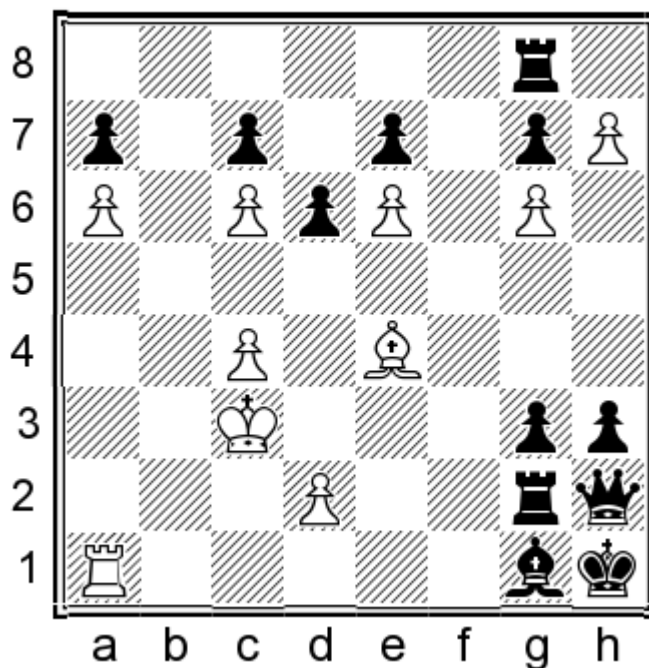
8...h3 9.Nf6 exf6 10.e7 f5 11.e8N f4 12.Nd6 cxd6 13.c7 dxc5 14.c8N! c4 15.Nb6

And wins.

With his last promotion White will get a queen, as in Herland's study.

In this study Zinar completed the so-called 'Valladao Task'. The requirements for this task are that the main line of the study should contain all 'special' chess moves: castling, an en passant capture and underpromotion. See also Chapter 14. An incredible achievement. What could I add to all this knight violence? It might be interesting to try and make a study with four knight promotions, rounded off with a bishop promotion. The result looks like this:

Timman 2011



White to play and win

I didn't manage to avoid the shortcoming of the ugly capture on the first move either.

1.hxg8N d5 2.Bf3

White cannot take the pawn. Moreover, the bishop has to stay on the long diagonal in order to prevent Black breaking loose.

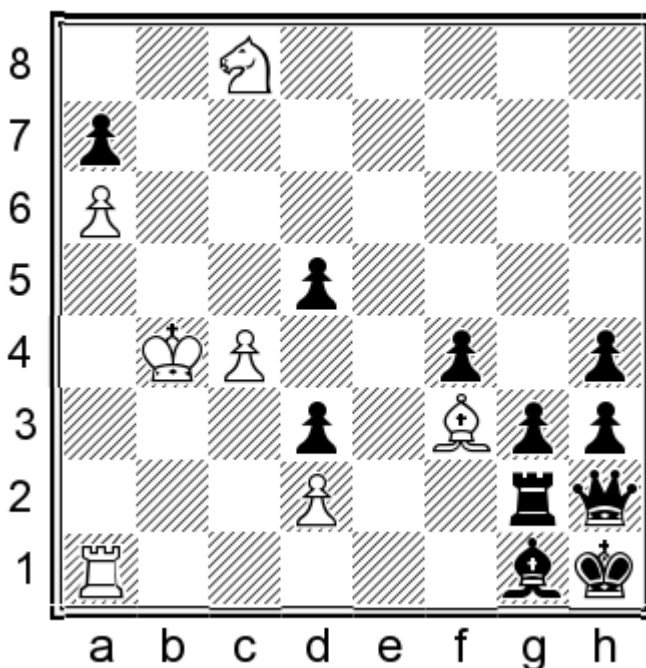
2...d4+

In reply to the alternative 2...dxc4 White has a clear-cut winning method: 3.Kc2 c3 4.Rd1 cxd2 5.Nh6 gxh6 6.g7 h5 7.g8N! h4 8.Nf6 exf6 9.e7 f5 10.e8N! f4 11.Nd6 cxd6 12.c7 d5 13.c8N d4 14.Kb1 d3 15.Nb6 axb6 16.a7 b5 17.a8Q (or B) 17...b4 18.Be4 b3 19.Bxd3 b2 20.Bf1! Be3 21.Bxg2#. This scheme, where a bishop is used to temporarily block the back rank, we will also encounter in the main variation.

3.Kb4!

Only much later will it become clear why this is the only square for the king.

3...d3 4.Nh6 gxh6 5.g7 h5 6.g8N! h4 7.Nf6 exf6 8.e7 f5 9.e8N! f4 10.Nd6 cxd6 11.c7 d5 12.c8N!

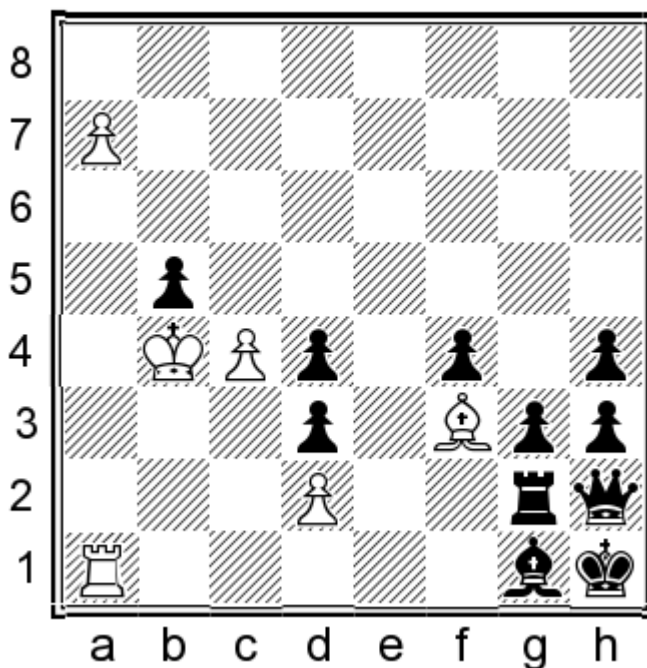


So far things have developed schematically. Now Black has a choice.

12...d4

The alternative was 12...dxc4. In that case White wins by 13.Nb6 c3 14.Kc4! cxd2 15.Kxd3 axb6 16.a7 b5 17.a8Q b4 18.Be2! and White will again give mate by bringing his bishop to f1.

13.Nb6 axb6 14.a7 b5



15.a8B!!

The only winning move. After 15.a8Q? bxc4 16.Be4 f3! White wouldn't be able to give mate in time. The problem is that the pawn on d3 is protected, so that the white bishop cannot reach the f1-square in time. Also, here it becomes clear why the white king had to be played to b4. If it were on b2 or b3, then Black would now react with 15...b4, after which the draw would be unavoidable.

15...bxc4 16.Bae4

The point of the bishop promotion. The newly-promoted bishop is on its way to f1 in order to give mate.

16...c3 17.Bxd3 c2

With 17...cxd2 Black could have postponed the mate for one move, but the text demands more of White.

18.Bf1 d3 19.Kb3 (19.Ka4, 19.Kb5, 19.Kc4)

The king has to move to a light square, otherwise Black would give a deadly bishop check.

19...c1Q 20.Rxc1 Bd4 21.B1xg2

Mate.

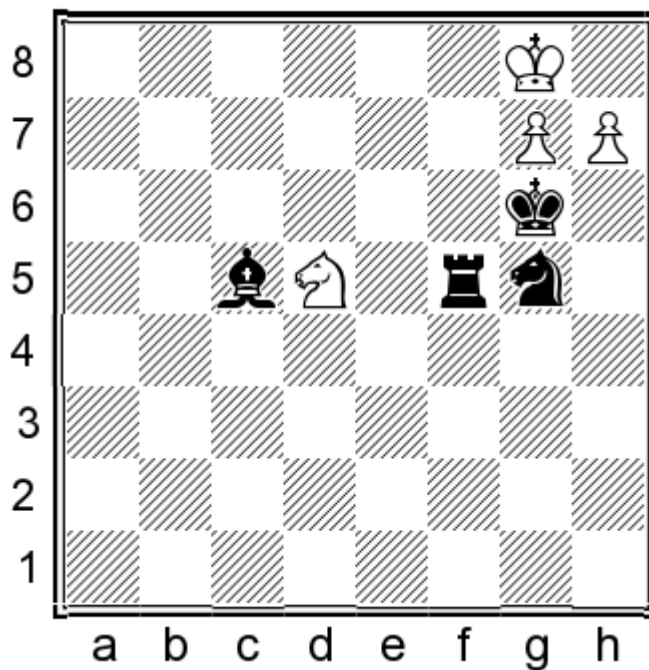
On this study I worked intensively for approximately twelve hours.

Chapter 6

Bishop promotions

In the preceding chapter, I showed how a bishop promotion can serve to avoid stalemate. This type of promotion can also have the opposite effect: supporting self-stalemate. Let me show you a modest example.

Timman 2011



White to play and draw

The white king is in the way of the g-pawn's promotion, and it also threatens to be caught in a mating net. For example, White would be mated by force after 1.h8Q? Rxd5.

1.Nf4+! Rxf4

Otherwise White will queen his h-pawn.

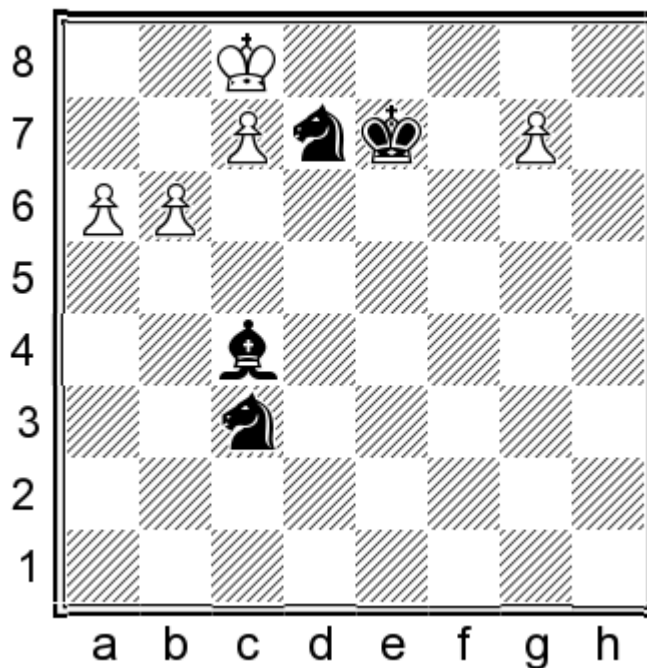
2.h8B!

And despite his huge material superiority (or maybe because of it!) Black cannot avoid stalemate.

Incidentally, White could not play 1.Ne7+?, as then Black wins with 1...Bxe7 2.h8B Bf6! and the stalemate threat is eliminated.

Of course, this can be achieved in a much more elegant way.

Rusinek, 'New Statesman' 1971



White to play and draw

Here, too, the white king is in grave danger. Especially the c-pawn is in the way.

1.a7 Ba6+ 2.b7 Ne4

Threatening mate in one.

3.g8N+

The first minor promotion.

3...Ke8 4.Nf6+

This was what it was all about. The knight that threatened to give mate is deflected.

4...Nexf6

After 4...Ndxf6 5.Kb8 White would manage to bring his king into safety.

5.a8B!!

A very elegant solution to the problems in the position. Black must now try to eliminate the stalemate threat and weave new mate threats into the position.

5...Ne5

On 5...Bf1 White draws with 6.b8N!.

6.Kb8 Nc6+ 7.Kc8 Bf1

Threatening to give mate from the other side. Now 8.b8N? wouldn't do on account of 8...Ne7+ 9.Kb7 Bg2+ 10.Ka7 Nc8+ and the promoted bishop is lost.

8.b8R!!

A real treat of minor promotions. This rook too will serve to construct a self-stalemate.

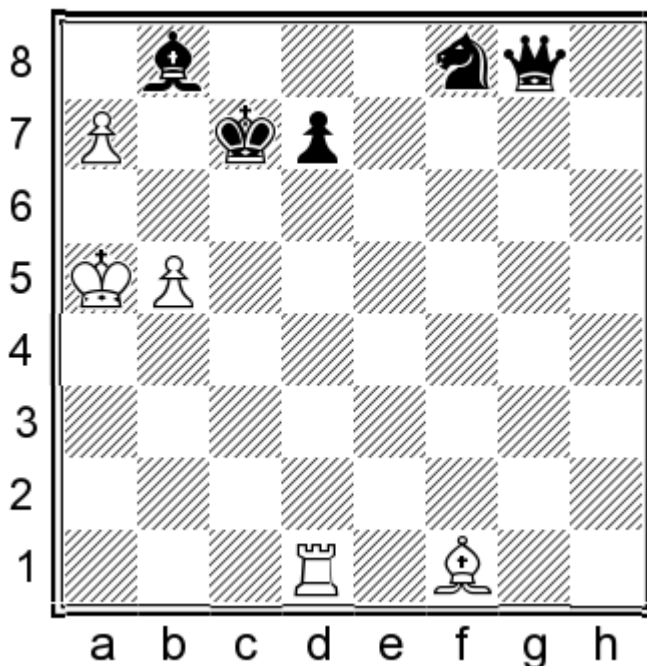
8...Ba6+ 9.Rb7! with a draw.

Black has no time to threaten mate since neither of the two promoted pieces can move, and nor can the white king.

Not surprisingly, with this study Rusinek won first prize in the New Statesman tourney.

It is even more elegant if the bishop promotion takes place at a moment when the self-stalemate is not yet in sight.

Gurvich, 'Trud' 1928



White to play and draw

Again, White has to compete against a large material superiority. At this point it is hard to imagine that this position will culminate in stalemate.

1.b6+ Kb7 2.Bc4!

A strong bishop sacrifice which Black has to accept, as otherwise a check on d5 follows.

2...Qxc4 3.Rxd7+!

This rook sacrifice Black has to accept as well, since after 3...Ka8 4.axb8Q+ Kxb8 5.Rb7+ White easily holds the draw.

3...Nxd7 4.a8B+!!

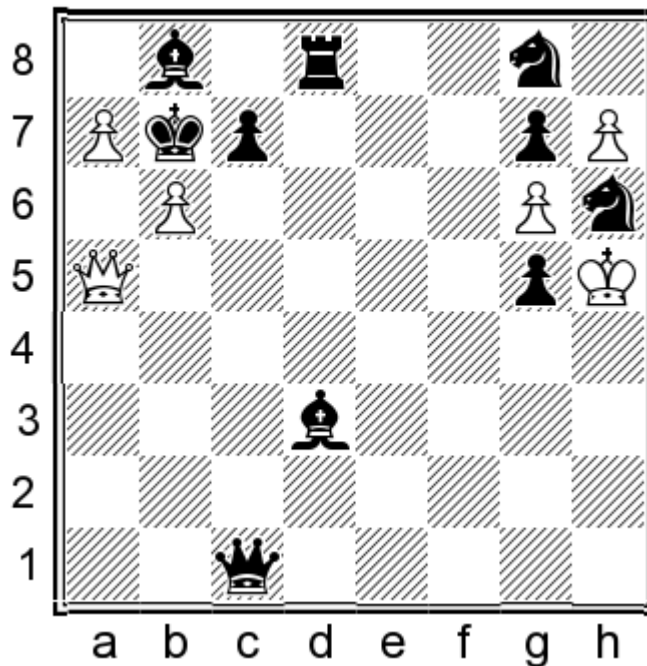
A tremendous surprise. Insufficient was 4.a8Q+ in view of 4...Kc8 and Black wins.

4...Kc8 5.b7+

The point. The bishop is walled in after all. Wherever the king goes, White is stalemated.

This same principle can be doubled.

Hurtig, 'Schackvarlden' 1943



White to play and draw

White starts on the queenside.

1.a8B+! Kc8 2.b7+

The first bishop is walled up.

2...Kd7 3.Qd5+

The battle scene is moved to the kingside.

3...Ke7 4.Qe5+ Kf8 5.Qxg7++!

This queen sacrifice prepares the second bricking-up.

5...Kxg7 6.h8B+!

The second bishop appears on the board.

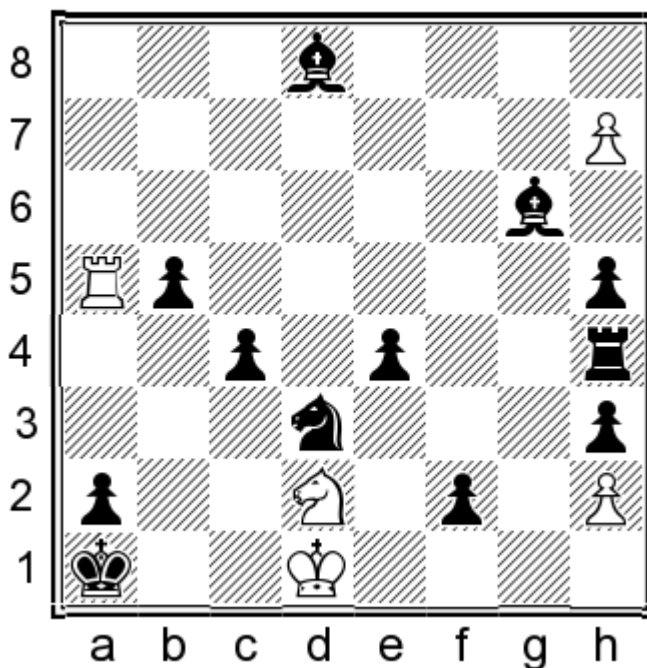
6...Kf8 7.g7+

With stalemate on the next move.

For this study A.Hurtig received second prize in the tourney of the Swedish chess magazine.

Sometimes the self-stalemate is nowhere in sight at the moment of the bishop promotion.

Rokirovkin 2009



White to play and draw

Black has a huge material superiority, but his king is in danger. It is clear that White has to promote his pawn:

1.h8B+!

Why not 1.h8Q+ ? The answer to this question will be revealed at the end of the study.

1...Nb2+ 2.Kc1

Threatening mate. Now Black has to drive the white king away from its current position with checks.

2...f1Q+ 3.Nxf1 Bg5+ 4.Ne3!

Keeping the b1-h7 diagonal closed for the time being.

4...Bxe3+ 5.Kc2 Bd4!

Black sacrifices his bishop in order to open the diagonal.

6.Bxd4 e3+ 7.Kc1 c3

Now it becomes clear why White couldn't promote to a queen. In that case he would have been hopelessly lost in this position.

8.Bxc3 Rb4

8...Rc4 would have been met by 9.Rxa2+ Kxa2 with stalemate. After the text move, Black threatens to win with 9...Rb3.

9.Ra3!

Preventing this.

9...Rc4

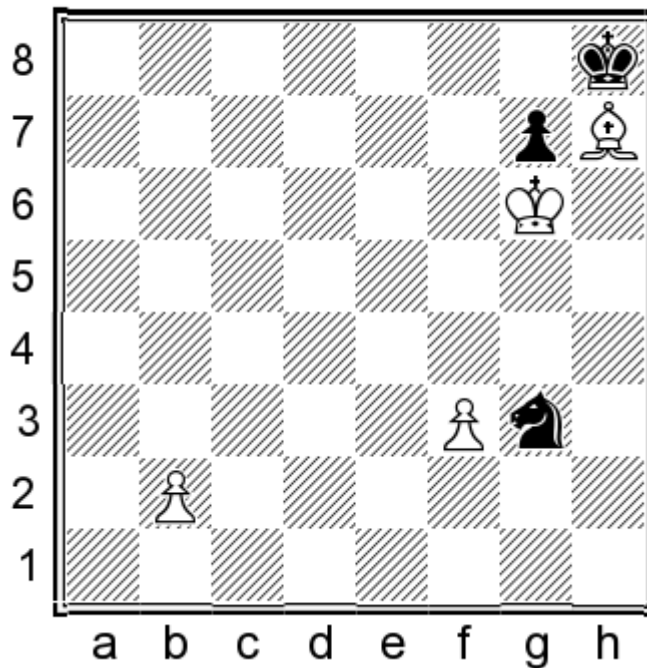
There is nothing better.

10.Rxa2+ Kxa2

Stalemate.

In the great majority of studies, bishop promotions serve to prevent stalemate. This theme does, however, allow for a lot of choice. The following study by Benkö is very good.

Benkö, 'Magyar Sakkélet' 1988



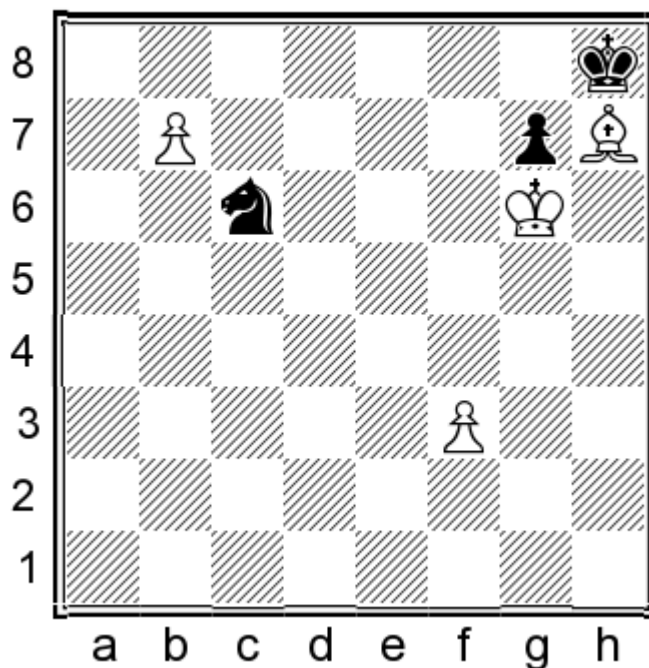
White to play and win

In this miniature study White has trouble freeing his bishop. He has to start pushing his passed pawn.

1.b4 Ne2

The only way for the knight to try and stop the b-pawn. After 1...Ne4 2.Kf5! Nd2 3.Bg6 Nxf3 4.Ke4 the knight would be dominated, while the black king is too remote to stop the b-pawn.

2.b5 Nd4 3.b6 Nc6 4.b7



Black has managed to stop the promotion of the b-pawn, but that does not mean his troubles are over. After 4...Nb8 5.f4 Nd7 6.f5 Nb8 7.f6 gxf6 8.Kh6 f5 9.Bxf5 the white bishop would be freed, and White wins by bringing his king to d6.

4...Nd8!

Black is playing for stalemate.

5.b8B!

The white pawn has travelled the entire road from starting square to promotion square. This motif is called the Excelsior Principle.

Although White now has a big material advantage, the win is far from easy. His king's bishop is still walled in.

5...Nc6 6.Bg3!

The only square for the bishop. On 6...Ne5+ White can now play 7.Kf5 with a win.

6...Ne7+ 7.Kf7 Ng6!

Another fantastic resource. White cannot take the knight.

8.Bg8! Ne5+ 9.Ke8!

And wins.

For this study Benkö received second prize in the tourney of the Hungarian chess magazine.

If I think of bishop promotions, I am immediately reminded of Vasily Smyslov.

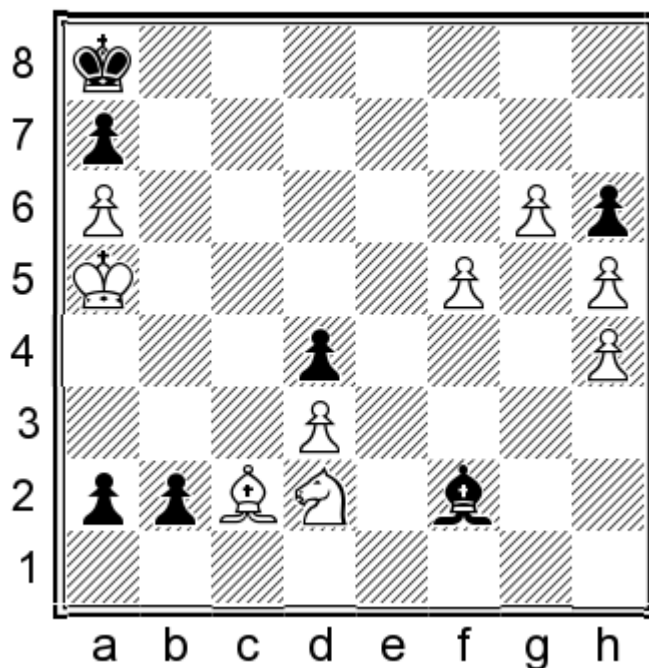
Smyslov as an endgame composer

It is a striking fact that Smyslov started composing studies at a very young age. This craft lay dormant during the time of his great successes. It was only at an advanced age, when blindness stopped him playing practical games, that he picked it up again. For 60 years he had produced very little in the area of endgame studies.

In 2001 a little pocket-sized booklet called *Moi Etiudy* was published. It contains 57 studies, 48 of which are from after 1998. I got the booklet, autographed by Smyslov himself, via Genna Sosonko. 'To dear Jan Timman,' said the inscription. I was struck by the steadiness of his handwriting; it had not been affected by his blindness. In 2005 a second edition appeared, containing a total of 114 studies. This means that in four years he had made exactly another 57 studies.

Curiously, *Moi Etiudy* does not contain the first study that Smyslov had made back in 1936, a year after his well-known game against Gerasimov. That study looks as follows:

Smyslov, '64' 1936



White to play and win

1.Bb1! a1Q+ 2.Kb5 Bg3 3.g7 Bb8 (!) 4.g8B!! Bf4 5.Bga2 Bxd2 6.f6 Bf4 7.f7 Bd6 8.Kc6 Bf8 9.Kc7

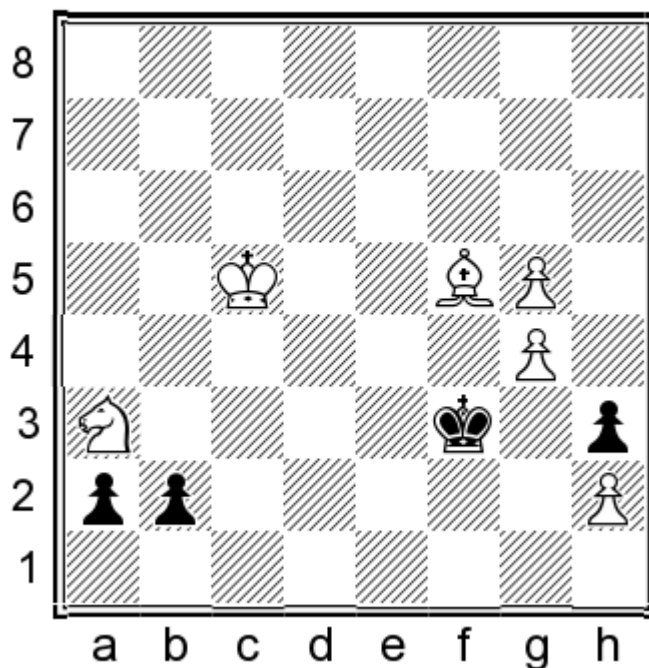
And wins.

It's a great study, but it does have a few snags – which is understandable if you consider that Smyslov was only 15. The end does not require great precision, and the pawns on the h-file make the study uneconomical. Smyslov and Pervakov, who edited the booklet, may have decided to leave it out.

The book does contain a variety of follow-up studies on the same theme: a black queened pawn surrounded by white minor pieces, followed by a minor promotion for White.

All those studies are more economical than the original one, but I find them less impressive. An example:

Smyslov 1999



White to play and win

1.Bb1 a1Q 2.Kb4 Kf4 3.g6 Kg5 4.g7 Kh6 5.g8B!

Here, too, meant to prevent a stalemate.

5...Kg5 6.Bga2

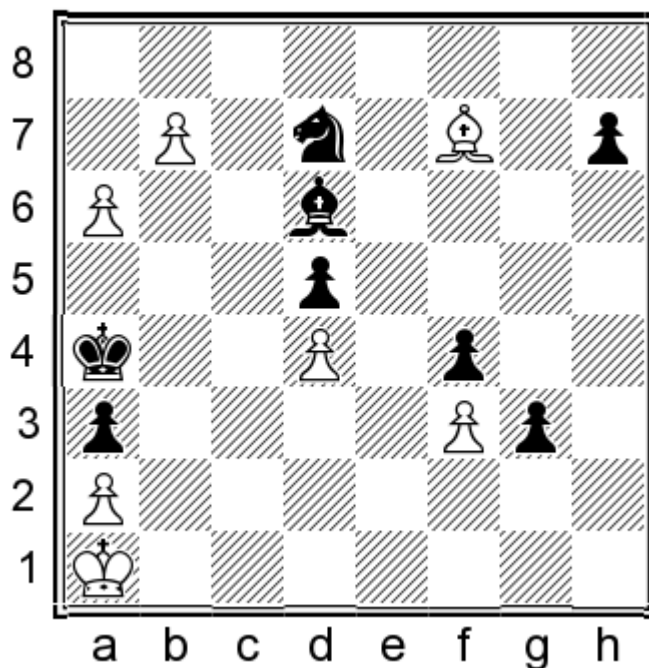
And now the picture is complete.

**6...Kxg4 7.Kc3 Kf3 8.Kd2 Kg2 9.Ke2 Kxh2 10.Kf2 Kh1
11.Nb5 (11.Nc4)**

And wins. But not 11.Nc2 in view of 11...Qxb1! 12.Bxb1 h2, and stalemate is inevitable.

In 2009 I started working on a variation on Smyslov's original study with the intention of making it economical, adding some elements and creating an interesting ending:

Timman 2010 (after Smyslov)



White to play and draw

The first few moves are obvious.

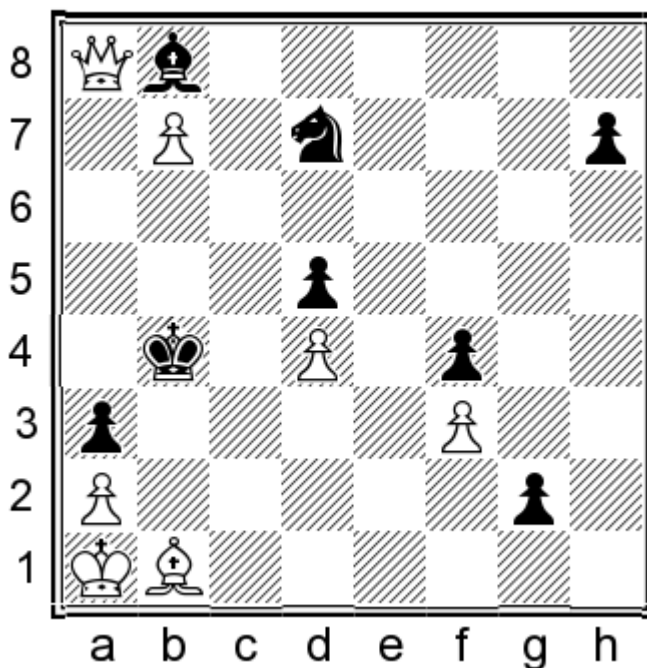
1.a7 Bb8 2.a8Q+ Kb4

White seems to have run out of options, since 3.Qa6 is met by 3...g2.

3.Bg6!

An improbable move. Now 3...hxg6 can be met effectively by 4.Qa6 after all, since the white queen can now go to either g6 or f1.

3...g2 4.Bb1



4...g1B!

The well-known motif.

5.Bf5 Bxd4+ 6.Kb1 Bda7 7.Bxd7 Kc3

The situation is critical for White. He must be careful not to be out-tempoed, e.g. 8.Bf5? h5 9.Kc1 h4 10.Kd1 d4, and this is a situation of mutual zugzwang.

8.Kc1 h5 9.Bb5!

The only bishop move to take control of the situation.

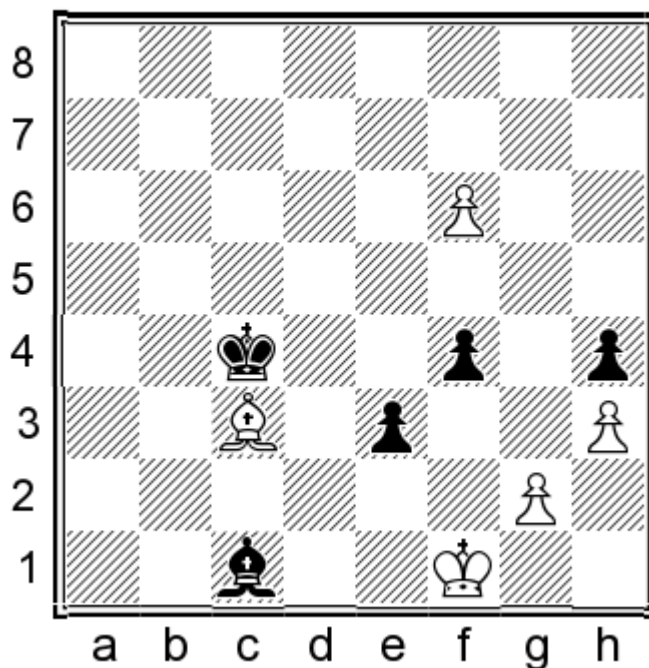
9...h4 10.Bf1 d4 11.Kd1

And another situation of mutual zugzwang has arisen. White to move would lose, Black to move cannot make progress, since after 11...d3 12.Bh3 d2 13.Bf1 he would even lose.

It had been my intention to show this study to Smyslov, but I never had time to do it.

In the years when Smyslov didn't focus on endgame studies, he created a fantastic twin study.

Smyslov, 'Pravda' 1976



White to play and win

A simple bishop ending is on the board. It's hard to imagine that White will soon promote to a bishop.

1.f7 Ba3 2.Bg7

After 2.Bb2 Bf8 3.Ke2 Kd5 Black will save himself.

2...f3! 3.gxf3

White has to take the pawn, since after 3.f8Q Bxf8 4.Bxf8 e2+ 5.Kf2 fxg2 he would even lose.

3...Kd3!

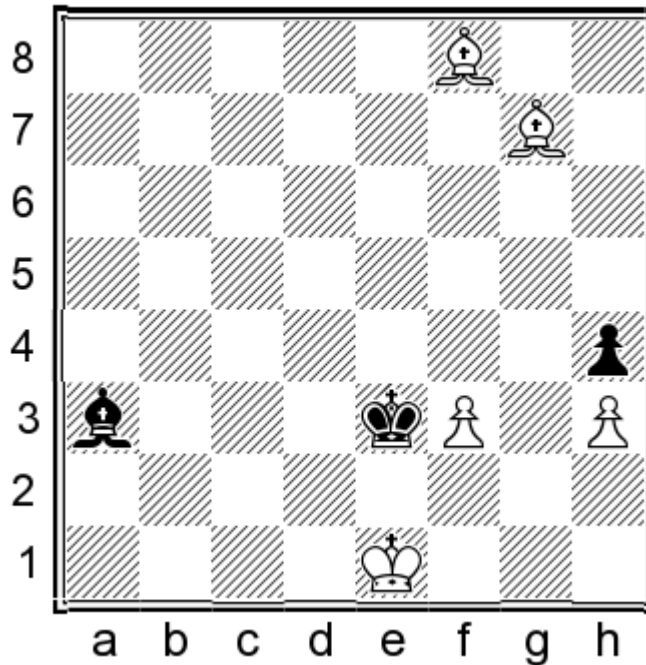
The point of the preceding moves. On 4.f8Q? Black has planned the reply 4...e2+ 5.Kf2 Bc5+.

If White takes the bishop, then Black promotes his e-pawn to force stalemate. If he plays 5.Ke1, then 5...Bxf8 follows, with a draw after 6.Bxf8 Ke3.

4.f8B!

Removing the stalemate from the position. The question remains if White can win with his unusual bishop pair.

4...e2+ 5.Kf2 e1Q+ 6.Kxe1 Ke3



Black defends as stubbornly as possible. After 7.Bxa3 Kxf3 he would also win the h-pawn.

7.f4! Kxf4 8.Kf2 Bc1

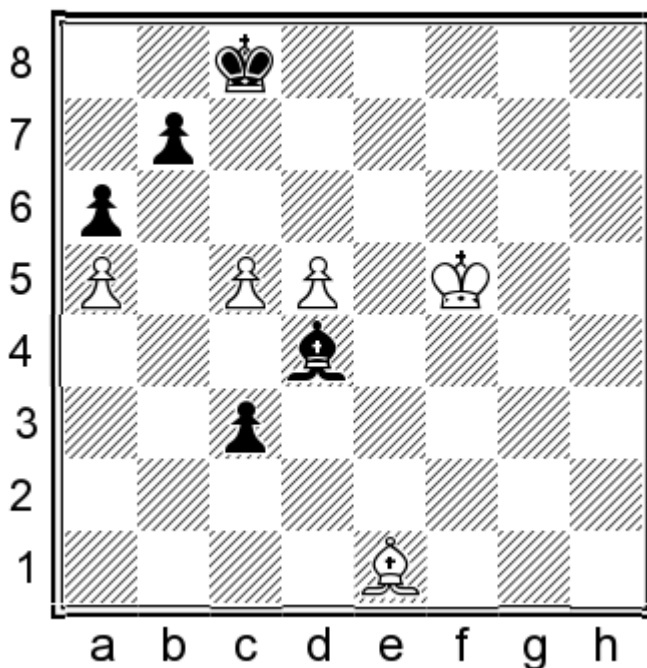
The exchange of bishops would not help Black.

8.Bh6+

And White wins.

In the second study Smyslov shows that the defensive plan can also be successful.

Smyslov, 'Pravda' 1976



White to play and draw

We have switched colours. The main reason why White can draw is that his bishop eventually has enough squares.

1.c6 c2 2.Bd2 Bb2 3.d6!

Same procedure.

3...bxc6 4.Ke6 c1B 5.d7+ Kd8 6.Kd6 c5 7.Kxc5 Kc7 8.Be1!

And Black cannot win.

Shortly after Smyslov had made this twin study, he showed it to the American grandmaster Lubosh Kavalek.

‘What do you think of it?’ the former World Champion asked.

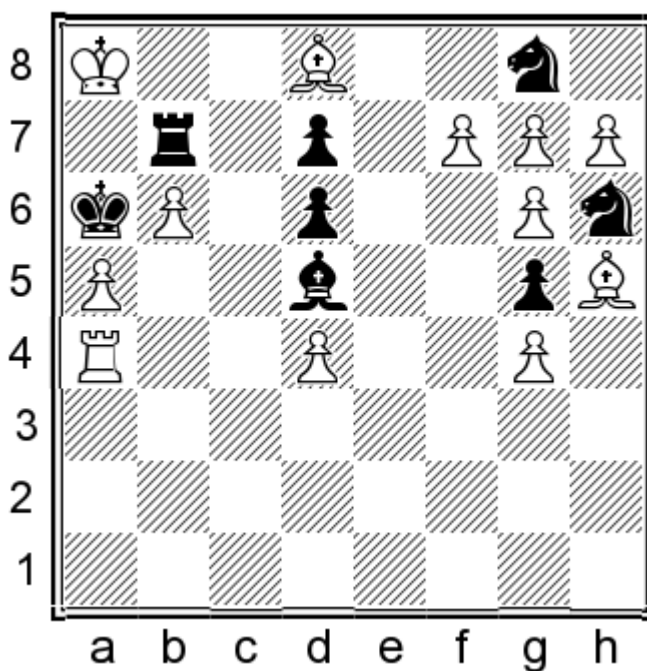
‘Brilliant,’ Kavalek replied. ‘Do you really think it’s good?’

Smyslov asked once again. And again Kavalek professed his enthusiasm. Later he told me that he had been quite surprised by Smyslov’s apparent lack of self-confidence.

I think that things are slightly different. If you have completed such a beautiful work, you are fully aware of its worth. But you still want to sound out the opinion of an expert; his enthusiasm will strengthen your deep feelings of satisfaction.

Just as with knight promotions, there once was a contest to include the greatest number of bishop promotions in one study. And again, Lommer and Zinar were the greatest rivals, albeit in different periods. Lommer achieved a total of four promotions.

Lommer, 'British Chess Magazine' 1945



White to play and win

The white pawns are poised to promote.

1.fxg8B

Not 1.fxg8Q in view of 1...Nf7 2.Qxf7 Rxb6+ 3.Qxd5 Rb8+ 4.Kxb8, stalemate.

1...Nxg8 2.hxg8B

The same principle.

2...Bxg8 3.Bxg5 Bd5 4.g8B Bxg8 5.g7

A fourth pawn is getting ready to promote to a bishop.

5...Bd5 6.g8B Bxg8 7.Bg6

This square has been cleared for the boxed-in bishop. Mate has become unavoidable.

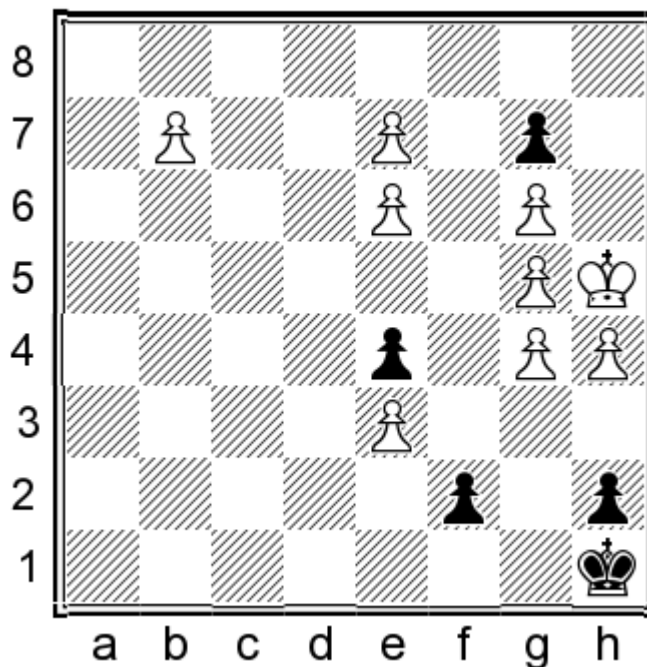
7...Bd5 8.Bd3+

And mate follows.

Not a very impressive study. The play contains no highlights and half of the bishop promotions are achieved with captures.

Before Zinar composed his study with a series of bishop promotions, he had set himself another goal: a pawn ending with a melange of bishop and knight promotions.

Zinar 1980



Zinar 1980 Black to move – White wins (incorrect)

The intended solution is:

1...f1N

Threatening mate in one.

In most cases the pawn structure around the white king serves to play for stalemate, and in that event the opposing side has to try and give mate in time (see for instance Troitzky's study in Chapter 5 and one of my own studies in Chapter 8). In the present case, stalemate motifs do not play a role. White has to try to prevent an enemy knight from mating him.

2.b8B

As after 2.b8Q? Ng3+ 3.Qxg3 Black is stalemated.

2...Kg2 3.e8N

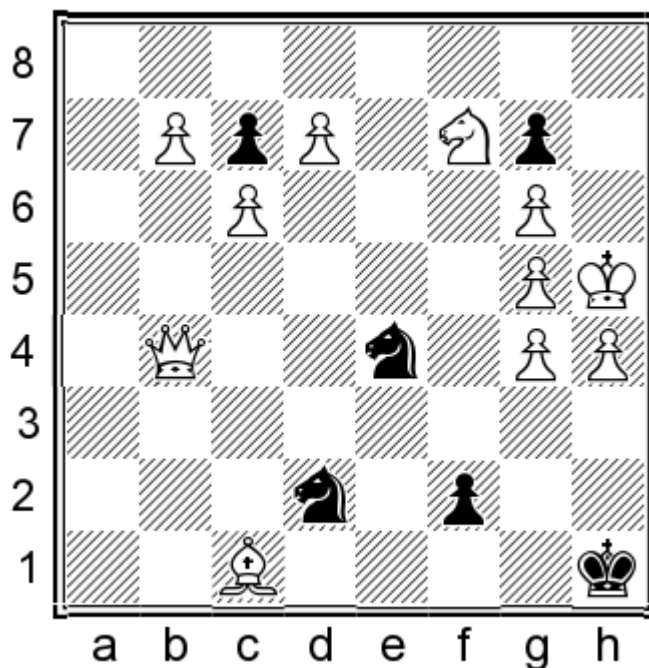
After 3.e8Q h1N Black would win immediately.

3...h1N 4.Nxg7

And wins.

For this creation, Zinar was inspired by a fantastic study by Troitzky and Korolkov. which looks as follows:

Troitzky/Korolkov 1938/1939



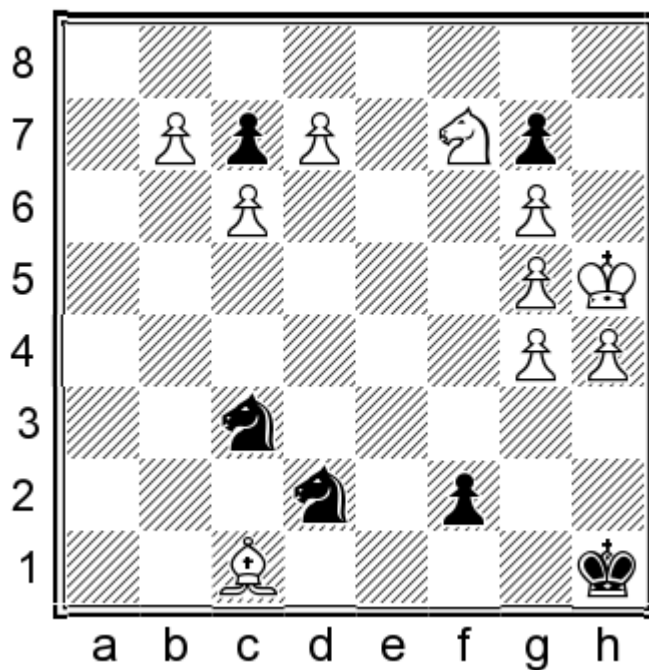
White to play and win

Actually, White must take great care not to lose. Black is threatening mate on g3 and if White tries to prevent this with 1.Qa3, Black brings along another knight to reinforce the threat.

1.Qc3!!

This queen sacrifice has the same function as the knight sacrifice from Zinar's (incorrect) study. White attacks the enemy g-pawn, and therefore Black has to accept the queen sacrifice.

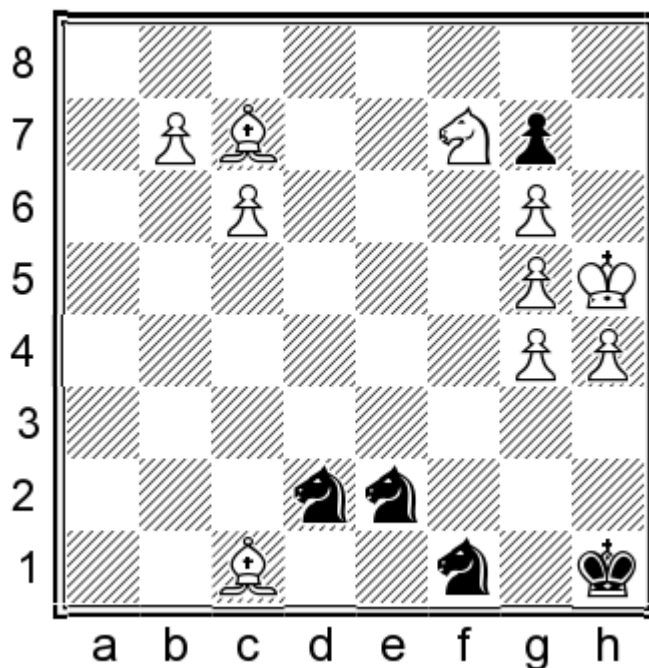
1...Nxc3



2.d8B!!

Not 2.d8Q in view of 2...Nde4 3.Qxc7 f1N 4.Bf4 Ne2, and White cannot prevent Black giving three knight checks on g3 and then being stalemated.

2...Ne2 3.Bxc7 f1N



4.b8B!!

The climax of the study. The critical square g3 can only be protected by bishops.

4...Ne4 5.B1f4

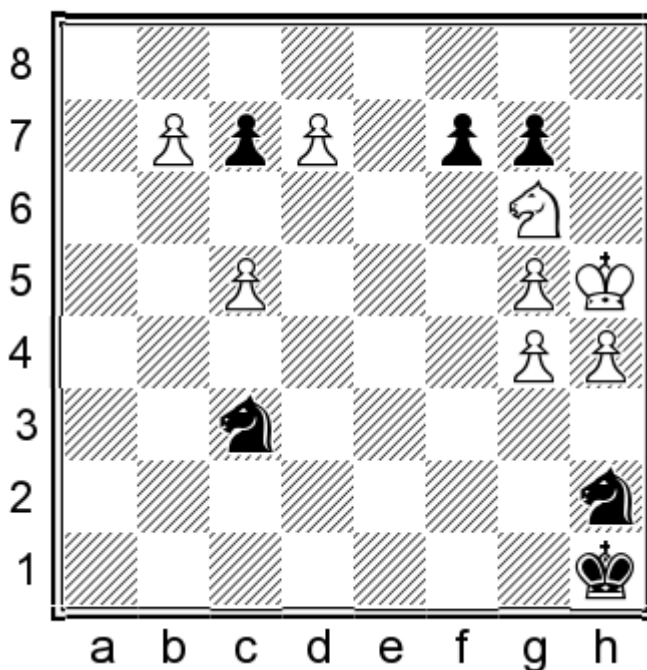
And the three white bishops keep the three black knights under control.

For this study Troitzky and Korolkov received first prize in the Chigorin Memorial Tourney.

In Zinar's version, White's second bishop promotion fails, but there is a second black knight promotion plus a white knight promotion. However, the study is incorrect because Black can win with the simple 1...f1Q. Both sides can get two queens and then the white king is too exposed, despite the defensive pawn construction. More generally, something else is wrong with this concept. The purpose of the white knight promotion is to attack the enemy g-pawn and thus to clear the escape square h6 for the king. However, White can also attack the pawn with his newly promoted bishop.

Strangely enough, the bishop promotions to avoid stalemate were already known five years before Korolkov's and Troitzky's study was published.

Gininger, 'Shakhmaty v SSSR' 1933



White to play and win

1.d8B!

The well known idea. Queen promotion leads to stalemate after 1.d8Q Nf1 2.Qxc7 Ne2 3.b8B Nf4+! 4.Qxf4 Ng3+ 5.Qxg3 fxg6+ and White has to take the pawn. An intriguing situation: not only the black king, also the white king is trapped.

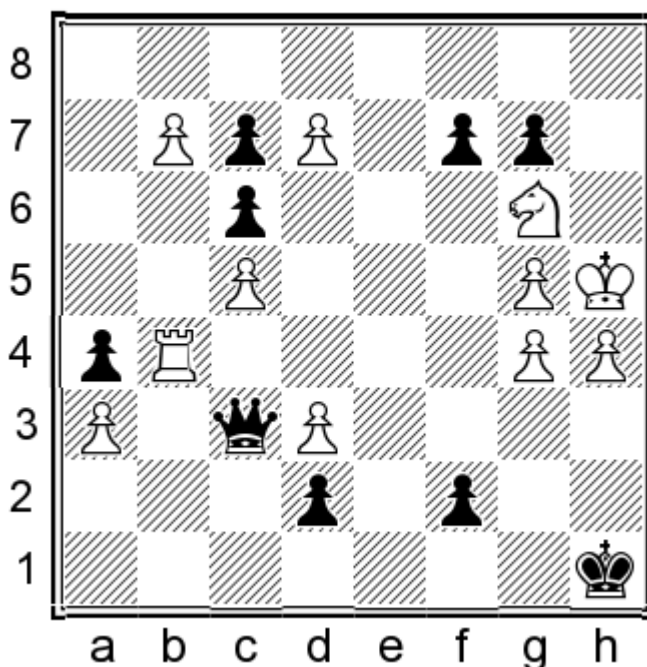
1...Nf1 2.Bxc7 Ne2 3.b8B! fxg6+ 4.Kxg6

And White wins.

Hermann Gininger was an excellent Romanian endgame composer who died young. Did the judge who awarded first prize to Korolkov

and Troitzky know Gininger's study? Presumably even the composers themselves didn't know it. The idea to place a white knight on g6 is ingenious. The only thing missing in Gininger's study is a knight promotion. It inspired me to compose a study that features four queen promotions, apart from bishop and knight promotions.

Timman, 'FRME 5' 2023



White to play and win

It starts with a quiet check.

1.Rb1+ Qc1!

The only move.

2.Rxc1+

The alternative 2.b8Q is met by 2...f1N! 3.Qxc7 Qxb1 4.d8Q d1Q (or 4...Qe1) and the position is balanced.

2...dxc1Q

If 2...dxc1N we come to familiar territory: 3.d8B! Ne2 4.Bxc7 f1N 5.b8B! and wins. In my study we see two bishop promotions together with two knight promotions.

3.d8Q!

It is very important to promote the d-pawn first, just like before. After 3.b8Q? f1N! 4.Qxc7 Qf4! White has to take the queen, since 5.Qxc6+? would actually lose after 5...Kh2 6.Qg2+ Kxg2 7.Nxf4+ Kf3 8.Ne2 Kxe2 9.g6 f6 10.g5 f5 and mate follows.

3...f1Q!

Now the situation is different after 3...f1N. White wins after 4.Qxc7 Qf4! 5.Qxc6+ Kh2 6.Qg2+! Kxg2 7.Nxf4+ Kf3 8.Ne2! Kxe2 9.b8Q. The promoted queen controls square g3.

4.b8Q Qf5!

A new struggle has begun. Black launches an attack with four promoted queens on the board.

5.Nf8!

The only way to avoid mate.

5...Qcf4

Threatening mate again. White has only one way out.

6.Qb1+ Kg2 7.Qd1!

The mate is prevented. Black still has resources though.

7...Q5e5 8.Ng6!

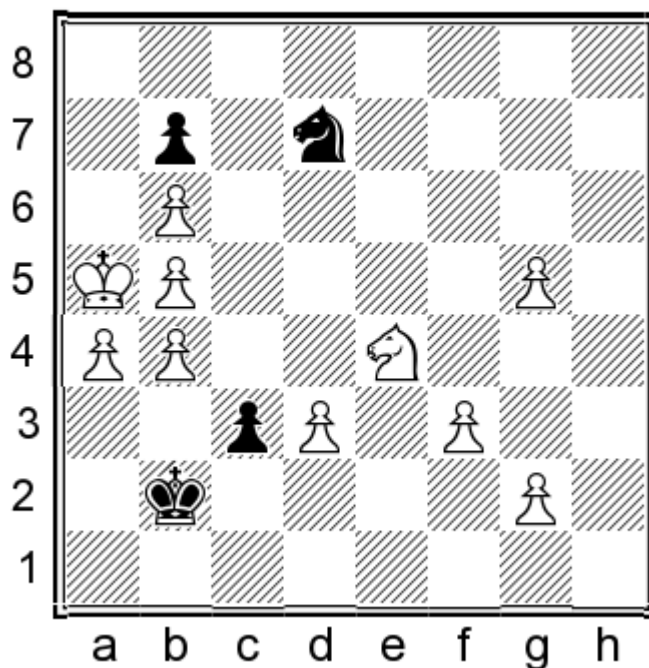
A switchback.

8...fxg6+ 9.Kxg6 Qe6+ 10.Kh7!

White wins. His king has reached a safe haven.

The Israeli study composer Gady Costeff also adapted this theme in the following study:

Costeff, 'Shahmat' 1986



White to play and win

A highly unusual knight ending. White has no fewer than six extra pawns, but his king is again trapped inside the well-known pawn construction, in this case on the queenside. Both sides will have to push their passed pawns.

1.g6 c2 2.g7

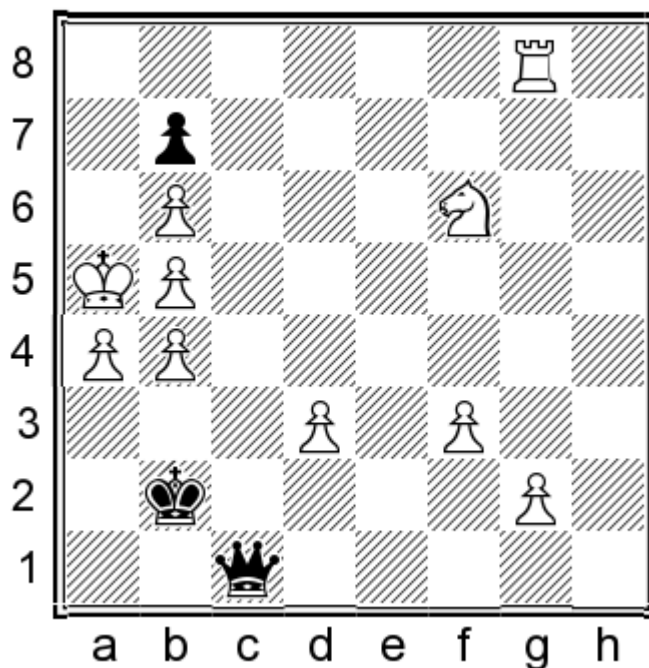
At first sight this looks like an easy win for White. However, Black has a resource which enables him to play for stalemate.

2...Nf6! 3.Nxf6

And now Black can promote in two ways. In both cases White reacts with a minor promotion:

A) 3...c1Q 4.g8R!

Not 4.g8Q? in view of 4...Ka3 5.Nd7 Qc2 6.Nc5 Qxa4+ 7.Nxa4, stalemate.



4...Ka3 5.Nd7 Qc3 6.Qg4 Qc8 7.Nc5 Qa8+ 8.Na6 and wins;

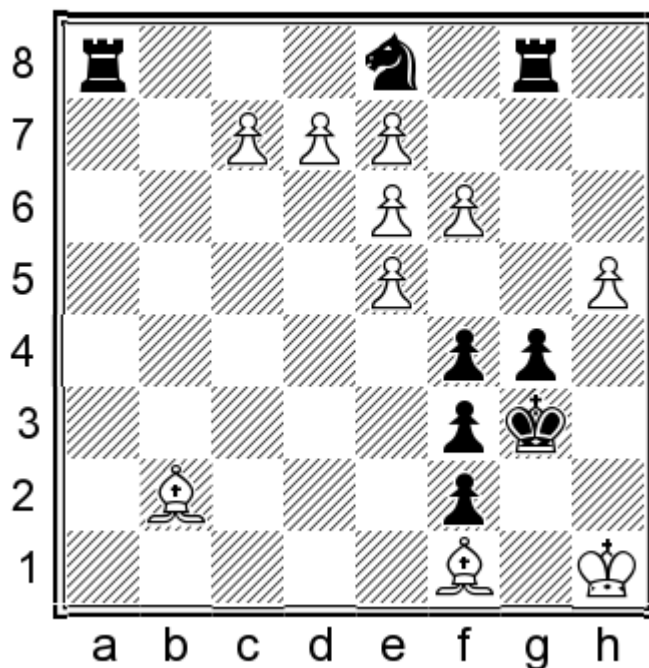
B) 3...c1N 4.g8B! and wins. Only not 4.g8Q? on account of 4...Ka1!, followed by 5...Nb3+ with stalemate.

Costeff has added a rook promotion to the theme. For this study he received shared first/second prize in the Czerniak Memorial.

Let's go back to the attempts to incorporate a record number of promotions into a study.

Almost half a century after Lommer's study, Zinar came up with the following piece of work:

Zinar 1983



White to play and win

Five of the seven white pawns are going to promote.

1.f7 Rh8

The well-known recipe. If White queens, Black will first play 2...Ra1! and after 3.Bxa1 sacrifice on h5.

2.fxe8B Raxe8 3.dxe8B Rxe8 4.Bd4

The best square for the bishop. If necessary, White is prepared to sacrifice the bishop on f2.

4...Rh8

Black keeps forcing White to promote to bishops.

5.e8B Rxe8 6.e7 Rh8 7.e8B Rxe8 8.e6

Now the point of the promotions becomes clear. The long diagonal is opened, and the rook is deprived of the square h8. However, Black has still another resource.

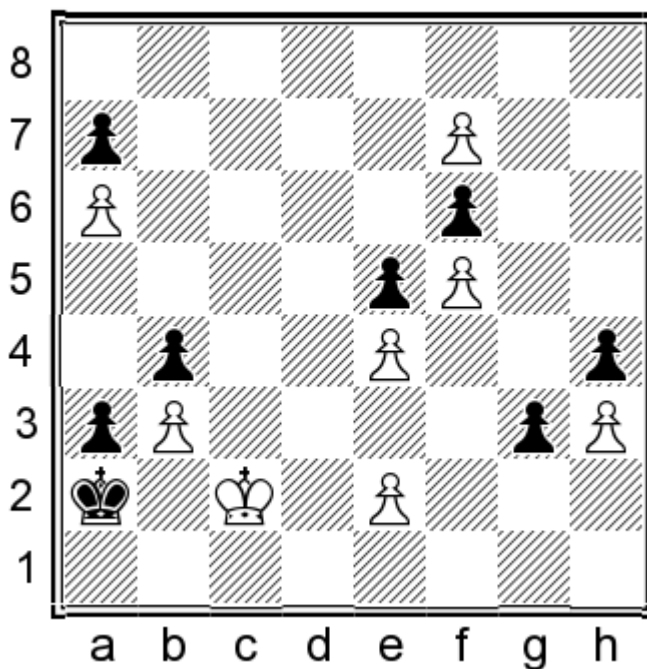
8...Rf8 9.e7 Rf5 10.e8B

The fifth and last bishop promotion. White wins.

These studies with whole series of bishop promotions are not very attractive. Lively play is only possible in studies with two bishop promotions.

It is a remarkable coincidence that in the two studies by Lommer and Zinar, the bishop promotions took place on the same square. This was also the case in a pawn ending with two bishop promotions by Zinar.

Zinar, 'Shakhmaty v SSSR' 1988



White to play and win

The black king is hedged in, which allows for a stalemate motif.

1.f8B!

Also here, promotion to a bishop is necessary to avoid stalemate.

1...g2 2.Bc5 Ka1

White has avoided the first stalemate trick, but now the threat is renewed. Black wants to play 3...a2, followed by 4...g1Q.

3.Be3

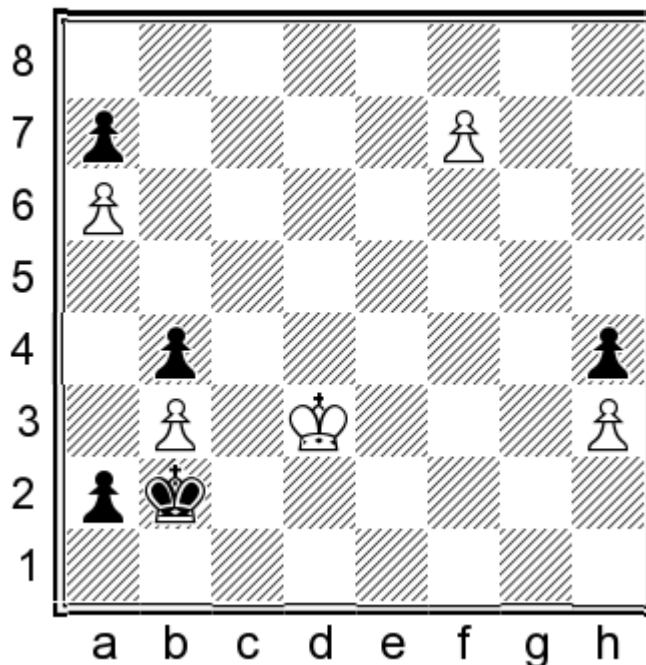
3...a2 is met by 4.Bc1 with mate.

3...g1Q 4.Bxg1 a2 5.Bd4+

White must sacrifice his bishop to prevent the stalemate.

5...exd4 6.e5 fxe5 7.f6 e4 8.f7 d3+ 9.exd3 exd3+ 10.Kxd3 Kb2

Black has weaved a new stalemate trap into the position.

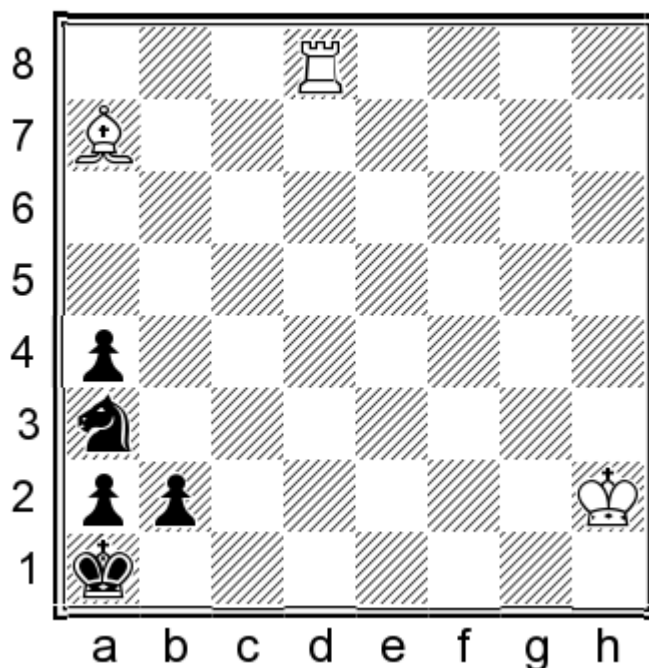


Now 11.f8Q a1Q 12.Qg7+ is met by the nasty 12...Kxb3!.

11.f8B! a1Q 12.Bg7+ and wins.

I thought it would be interesting to compose a study where the bishop promotion is not intended to prevent an immediate stalemate;

the promoted bishop would have to serve to block a line and then prepare mate. As an introductory study, I constructed the following:
Timman 2010



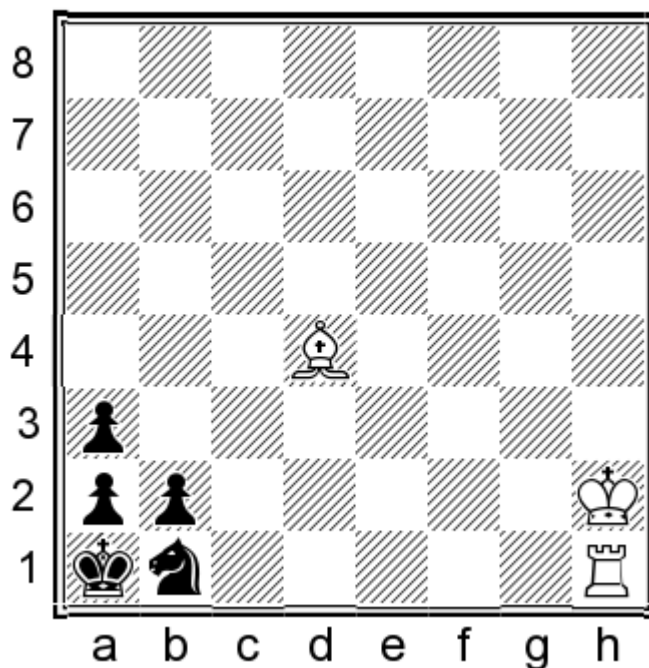
White to play and win

First of all, White puts his rook in ambush.

1.Rd1+ Nb1 2.Rh1! a3 3.Bg1!

The point of the previous move. Black is forced to move his knight, and after that, White will put his bishop on a better square.

3...Nc3 4.Bd4+ Nb1



5.Kg1!

White repeats the motif with his king.

5...Nc3 6.Kf2+ Nb1 7.Ke1

The king approaches, in order to give mate!

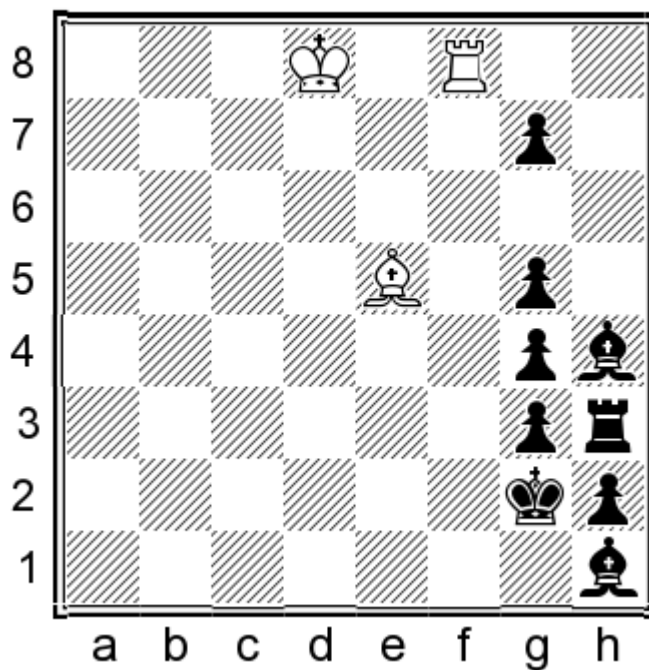
7...Nc3 8.Bxc3 Kb1 9.Kd2

Mate.

The idea of the study is to put the rook in ambush and then use two other pieces to temporarily block the back rank, preventing stalemate. Eventually mate follows by the three pieces in cooperation.

You can also do something similar on a diagonal. Then the bishop is the piece lying in ambush.

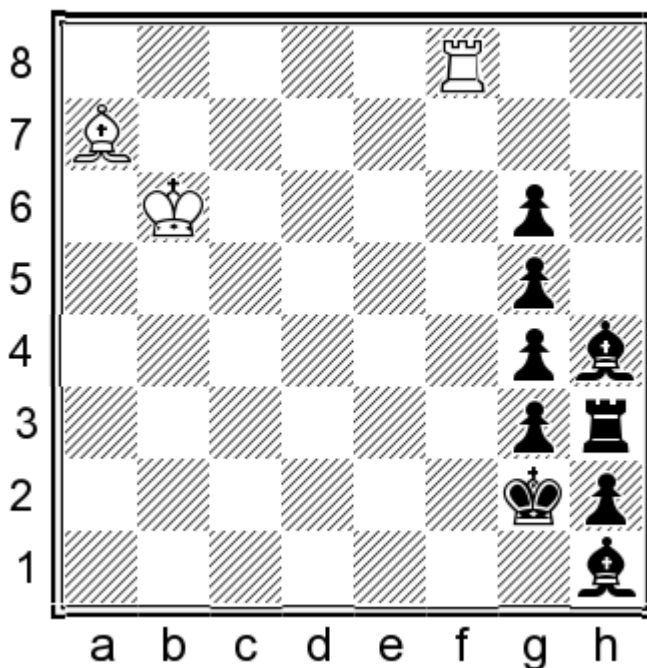
Lommer 1975



White to play and win

First of all White puts his bishop in ambush:

1.Bb8 g6 2.Kc7 Kg1 3.Ba7+ Kg2 4.Kb6



This way White is going to bring his king closer.

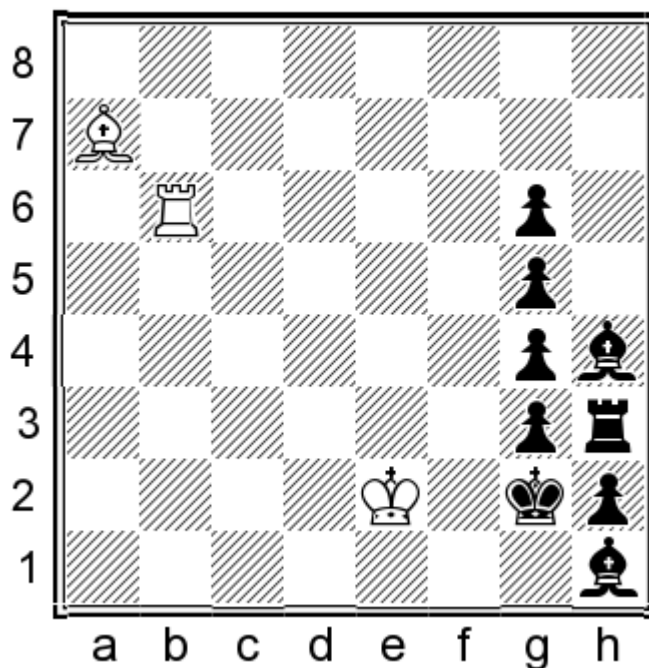
4...Kg1 5.Kb5+

The alternative was 5.Kc6+, with the same consequences. Later on, the king also has an alternative route.

5...Kg2 6.Kc5 Kg1 7.Kc4+ Kg2 8.Kd4 Kg1 9.Kd3+ Kg2 10.Ke3 Kg1 11.Ke2+ Kg2 12.Bb8

Now that the white king has come closer, the bishop temporarily leaves the crucial a7-g1 diagonal in order to put the rook into position.

12...Kg1 13.Rf1+ Kg2 14.Rf6! Kg1 15.Ba7+ Kg2 16.Rb6



The point of the 14th move.

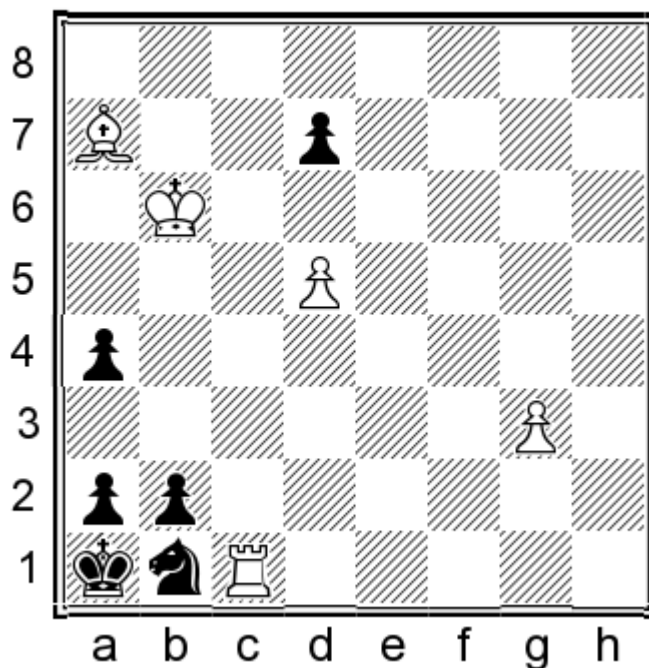
Now the rook will edge its way through and give mate.

16...Kg1 17.Rb3+ Kg2 18.Re3! Kg1 19.Rxg3#

This was the last study that Lommer made.

Let's get back to bishop promotions. In the following study White again has to put his rook in ambush first.

Timman 2010

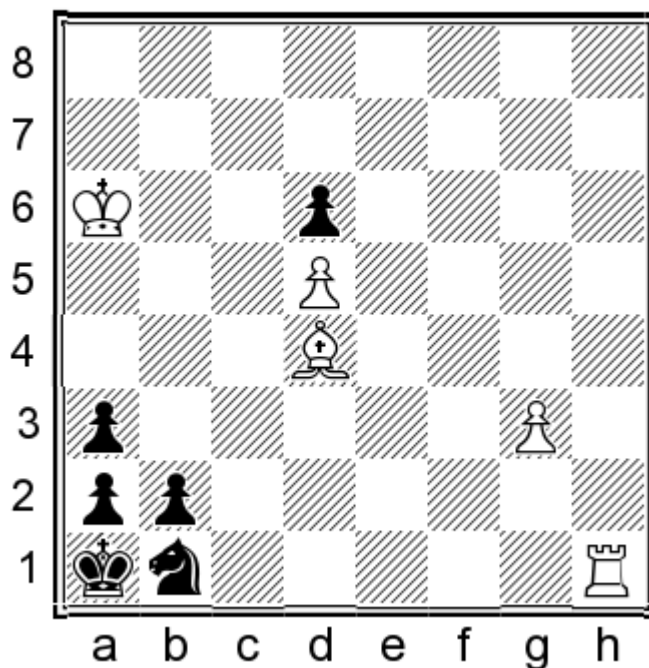


White to play and win

1.Rh1! a3 2.Ka6!

The king makes way for the bishop, which is heading for g1 again. Only seven moves later will it become clear why the king could not go to a5 or c7.

2...d6 3.Bg1! Nc3 4.Bd4+ Nb1



5.Be5!

White sacrifices his bishop in order to create a passed d-pawn. Again, this leads to the Phoenix Principle, since White will promote to a new bishop before long.

5...dxe5 6.d6 e4 7.d7 e3 8.d8B!

Other promotions would be of no use to White.

8...e2 9.Ba5

Now it becomes clear why the king had to go to a6. The passage for the promoted bishop had to be kept free.

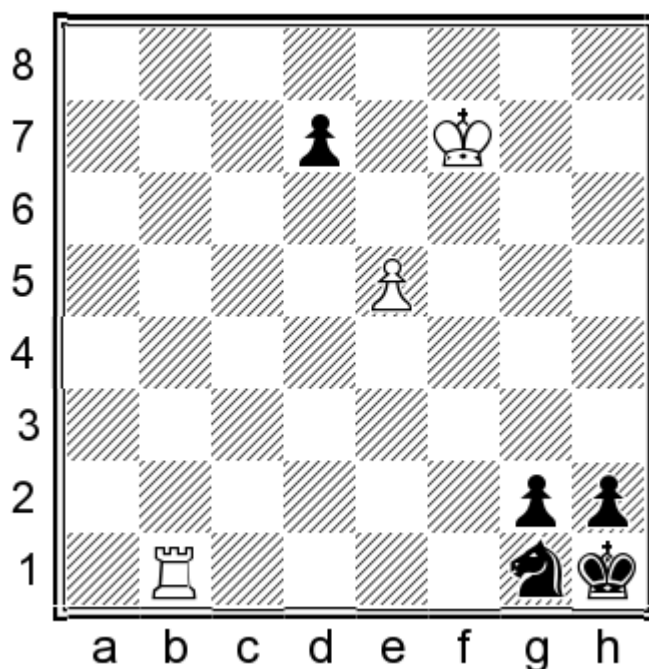
9...e1Q 10.Bxe1

Again the back rank has been closed by a bishop, this time with devastating effect.

10...Nd2 11.Bxd2+ b1Q 12.Bc3

Mate.

Later I found a study by Costeff which contains a nice addition to this theme.



White to play and win

White's first move is anything but obvious.

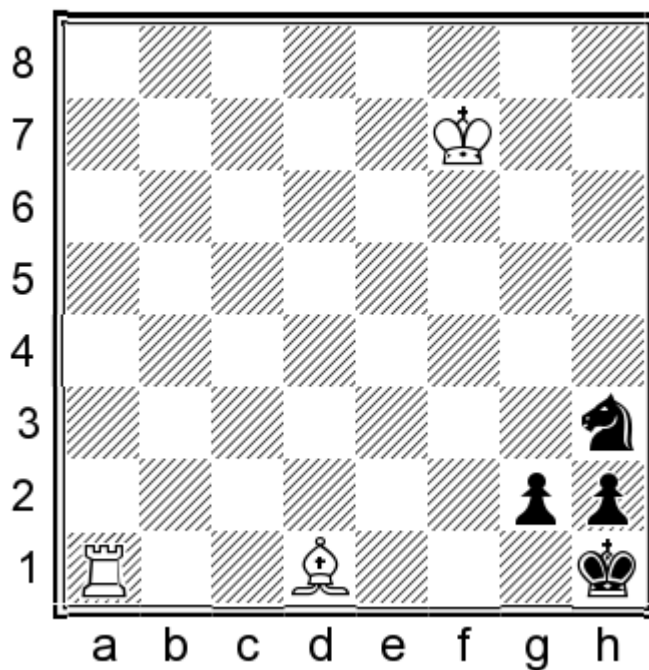
1.Ra1!

Only seven moves later will the purpose of this little rook move become clear. 1.Rd1 looked obvious, but after 1...d5 2.e6 d4 3.e7 d3 4.e8Q d2 5.Rxd2 Nf3 6.Rf2 g1Q 7.Rxf3 Black has 7...Qd1!, and White cannot win.

1...d5 2.e6 d4 3.e7 d3 4.e8B!

The familiar bishop promotion.

4...d2 5.Ba4 d1Q 6.Bxd1 Nh3



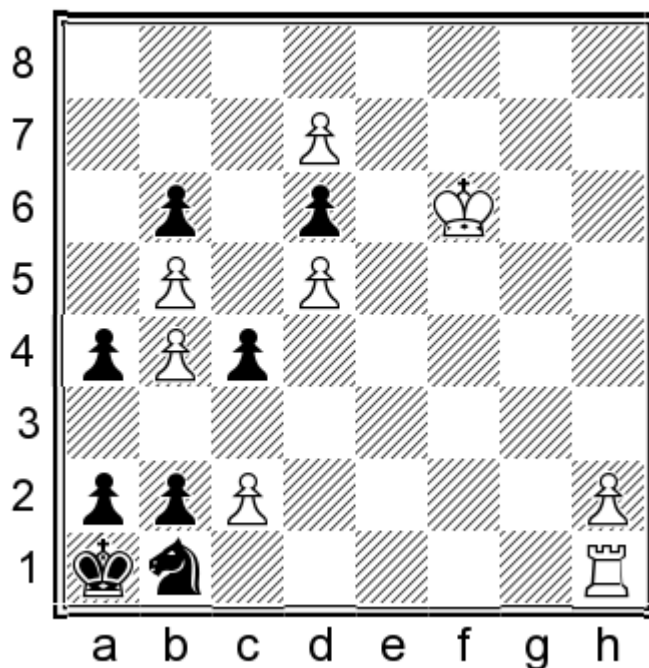
7.Bc2+!

On its way to b1. That is why the white rook had to go to the corner square.

7...Ng1 8.Bb1 Nh3 9.Be4+ Ng1 10.Ra2 and wins.

The same can be done with two bishop promotions.

Timman 2011



White to play and win

If White queens, he cannot win. An illustrative line is 1.d8Q c3 2.Rd1 a3 3.Rd4? Nd2 4.Qc7 b1Q 5.Qxc3+ Qb2 6.Qxd2 Kb1 7.Qe1+ Qc1 8.Rd1 a1Q+ and Black wins.

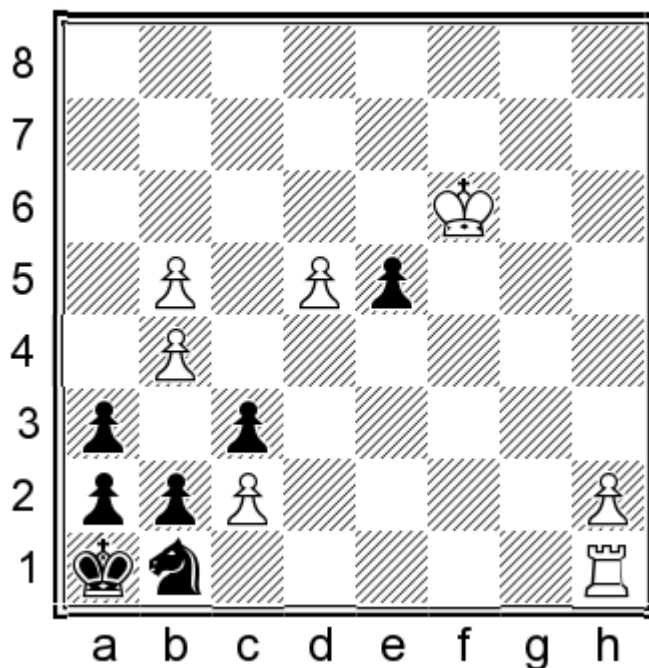
1.d8B!

On its way to g1.

1...c3 2.Bxb6 a3 3.Bg1! Nd2 4.Bd4+ Nb1 5.Be5!

Again, the thematic bishop sacrifice.

5...dxe5



6.b6

White has to push this passed pawn. After 6.d6 e4 7.d7 e3, stalemate would be unavoidable.

6...e4 7.b7 e3 8.b8B!

Like a Phoenix, the bishop has risen from the grave.

8...e2 9.Bg3

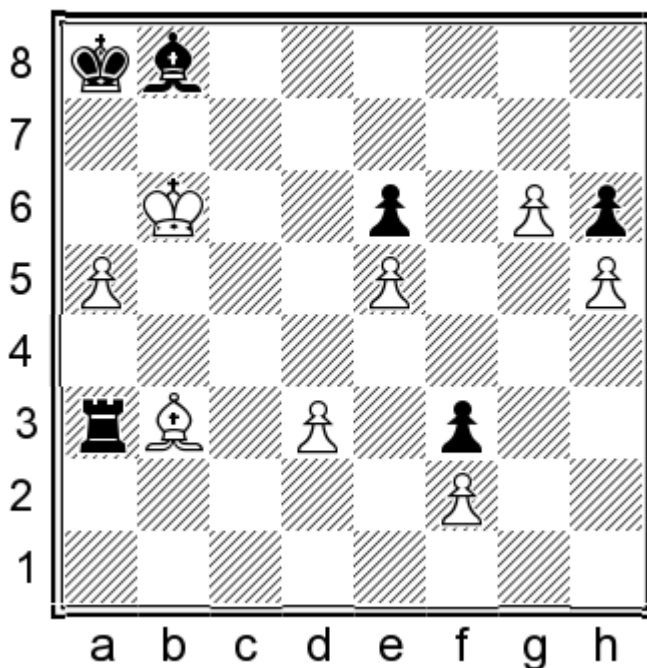
This is what it was all about. White is in time to temporarily close off the back rank again.

9...e1Q 10.Bxe1 Nd2 11.Bxd2+ b1Q 12.Bxc3

Mate.

Is it possible to have two bishop promotions alongside each other? I have spent a lot of time trying to find an answer to this question. The following study is a first attempt, although the bishop promotions occur in the side variations.

Timman 2009



White to play and win

White cannot play 1.g7 on account of 1...Rxb3+ 2.Ka6 Rb7 3.g8Q Rb6+! with stalemate. This theme will crop up again and again.

1.Bd5+! exd5 2.g7 Rb3+ 3.Ka6

If the king moves to the c-file, Black will save himself with a check on c3.

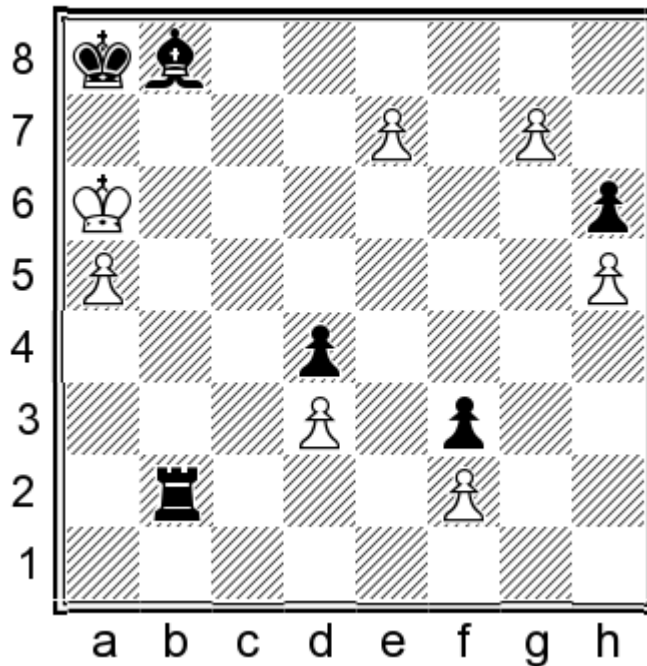
3...d4!

Re-introducing the stalemate motif into the position.

4.e6

An important alternative was 4.g8B. As White threatens mate on d5, he now wins the rook on b3. But Black can just save himself with 4...Bxe5 5.Bxb3 Bf6 6.Bd5+ Kb8 7.Bxf3 Bh4 8.Kb6 Bd8+! 9.Kc5 Bxa5.

4...Rb2 5.e7



Both pawns are about to promote and Black now has to choose how to organize his defence from here.

5...Rb7

The best defence. On 5...Rb1, both 6.e8B and 6.g8B would be winning.

Now both bishop promotions fail to 6...Ra7+ 7.Kb6 Rb7+, and White cannot win.

6.g8N!

The only correct promotion. After 6.e8N Rxc7 7.Nxc7 Bg3 Black would not need to worry.

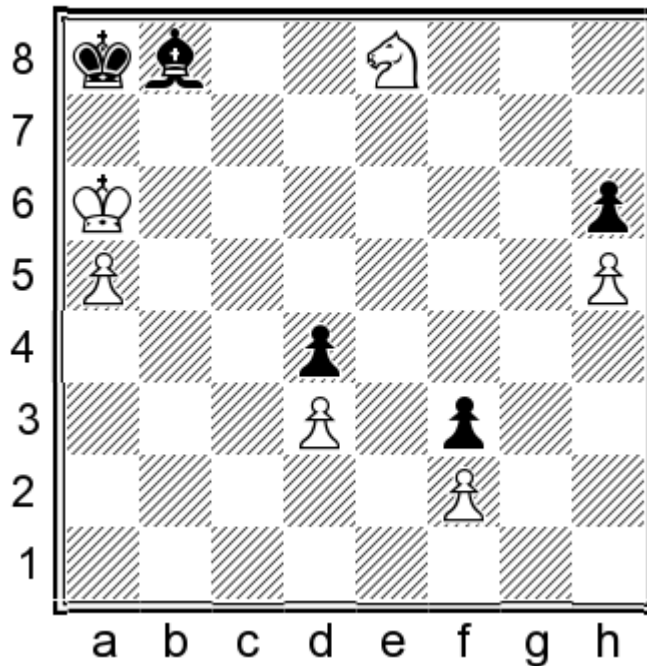
6...Rb1

Black keeps playing for stalemate. White cannot promote his e-pawn.

7.Nf6 Re1 8.e8Q

But now he can.

8...Rxe8 9.Nxe8



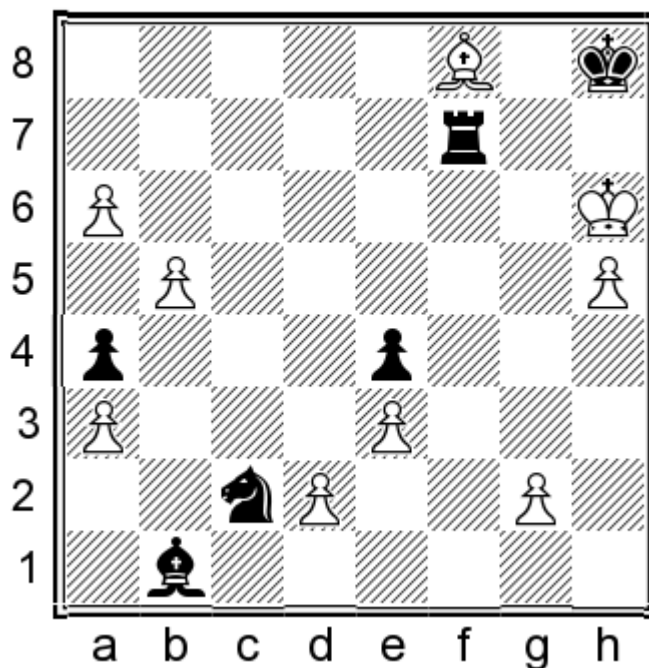
The complications are over and a knight vs bishop ending has arisen. The finish still requires precision.

9...Bg3 10.Kb6 Bxf2 11.Nc7+ Kb8 12.a6

And wins.

The same stalemate motif also occurs in the following study.

Timman 2011



White to play and win

The white passed pawns are dangerous, but after 1.Bd6 Ba2 Black can just save himself.

1.Bg7+!

With this bishop sacrifice, White renders the 6th rank inaccessible to the black rook.

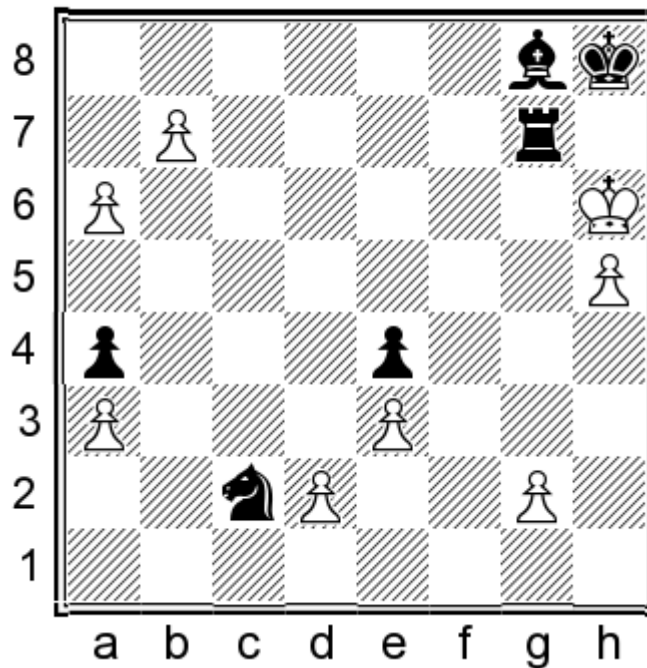
1...Rxg7 2.b6

An unbelievable situation: Black has a rook and two minor pieces for a handful of pawns, and yet he is lost. He still has one chance left:

2...Ba2 3.b7 Bg8

Now 4.b8Q runs into 4...Nxe3! 5.dxe3 Rg6+! and stalemate is unavoidable. The logical 4.a7 is also insufficient for the win after

4...Nxe3! 5.dxe3 Rxc3 and White doesn't have an effective minor promotion.



4.g3!!

A very subtle little move. The point is that after 4...Nxe3 5.dxe3 Rxc3 White has at his disposal 6.b8B!, winning. This means that the rook's range of action is restricted.

4...Nxe3

Black cannot postpone this knight sacrifice any longer.

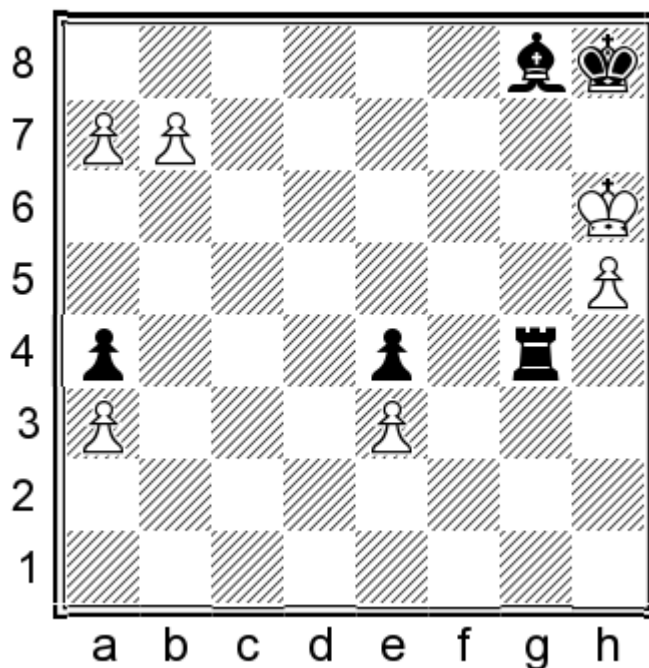
5.dxe3 Rg4 6.a7 Rg7

Now 7.a8B? is insufficient on account of 7...Rxb7! 8.Bxb7 Bd5 9.Bc8 Be6 10.Ba6 Bc4 and again, White cannot avoid stalemate.

7.g4!

A pawn sacrifice, enforcing a situation of mutual zugzwang. Black has to help himself to the pawn.

7...Rxc4



8.a8N!

Just as in the previous study, a knight promotion provides the solution to the problem.

8...Rg7

On 8...Rg1, 9.Nb6! would have been winning.

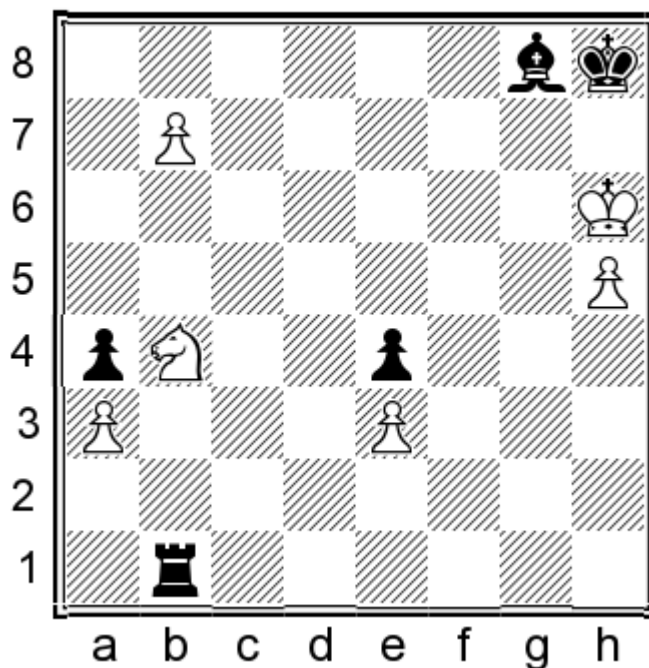
9.Nc7!

An indirect defence of the b-pawn. Again, a situation of mutual zugzwang has arisen.

9...Rg1 10.Nd5!

Centralization. Now on 10...Rg7, both 11.Nf4 and 11.Ne7 are winning.

10...Rb1 11.Nb4



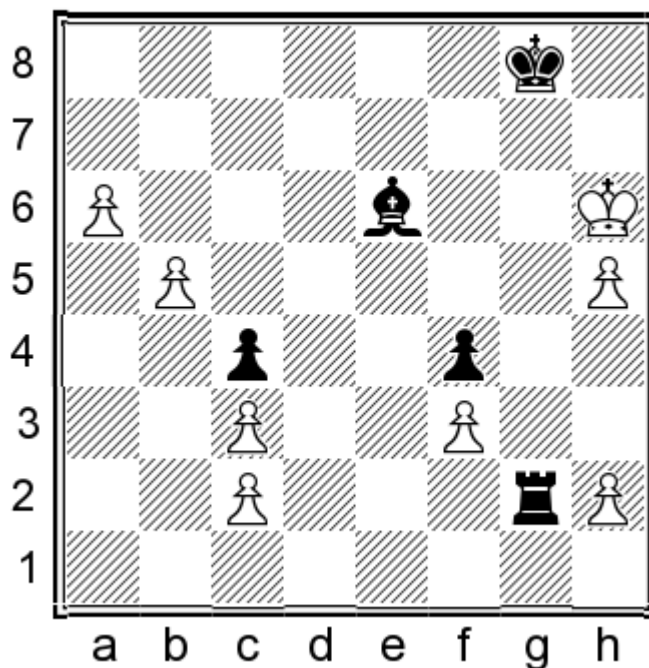
Screening off the b-file.

11...Rg1 12.Nc6

And wins. Black has to give his rook for the b-pawn, after which the knight vs bishop ending is an elementary win.

It's possible to make an even more beautiful version of this theme.

Timman 2011



White to play and win

Black has an enormous material advantage, but he cannot stop the white queenside pawns.

1.b6 Kh8

Making room for the bishop.

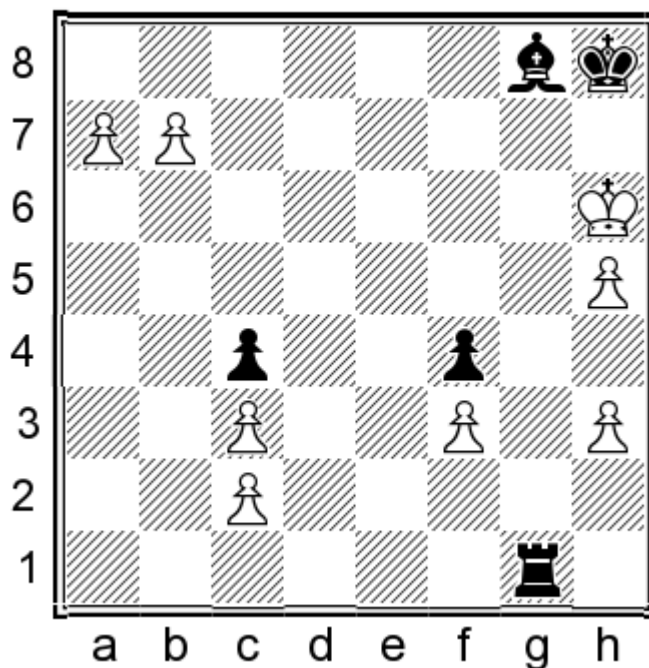
2.b7 Bg8

The stalemate construction is ready.

3.a7

White could not queen immediately, since after 3.b8Q Rg6+! stalemate would be unavoidable.

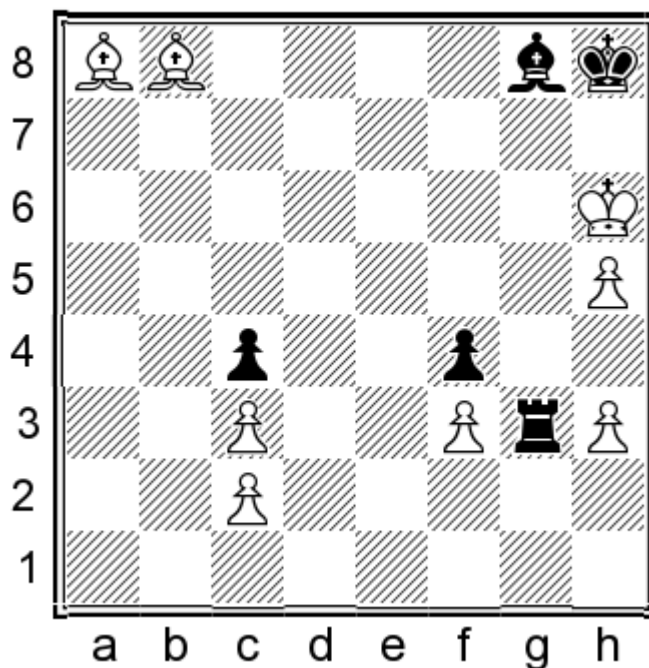
3...Rg1 4.h3!



Mutual zugzwang. The rook is forced to a less favourable square on the g-file, and then minor promotions will become possible. There are now two main lines:

A) 4...Rg3 5.a8N! Not 5.a8B in view of 5...Rg7! with mutual zugzwang. 6.h4 is met by 6...Rh7+ 7.Kg5 Rg7+ and White does not have the square h4 for the king. And if White continues 6.b8B, Black has the little saving move 6...Bd5!. White does not have a check on e5;

B) 4...Rg7 5.a8B! Again a situation of mutual zugzwang has arisen. The black rook has to go down again, as after 5...Rxb7 6.Bxb7 Bd5 White would prevent the stalemate threat by 7.Ba6. 5...Rg3 6.b8B! The second bishop promotion. The newly-created bishop pair reigns supreme.

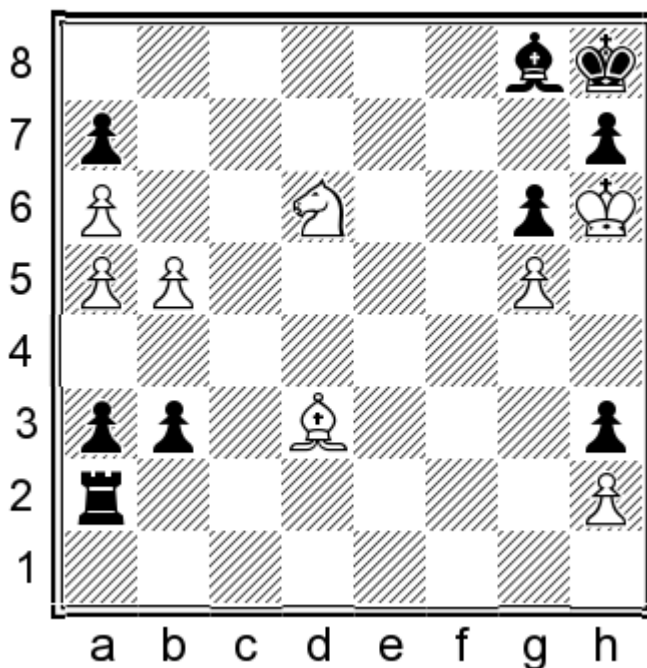


6...Bd5 After 6...Bf7 7.Be5+ Kg8 8.h4 Rh3 9.Kg5 White would have a clearly winning position. 7.Be5+ and wins.

I consider this to be one of my best studies.

Studies with bishop promotions on both sides are rare. Inevitably, the bishop promotions will have different motifs: the attacking side wants to avoid stalemate, whereas the defending side strives to achieve just that.

Timman 2011



White to play and win

Again, the kings are facing each other in the upper right-hand corner. Both sides have dangerous passed pawns. In order to realize promotion, pieces will have to be sacrificed.

1.Nf7+!

With this knight sacrifice, White closes off the f-file for the enemy rook. At the same time, he wants to promote his b-pawn with check.

1...Bxf7 2.b6

It looks as if Black has run out of options now. What can he do against the threat of 3.b7 ? 2...b2 runs into the devastating 3.Bb1!.

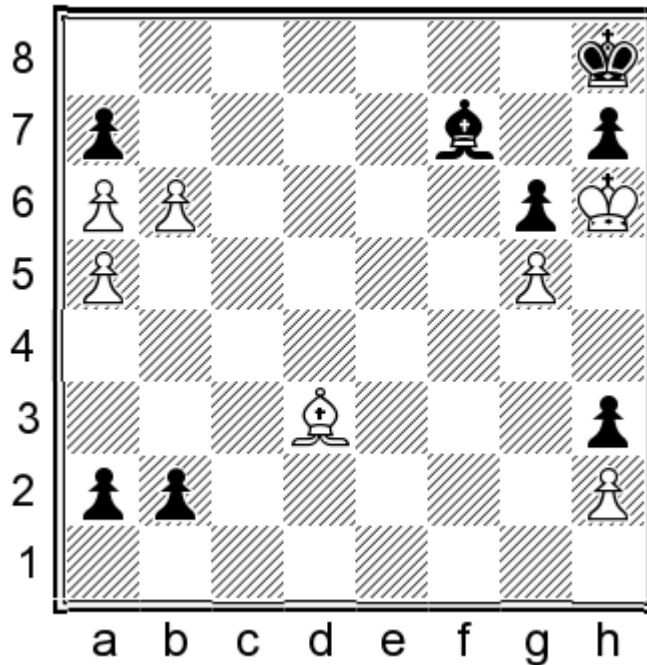
2...Re2!

A stunning rook sacrifice. Black threatens to play his rook to e8, and therefore White has to accept the sacrifice.

3.Bxe2

A somewhat uncommon bishop ending has emerged on the board. Soon it will be a four-bishop ending.

3...b2 4.Bd3 a2



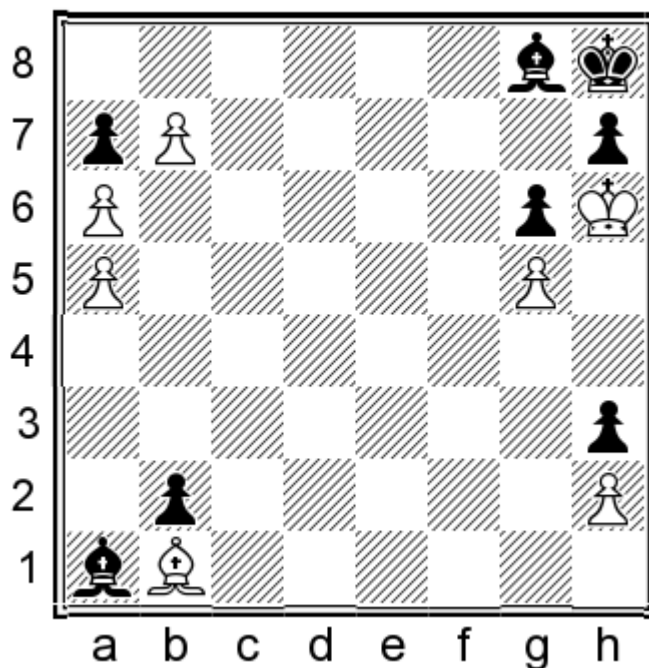
5.Bb1!!

Here too, the correct move. This blockade motif – in a slightly different form – was invented by Stamma.

5...Bg8

Preparing a stalemate construction.

6.b7 a1B!



The point of the previous move. White cannot promote to a queen or rook on account of stalemate. Moreover, he does not have a waiting move with his bishop, since then the compromised position of his king would seal his fate: Black promotes his pawn and gives mate on g7.

7.b8B!

A real treat for lovers of bishop promotions. The stalemate has been removed.

7...Bc4 8.Bxa7 Bd3

A final attempt. After 8...Bxa6 9.Bd4+ Kg8 10.Bg7 Black would have no chance to survive.

9.Bd4+

And wins.

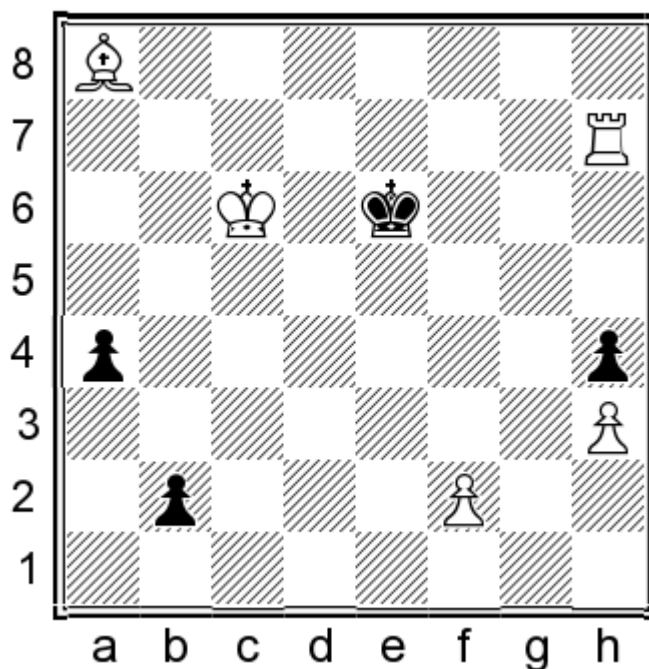
Chapter 7

Mating patterns

In the first chapter I gave two miniatures in which the black king was mated in the middle of the board. This is the most attractive mating pattern.

Alois Wotawa has made various studies where the mating pattern seems to appear out of the blue. A good example is the following study.

Wotawa, 'Deutsche Schachzeitung' 1961



White to play and win

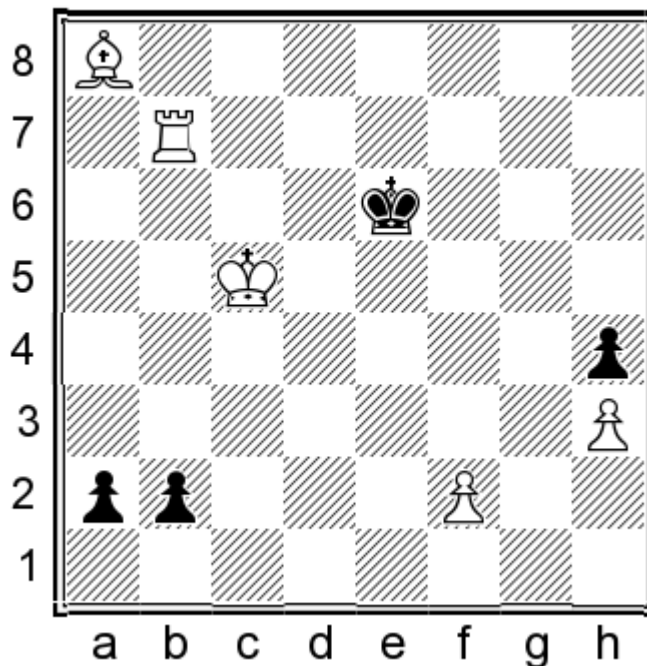
The white pieces seem to be badly positioned for stopping Black's far advanced passed pawns. White even runs the risk of coming off worse.

1.Rb7 a3 2.Kc5!

This is the first step in the direction of the mate, even though such a mate is nowhere to be seen at this point.

2...a2

Now what?



3.Rf7!!

Magnificent. White deprives the black king of escape squares.

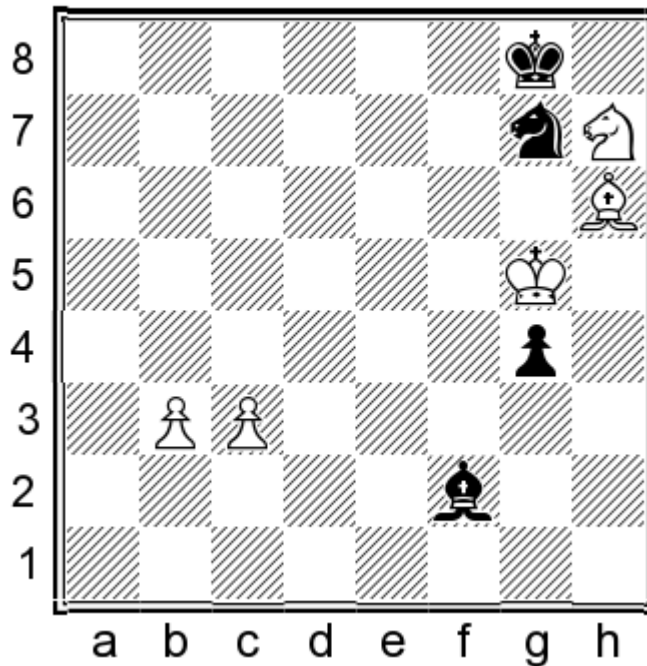
3...a1Q

3...Kxf7 4.Bd5+ and White wins.

4.Bd5+ Ke5 5.f4#

It's impressive if in the main variation the composer manages to draw the king from the corner to the centre, where it is then mated. Genrikh Kasparyan has tried to realize this theme in a study, but unfortunately this study is incorrect.

Kasparyan 1962



White to play and win (incorrect)

First of all White has to eliminate the g-pawn.

1.Nf6+ Kf7 2.Nxg4 Ne6+ 3.Kf5

He must centralize his king as much as possible.

3...Be1

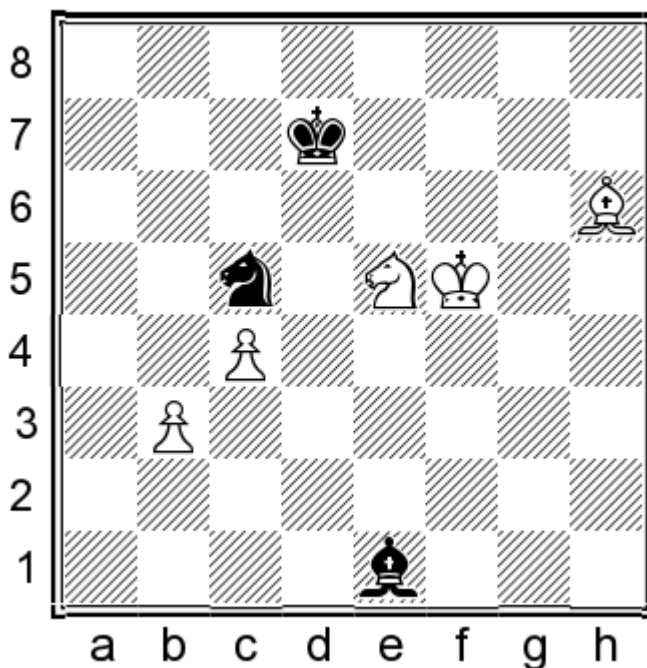
Black besieges the white passed pawns. White cannot push the c-pawn, as after 4.c4 Nd4+ the b-pawn will be lost.

4.Ne5+ Ke7 5.Nc6+

The aim of the knight checks is clear. White wants to control the square d4.

5...Kd6

After this king move, White eventually manages to catch the enemy king in a mating net. However, Black could have held the draw with 5...Kd7!. After 6.c4 Nc5 7.Ne5+ Black again has to find the right square for the king.



In Endgame Challenge, Nunn gives 7...Kc8, after which White reaches a technically winning endgame with 8.Nf3 Bc3 9.Bd2. Better is 7...Kc7, as after 8.Nf3 Bc3 9.Bd2 Bxd2 10.Nxd2 Kb6 11.Ke5 Ka5, followed by 12...Kb4, Black effectively blocks the white passed pawns.

6.c4 Bc3 7.Na7!

Surprising, but strong. The knight aims for the critical square b5.

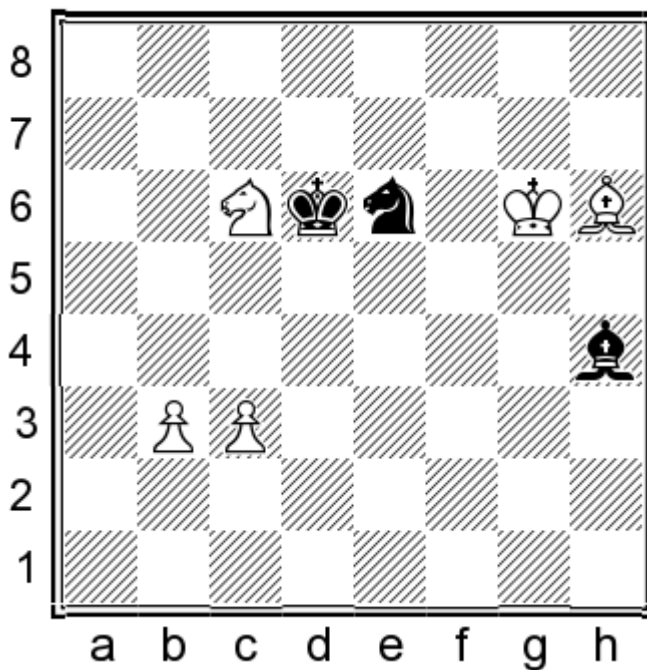
7...Nd4+ 8.Ke4 Nxb3 9.Nb5+ Kc5

It looks as if Black is going to eliminate the last pawn, but:

10.Bf8+! Kxc4 11.Na3#

Can this study be saved? I fear the long march by Black's king cannot be maintained. But still it is possible to make a good study out of it.

Timman 2011 (correction of a study by Kasparyan)



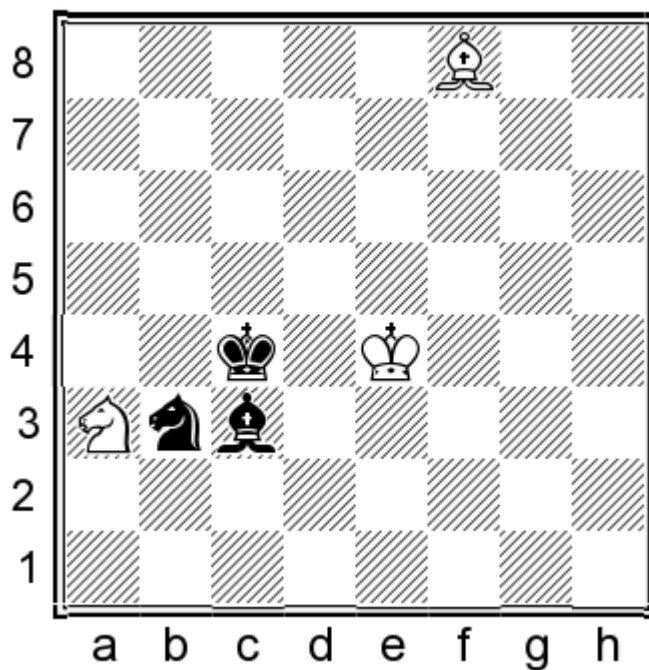
White to play and win

First White must centralize his king.

1.Kf5 Be1

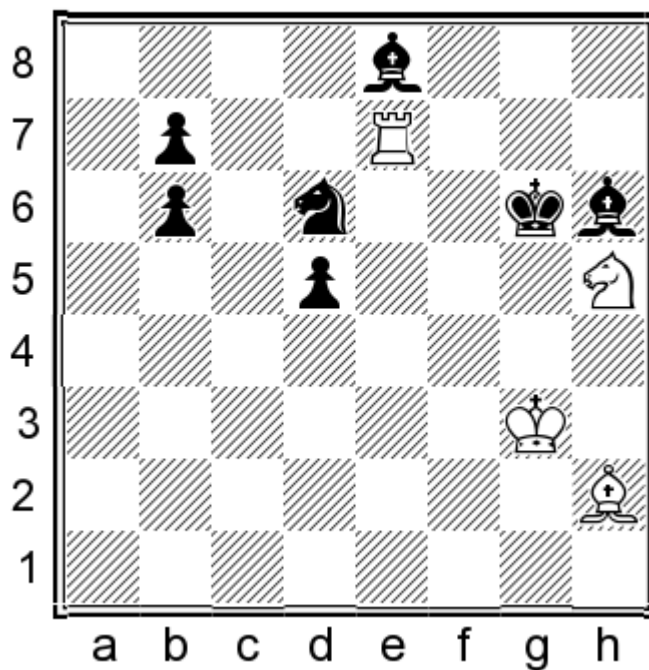
Now everything is clear.

**2.c4 Bc3 3.Na7! Nd4+ 4.Ke4 Nxb3 5.Nb5+ Kc5 6.Bf8+! Kxc4
7.Na3#**



All the pieces are playing – the study is still lively.
In the following study the mate is given by the bishop.

Timman 1984



White to play and win

The first move is obvious.

1.Kg4

Protecting his own knight and attacking the enemy knight.

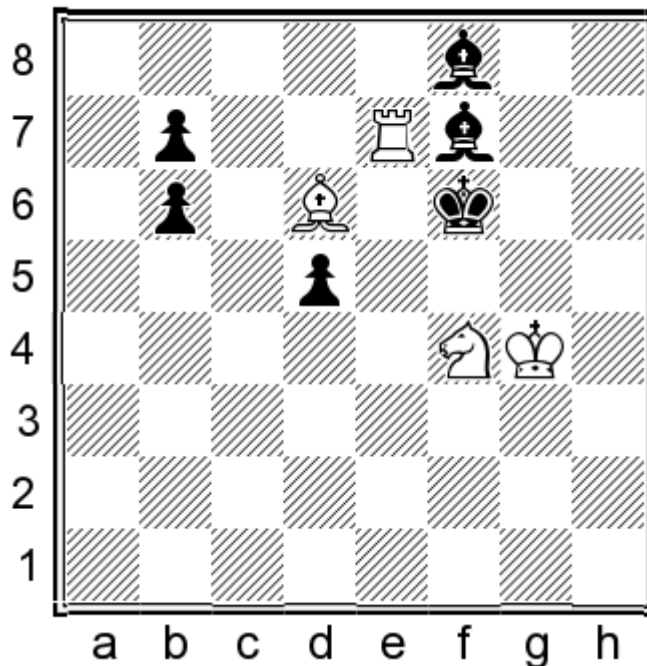
1...Bf7!

The best defence. Black gives up the knight, hoping to set up a pin which is unpleasant for White.

2.Bxd6 Bf8

The point of the previous move.

3.Nf4+ Kf6



4.Bb4!

Preparing a mate on the long diagonal. For this purpose 4.Ba3? was not suitable, because then Black would close the long diagonal with 4...d4!, after which White cannot avoid losing the bishop.

4...b5!

A subtle defence. 4...d4 would have been met by the devastating 5.Rxb7, but now Black does threaten to close the long diagonal.

5.Bc5!

Threatening to unpin the rook by 6.Rc7.

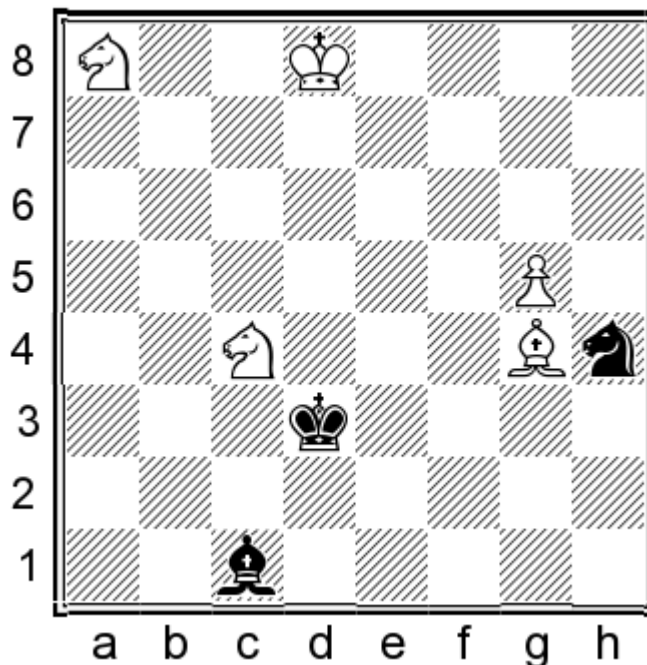
5...b6 6.Ba3

The last finesse. White first provokes ...b7-b6 and then eventually retreats his bishop to a3, since the passage to a7 has now been cleared for the white rook.

6...b4 7.Bxb4 Bxe7 8.Bc3#

It is very rare for a rook to remain en prise for so many moves. Later I encountered the same mating pattern in a study by Mario Matous.

Matous, 'Chavchavadze MT' 1987



White to play and win

White can only hope to win if he can keep his pawn – either that, or he must succeed in giving mate. At this point, mate is nowhere in sight.

1.Ne5+ Ke4 2.g6 Bh6 3.Nf7 Bg7

Now what? The g-pawn looks doomed.

4.Bd1!

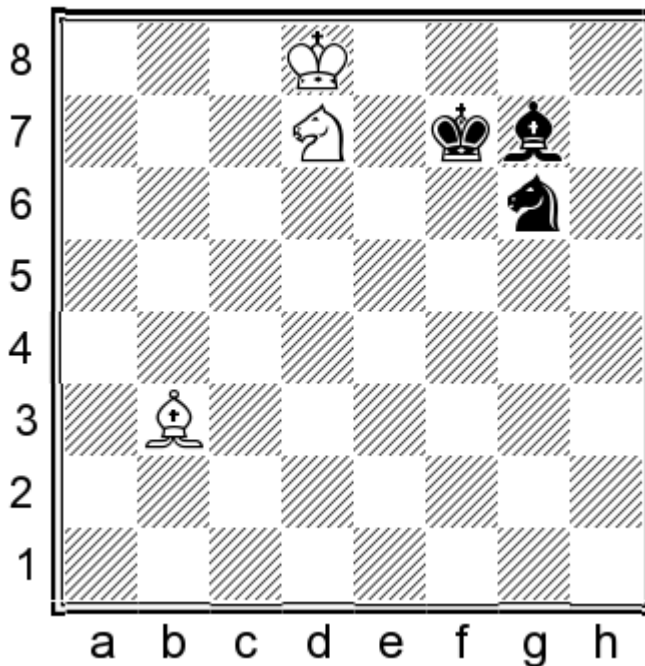
For the moment the pawn is indirectly protected.

4...Kf5 5.Bc2+ Kf6 6.Nb6!

The other knight comes to the rescue.

6...Nxxg6 7.Nd7+ Kxf7 8.Bb3

Mate.

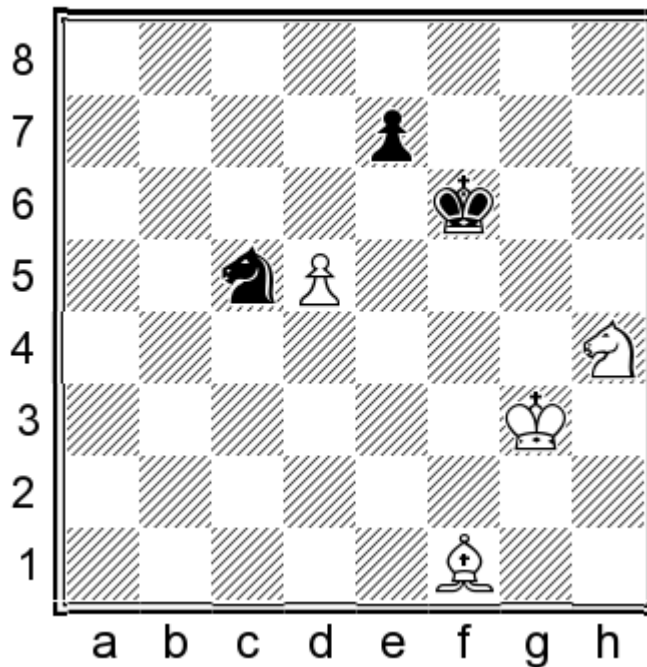


With the sacrifice of a knight and a pawn, the same mating position appears on another side of the board. It does not make any

difference that one of the pieces which blocks the king's escape route is a knight instead of a bishop.

The following study is a very subtle one.

Sochniev, 'Vechny Leningrad' 1987



White to play and win

The main question is whether Black will manage to exchange pawns.

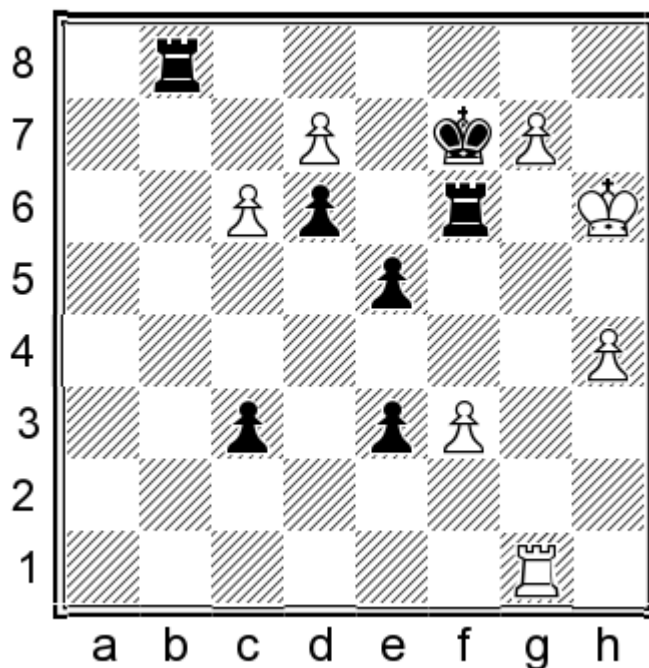
1.Kf4

A natural and strong move.

1...e6

Black cannot wait too long with this, otherwise White will consolidate his position.

2.d6 e5+



3.Kg4!

Again White chooses the best square for the king.

3...Ke6 4.Nf5

For the time being, White has managed to maintain the pawn, but Black keeps harassing it.

4...Ne4 5.Bc4+

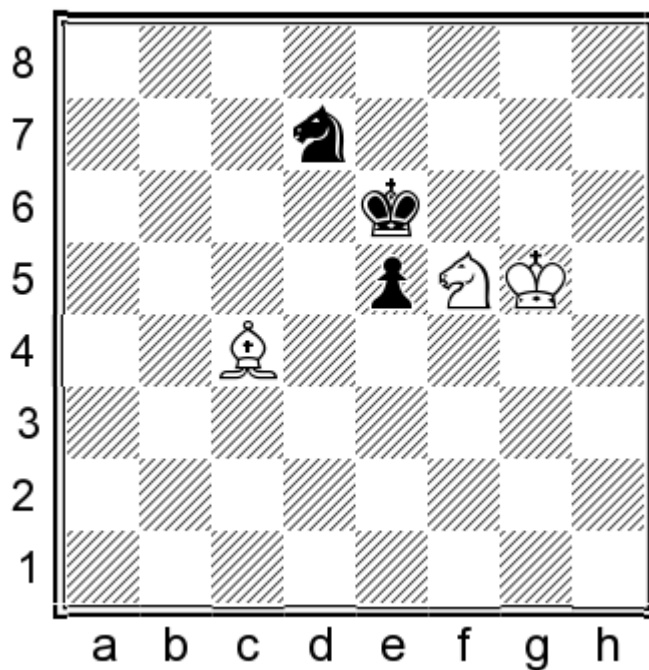
The bishop comes into action.

5...Kd7 6.Bb5+ Ke6 7.d7!

Driving the black knight to a square where it blocks the black king.

7...Nf6+ 8.Kg5 Nxd7 9.Bc4

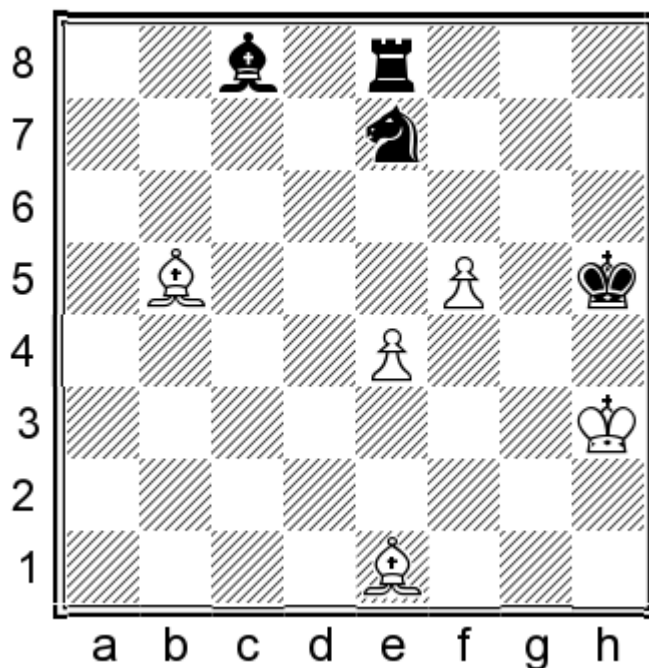
Mate.



For this study, Sochniev received first prize in the ‘Vecherny Leningrad’ tourney.

If the harassed king is on the edge of the board, in principle no blocking pieces are needed for the mate.

Timman 1984



White to play and win

White can capture the rook, with check even, but that wouldn't bring him anything: 1.Bxe8+ Kg5 2.Bd2+ Kf6 and Black is ready to give his knight for the white pawns, keeping his bishop, which is a reliable weapon in the battle against the bishop pair.

1.Bd2

Threatening mate from both sides.

1...Bxf5+

The only defence.

2.exf5 Nc6

The sensational knight move 2...Ng6 would save the draw after 3.fxg6 Rg8 4.g7 Kg6, but it loses after 3.Bc6, which renews the mate threat. The stalemate attempt 3...Nf4+ 4.Bxf4 Re3+ turns out to be a useless demonstration after 5.Kg2.

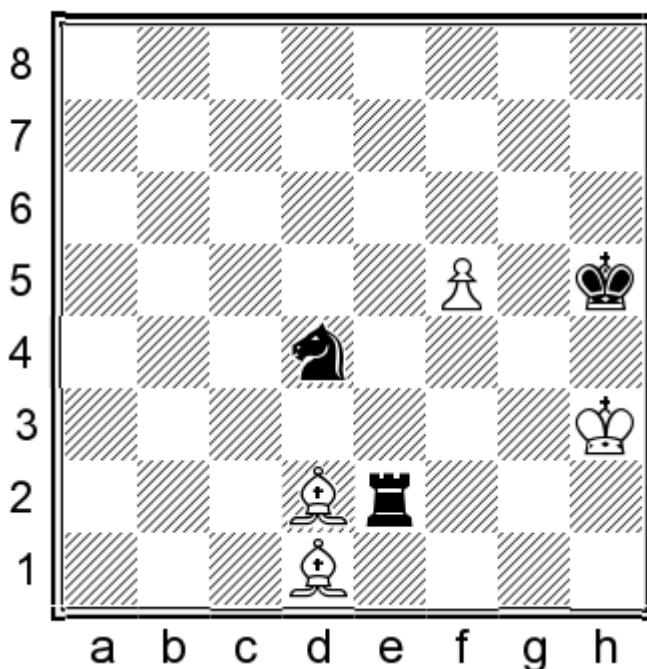
3.Ba4!

A very subtle move. White now threatens mate on d1. Insufficient was 3.Bxc6 in view of 3...Re3+ 4.Kg2 Re2+ with a draw.

3...Re2!

Again, the only defence. Black voluntarily places his rook in an unpleasant pin. Another method to prevent immediate mate is not available.

4.Bd1 Nd4



Black has built up a shaky defence. Nevertheless, it is not so easy to breach. Black cannot be brought into zugzwang as he can always play his knight to f3.

5.Be3!

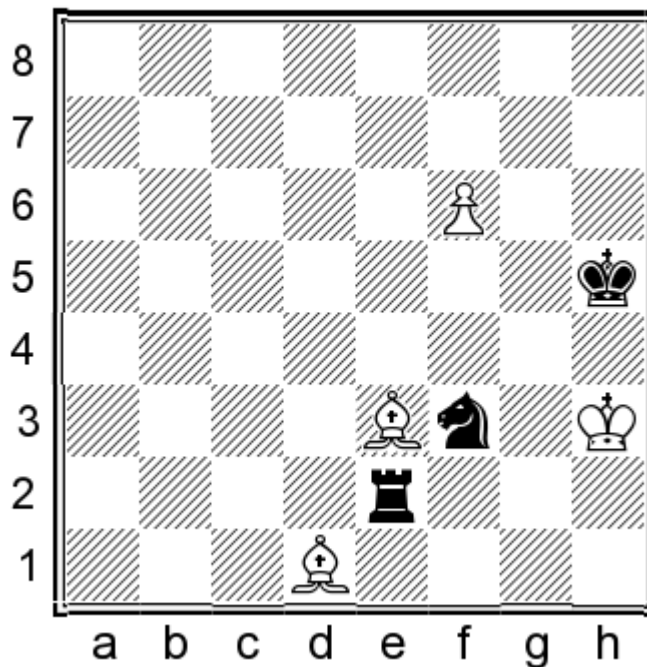
The mate motif is disturbed by a stalemate motif. In combination with the next move, this is the only winning method. After 5.Bc1 Nf3 6.Kg3 Nd4, White cannot make progress, for example:

A) 7.Kf4 Kh6 8.Kg4+ Kg7 9.Bxe2 Nxe2 10.Bb2+ Kf7 11.Kf3 Ng1+ and White cannot catch the knight without losing his f-pawn.

Incidentally, 7...Kh4 is also insufficient for the draw in view of 8.Bxe2 Nxe2+ 9.Ke5 Nxc1 10.f6 Nd3+ and the knight stops the f-pawn via c5 or f4;

B) 7.Bb2 Kg5 (not 7...Nxf5+ 8.Kh3 and Black loses a full rook, ending up in a 2 bishops vs knight ending) 8.Bxd4 Re4 (the only move to prevent White reaching a theoretically winning position) 9.Bb2. Now Black should definitely not take on f5, but both 9...Rb4 and 9...Re3+ lead to a draw.

5...Nf3 6.f6!



This push is only effective when the queen's bishop is on e3. There it blocks the black rook's path to stopping the f-pawn, and also, after 6...Kg6 7.Bxe2 Black has no check on g1.

6...Rh2+

The only reasonable try. After both 6...Rxe3 7.f7 and 6...Ng5+ 7.Kg3 Ne4+ 8.Kf4 Black runs out of moves.

7.Kg3 Kg6 8.Bxf3

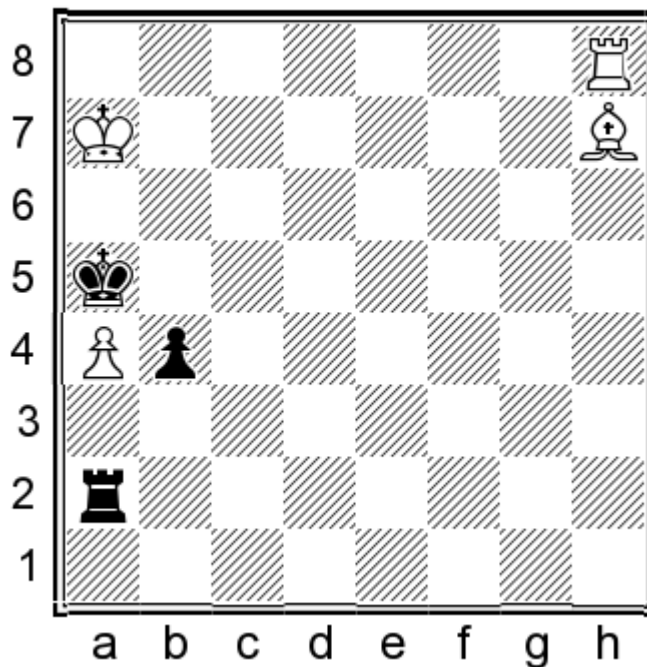
The rook has no good squares. On 8...Rh8, both 9.Be4+ and 9.Bc5 are winning.

8...Rh7 9.Be4+

And wins. Black can still try the cheap trap 9...Kh5, but then White has a large range of winning continuations.

The Russian endgame study composer A.S. Gurvich created a famous miniature in which a mating net is woven around the black king in a surprising way.

Gurvich, 'Shakhmatnaya Moskva' 1959



White to play and win

It seems like an impossible task. White's a-pawn is very hard to protect, whereas Black has a strong passed pawn. However, the position contains a subtle combination.

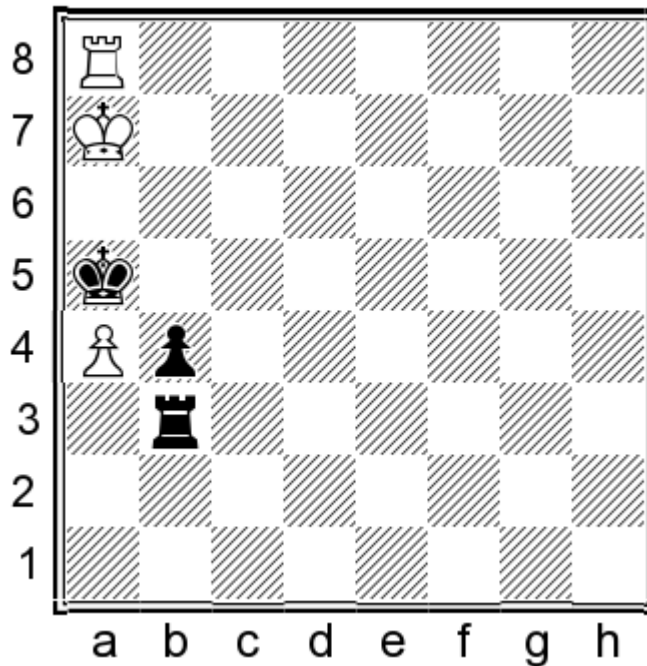
1.Bg8! Rb2

The a-pawn was taboo on account of mate in one.

2.Bb3!!

Blocking the black b-pawn.

2...Rxb3 3.Ra8!



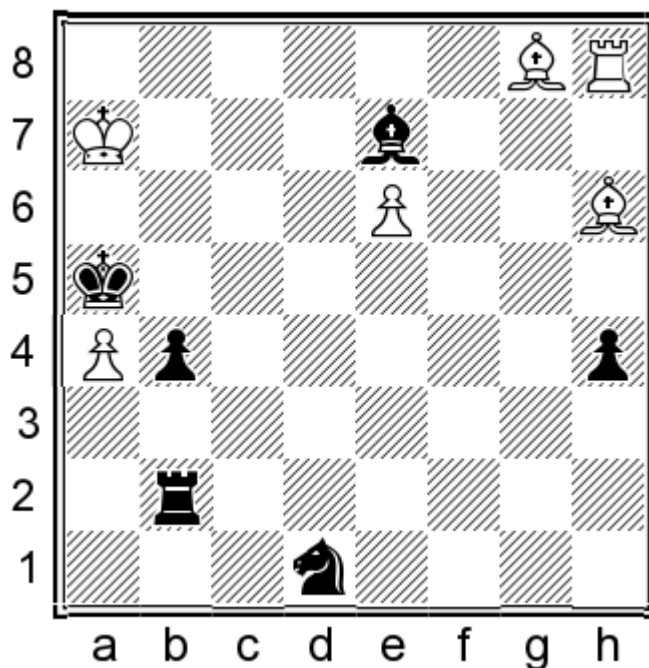
The point of the bishop sacrifice.

3...Kxa4 4.Kb6

Mate.

Interestingly, this mating net can also be constructed if Black has much more material.

Timman 2011



White to play and win (after Gurvich)

Material is equal. White has the bishop pair and a strong passed pawn, but the black pawns aren't exactly harmless either. White has to act energetically, otherwise he may end up in trouble.

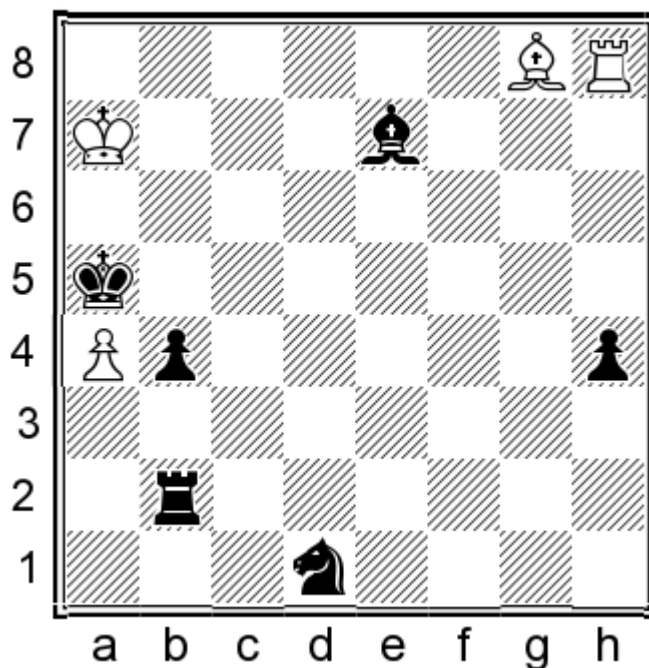
1.Bf8!!

A bishop sacrifice Black has to accept.

1...Bxf8

On 1...Rc2, 2.Kb7! is winning.

2.e7! Bxe7



The same theme that was discussed earlier in this chapter. The starting position is again reached, but this time without the queen's bishop and the e-pawn. So the a2-g8 diagonal has been opened for the other bishop.

3.Bb3!!

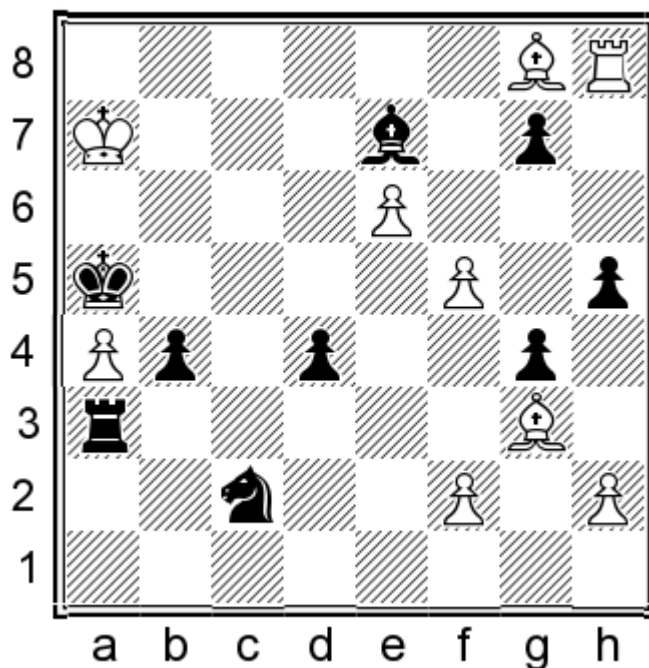
Gurvich's bishop sacrifice turns out to be equally effective here.

3...Rxb3 4.Ra8! Kxa4 5.Kb6

Mate.

The study has gained in content with the extra sacrifices. But still Gurvich's study is better, because it shows the brilliant idea in all its simplicity. In my study, the fact that the black knight doesn't move is especially annoying. Therefore I decided to make a study in which Gurvich's mating position features in a side variation.

Timman 2011



White to play and win

Here Black's passed pawns are even more dangerous.

1.f6!

The intention of this pawn sacrifice will soon become clear.

1...gxf6 2.Bd6!!

The well-known bishop sacrifice. After 2...Bxd6 3.e7! Bxe7 4.Bb3!! Black would get mated in the way that we have already seen. However, there is a better defence.

By the way, after 2.Rh7 Bf8 3.e7 Bxe7 4.Rxe7 Rc3 Black would have sufficient counterplay.

2...Rc3!

Now the battle will revolve around the square e7.

3.Rxh5+

Now the intention of the pawn sacrifice becomes clear.

3...f5!

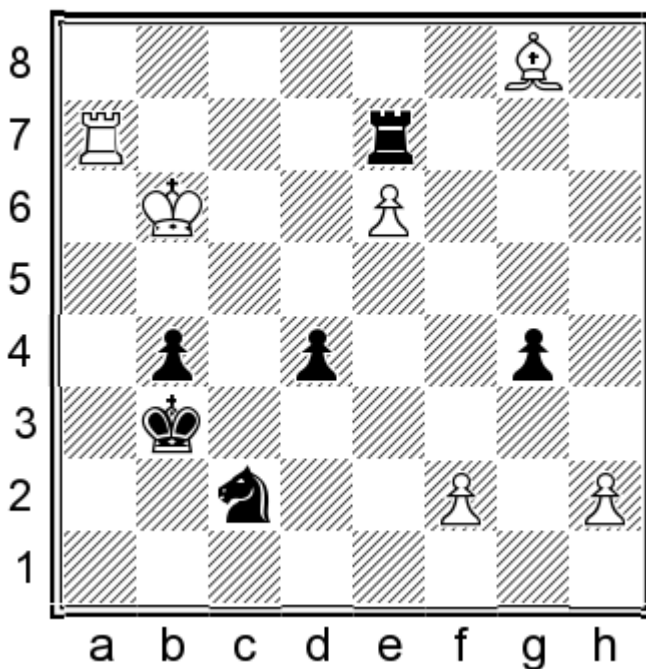
Black also sacrifices his f-pawn. After 3...Kxa4 4.Bxe7 Rc7+ 5.Kb6 Rxe7 6.Rh7 he would have been left without a chance.

4.Rxf5+ Kxa4 5.Bxe7 Rc7+ 6.Kb6 Rxe7 7.Ra5+

Necessary in order to break the blockade on e7. Insufficient for the win was 7.Kc5, as becomes clear from the following variation:

7...d3 8.Rd5 Re8 9.Rf5 Rc8+ 10.Kb6 b3 11.e7 b2 12.Ra5+ Kb4 13.Rb5+ Kc3 14.Rb3+ Kd2 15.Rxb2 Kc1, followed by 16...d2, and White cannot win.

7...Kb3 8.Ra7



It looks as if White wins comfortably, but Black has a fantastic resource:

8...Ne3!

Indirectly protecting the rook. White has to take the knight.

9.fxe3 dxe3

An interesting situation. If White takes the rook, the black pawn will queen undisturbed, after which he draws easily.

10.Rc7!!

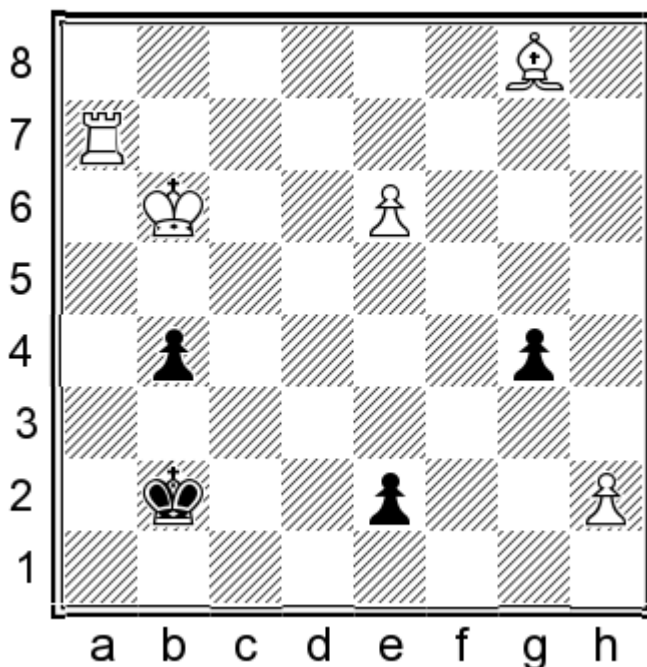
A very strong move. The black king is cut off and can therefore not support the e-pawn.

10...Ka3

Black wants to march on with the b-pawn. Now 11.Rc1 would be insufficient for the win due to 11...b3 12.Re1 b2 13.Rxe3+ Ka2. After White has been forced to give his rook for the b-pawn, the black king marches to the kingside, just in time to conquer the white h-pawn.

However, White has a hidden trick up his sleeve.

11.Rxe7! e2 12.Ra7+ Kb2



13.Ra2+!

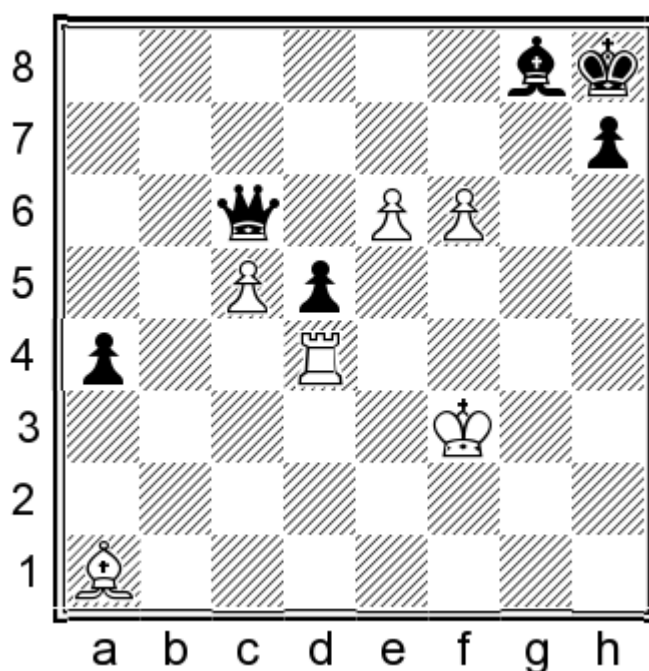
With this rook sacrifice White forces the passage of his e-pawn with check.

13...Kxa2 14.e7+

And wins.

The Russian endgame study composer Viktor Evreinov is from the same generation as Vladimir Bron and Vladimir Korolkov, but he has left behind a much smaller body of work. Whereas Bron and Korolkov each have more than 400 studies to their names, Evreinov hasn't even made 100. This is mainly due to the fact that he only started to compose seriously when he was 50. To my mind, he composed one of the most beautiful mate studies imaginable.

Evreinov, 'Shakhmaty Riga' 1959



White to play and win

The white bishop is lying in ambush. It will play the starring role in the mating combination.

1.Re4!!

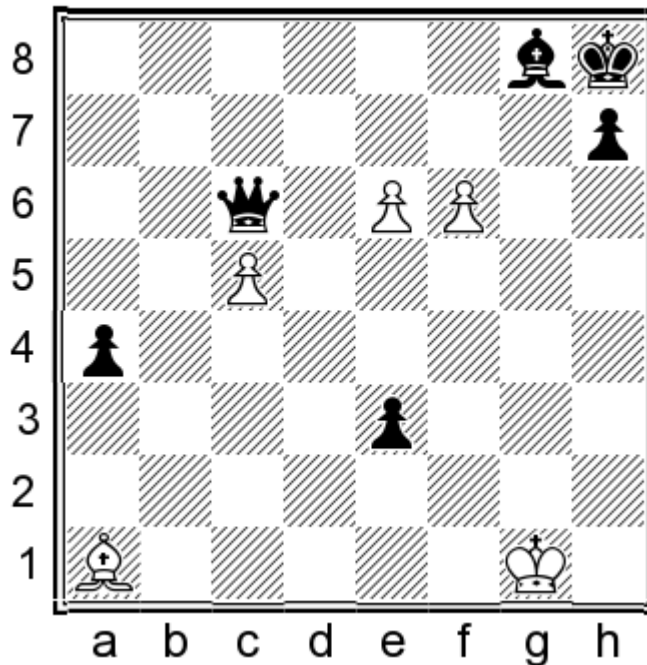
An absolutely stunning first move. White opens up one diagonal for his bishop and closes another for the black queen.

The sacrifice of his rook – with check! – is necessary in order to get everything right.

1...dxe4+ 2.Kg2!

Walking away from all the queen checks.

2...e3+ 3.Kg1



Again, the only square for the king. The position is intriguing. Black is a full queen up, but can't avert the catastrophe along the a1-h8 diagonal.

3...Bf7

A desperate attempt to keep the long diagonal closed.

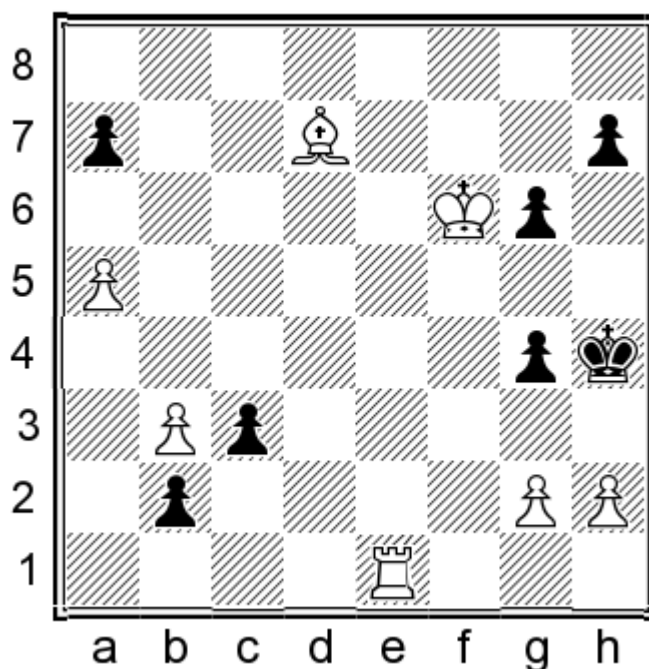
4.exf7 Qxc5 5.f8Q+ Qxf8 6.f7+ Qg7+ 7.Kh2!

For the third time, the only square for the king.

7...Qxa1 8.f8Q#

Evreinov also worked on another ingenious mating position.

Evreinov, 'Ceskoslovensky Sach' 1960



White to play and win

The black passed pawns cannot be stopped. Therefore, White has to search for mates.

1.Bb5 c2 2.Re7!

Forcing the h-pawn to move forward, after which the black king loses one escape square.

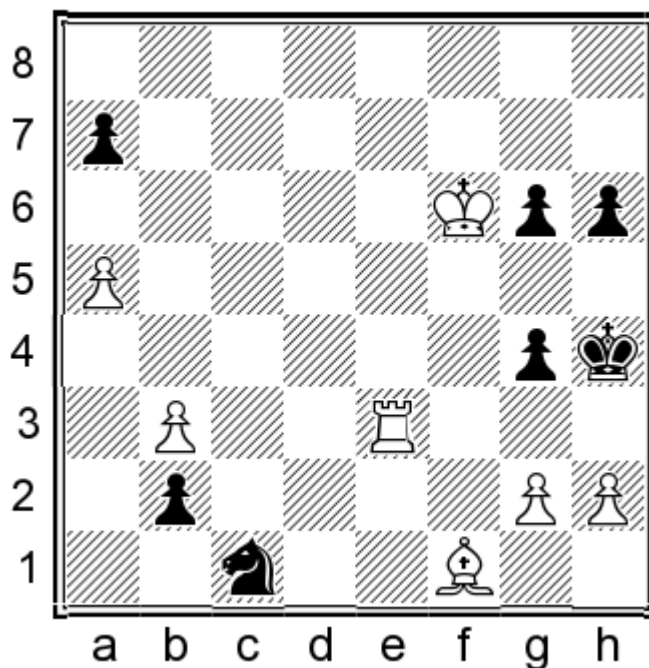
2...h6 3.Re3!

Suddenly there is a concrete mate threat: 4.Rh3+ gxh3 5.g3+, followed by mate on e2.

3...c1N!

The only defence.

4.Bf1!



Depriving the black king of the h3-square. Now Black has to promote his other pawn, too.

4...b1Q 5.g3+ Kh5 6.Re5+ g5 7.Bc4!

The mating net is shifted.

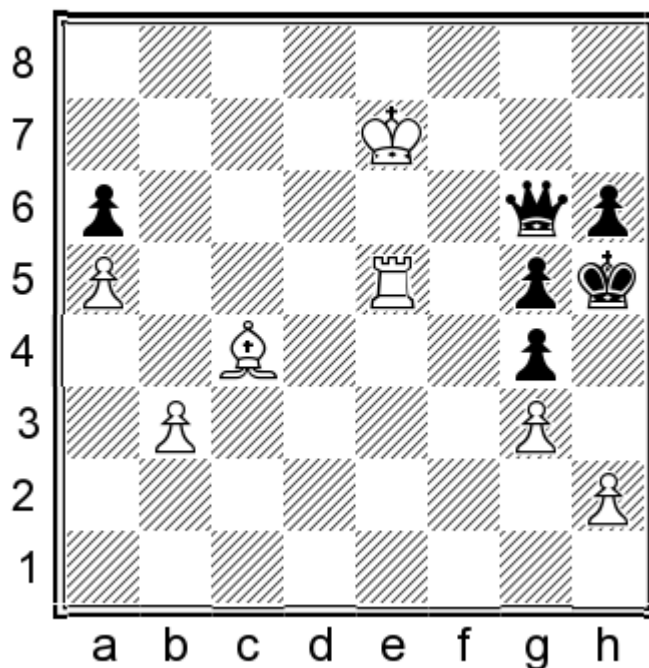
The deadly check on f7 cannot be prevented. Black now starts to play for stalemate.

7...Qg6+ 8.Ke7 Nd3 9.Re3!

This is the only square for the rook.

9...Ne5 10.Rxe5 a6

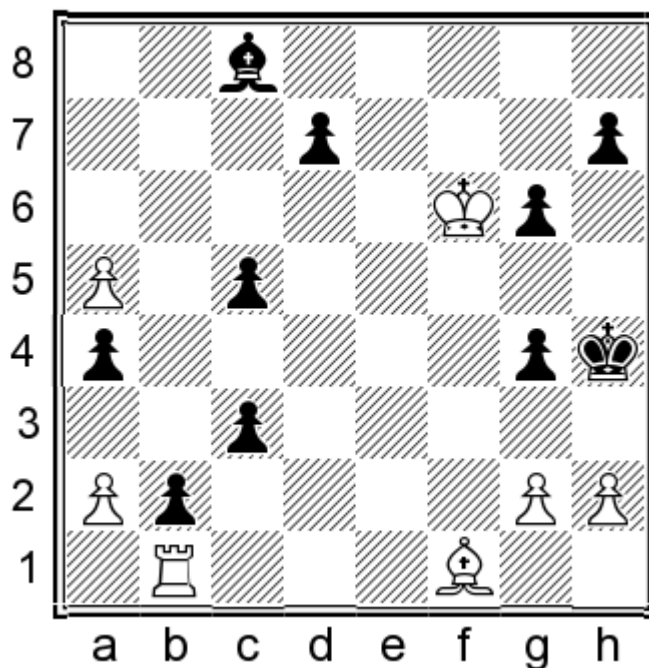
And here White plays a final little move White to avoid stalemate and win:



11.h3!

A pretty study, but you can sense that more can be got from this theme. Apparently Evreinov felt the same. He made three other studies with this theme; one in the same year, the other in 1967 and the third in 1980, not long before he died. Although Evreinov won prizes with these last two studies, none of them turned out to be correct – a good challenge for me. I set to work and improved Evreinov's idea as follows.

Timman 2011



White to play and win (after Evreinov)

Black still has all his pawns. The passed pawns are threatening, so White has to search for a mate.

1.Re1

White brings his rook into play. The alternative 1.Rd1 was no good in view of 1...g3, giving the black king some air.

1...Ba6!

With this surprising bishop sacrifice, Black manages to create counterplay. After 1...d5 White would weave a mating net around the enemy king, as follows: 2.g3+ Kh5 3.Bd3 (threatening 4.Bxg6+ hxg6 5.Re8 with mate), 3...Kh6 4.h3 or 4.Rh1, followed by 5.h3. Black is helpless.

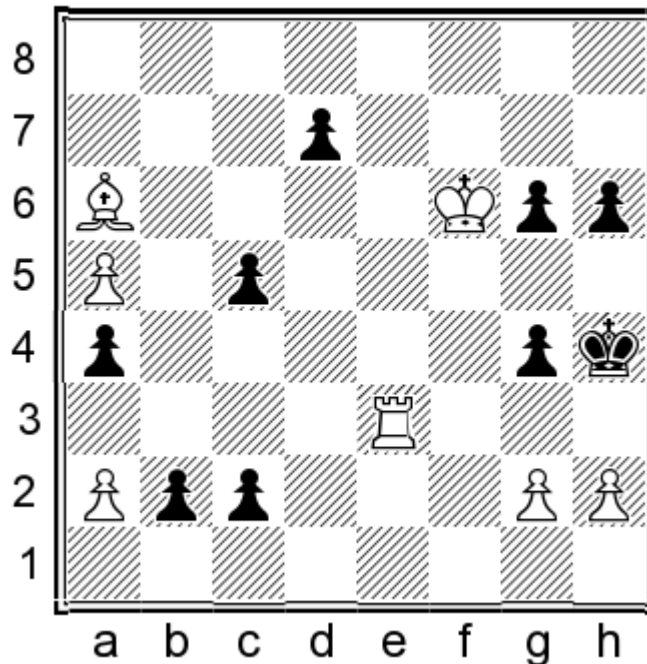
2.Bxa6

White has to accept the bishop sacrifice. After 2.Re7 h6 3.g3+ Kh5 4.Re5+ g5 5.Bxa6 b1Q he would have no more than a draw. It is important to keep the check by the g-pawn in reserve.

2...c2 3.Re7!

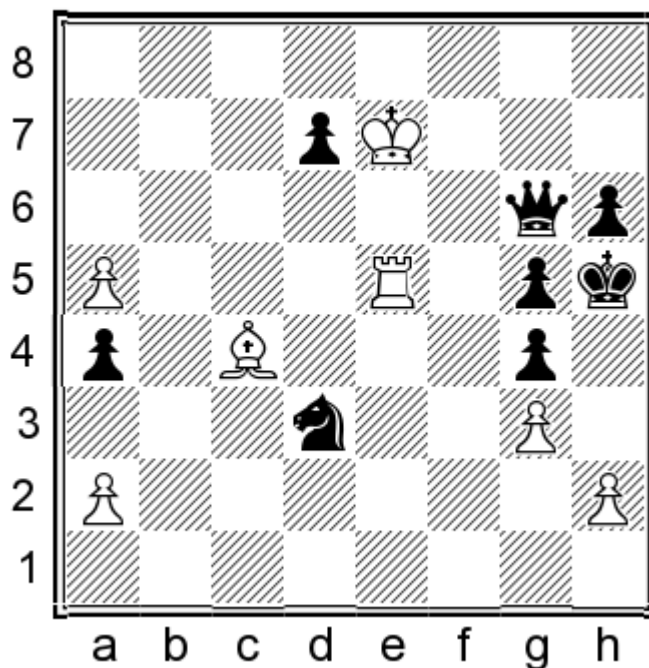
Now this Evreinovian thematic move is good.

3...h6 4.Re3



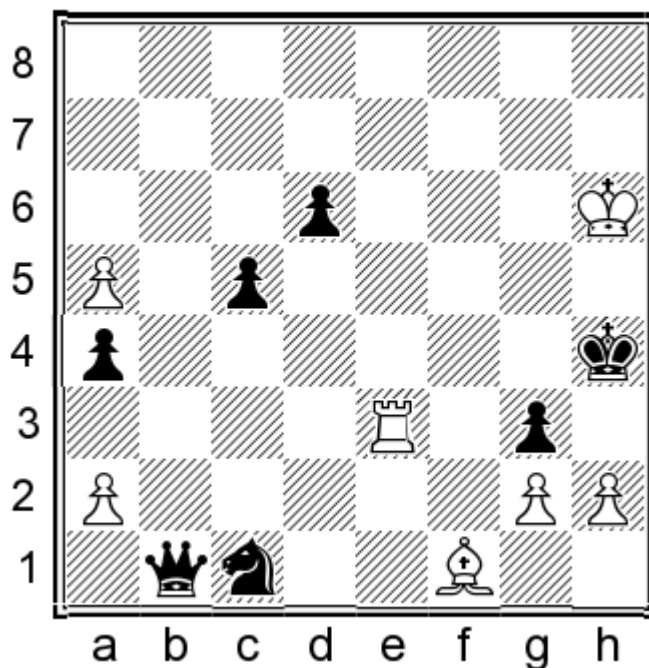
There are two main lines here:

A) 4...c4 Black sacrifices a pawn now in order to play for stalemate later on. 5.Bxc4 c1N! Here, too, the only way to prevent the mating combination. 6.Bf1! b1Q 7.g3+ Kh5 8.Re5+ g5 9.Bc4 Qg6+ 10.Ke7 Nd3 Black is also going to sacrifice his knight.



11.Re3! The only square for the rook. On 11.Re2, 11...Nf4! saves Black. 11...d5 12.Bxd5 Ne5 13.Rxe5 a3 14.h3! Evreinov's final move. White avoids stalemate and wins;

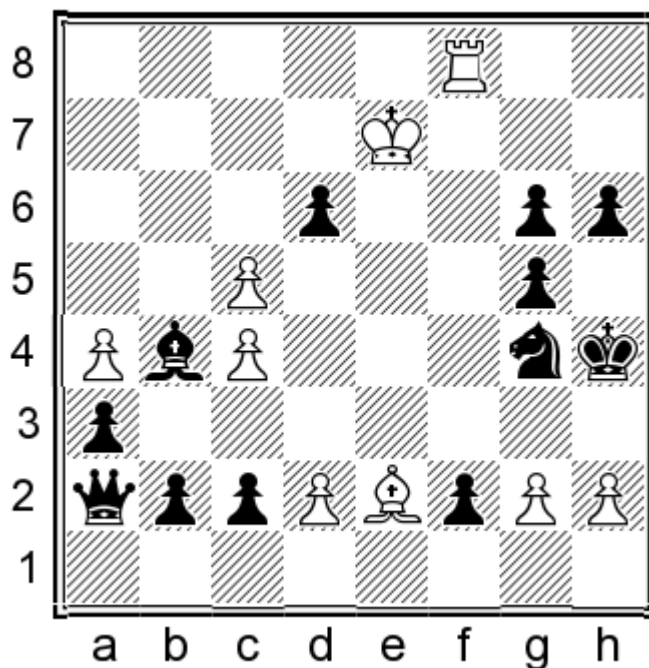
B) 4...c1N After this immediate knight promotion the play takes on a different character. 5.Bf1! d6! Preventing the check on e5. Now White has to corner the black king in another way. 6.Kxg6! Here it becomes clear why White had to wait with the g-pawn check. 6...b1Q+ 7.Kxh6 White has allowed the queen promotion with check. He now threatens mate in one. 7...g3 The only way to prevent it.



8.Bd3!! A surprising bishop sacrifice. Again there is a threat of mate in one, so Black's reply is forced. 8...Qxd3 9.hxg3+! An important zwischenzug. After 9.Rxd3 Nxd3 10.hxg3+ Kxg3 11.a6 c4 12.a7 c3 13.a8Q c2 14.Qf3+ Kh2 White would not be able to win. 9...Kg4 10.Rxd3 Nxd3 11.a6 and wins.

Variation B looked like an interesting starting-point for a new study.

Timman 2011



White to play and win

White is a large amount of material behind, but he can create a powerful mating threat.

1.Rf3

Mate on h3 can only be prevented with heavy material sacrifices.

1...Qb3!

This queen sacrifice draws the white rook beyond the critical e3-square.

2.Rxb3 Ne3

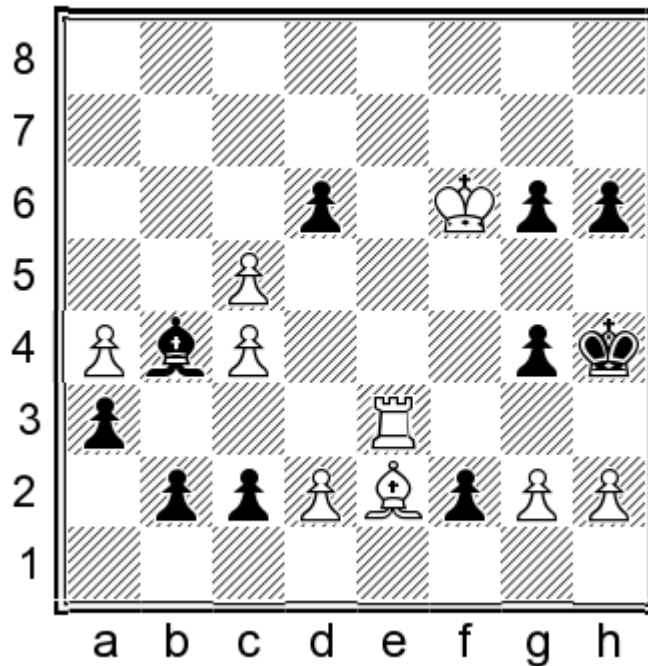
Black sacrifices his knight so as to be able to push his foremost g-pawn.

3.Rxe3 g4

The first mate threats are warded off. But White has more trumps.

4. Kf6!

Depriving the black king of the g5-square. As in the previous studies, White is threatening 5.Rh3+ gxh3 6.g3 mate. Again Black has to make huge sacrifices to avert the new mate threat.



4...Bc3+!

Only with this bishop sacrifice can Black stay afloat. After 4...f1Q+ 5.Bxf1 c1N 6.Kxg6 b1Q+ 7.d3! he would soon be mated. Here the intention of the black bishop sacrifice becomes clear: he wants to deflect the white d-pawn to c3.

5.dxc3

Alternatives were no good:

A) 5.Rxc3 f1Q+ 6.Bxf1 c1N and White cannot win. His rook is less favourably placed, so he cannot work with the little d2-d3 move;

B) 5.Kxg6 Be5! and Black is winning, as the mate threat is gone.

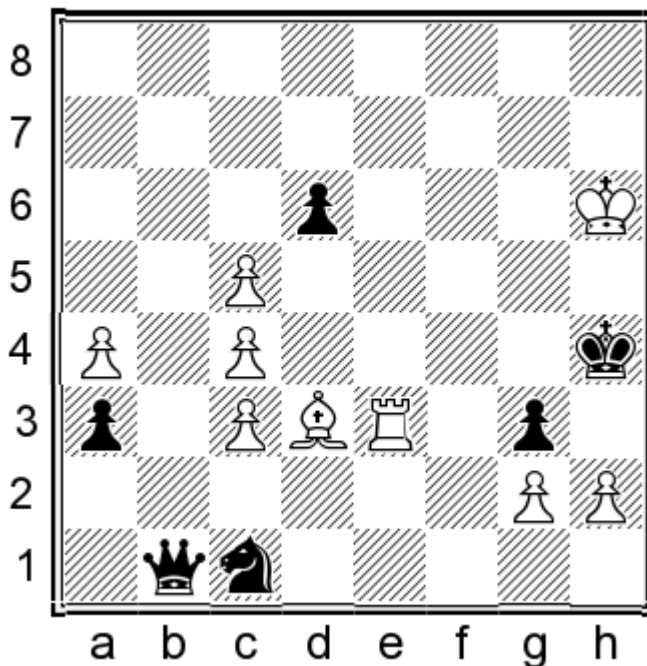
5...f1Q+ 6.Bxf1 c1N!

Here too, Evreinov's knight promotion is the only way to prevent immediate mate.

7.Kxg6

Not 7.g3+ Kh5 8.Bg2 in view of 8...b1Q 9.Be4 a2! and Black comes out on top.

7...b1Q+ 8.Kxh6 g3 9.Bd3!



All still as in the previous study. After 9...Qxd3 10.hxg3+ Kg4 11.Rxd3 Nxd3 12.c6 White promotes with check and then reaches a winning queen ending. However, Black has a more tenacious defence:

9...Qb7!

Black continues the struggle for the square e4. 10.Re4+ now runs into 10...Qxe4 11.hxg3+ Kxg3 12.Bxe4 dxc5 13.Bb1 Nb3 and the draw is inevitable.

10.Bf5!!

White keeps playing for mate. With the text White deprives the black king of the g4-square.

10...Ne2!

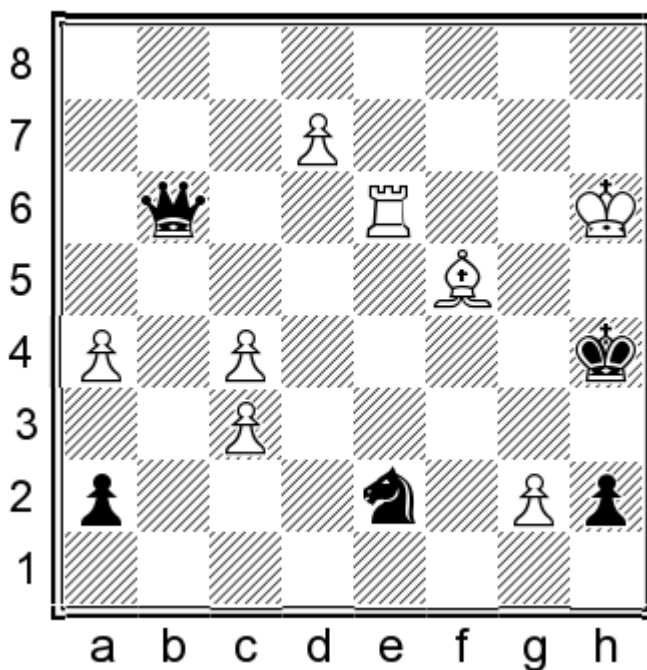
Both promoted pieces rush to the aid of the black king. Now White cannot increase the pressure. However, he still has another trump.

11.cxd6

This passed pawn is going to decide the issue.

11...a2 12.d7 Qb6+ 13.Re6 gxh2

The situation remains tense.

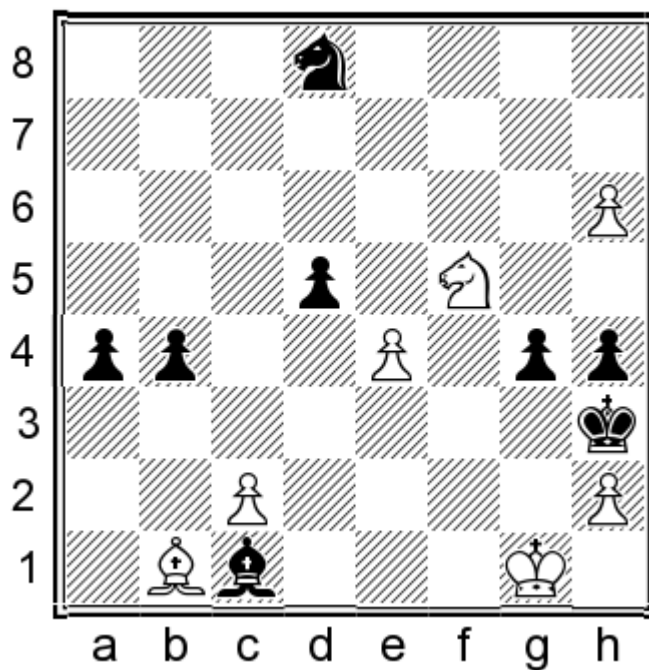


14.Rxb6 h1Q 15.d8Q+ Kg3+ 16.Kg7!

Not 16.Kg6 in view of 16...Nf4+ 17.Kg7 Qh5! and White cannot win. After the text move Black can promote a fifth pawn, but after 16...a1Q 17.Qd3+ Kf2 18.Qf3+ Ke1 19.Rb1+ White emerges with an easily winning endgame.

In the next study, White sacrifices a knight and three pawns in order to open the diagonal for his bishop.

Timman 2009



White to play and win

1.h7 Bb2

On 1...Nf7, 2.e5 is winning.

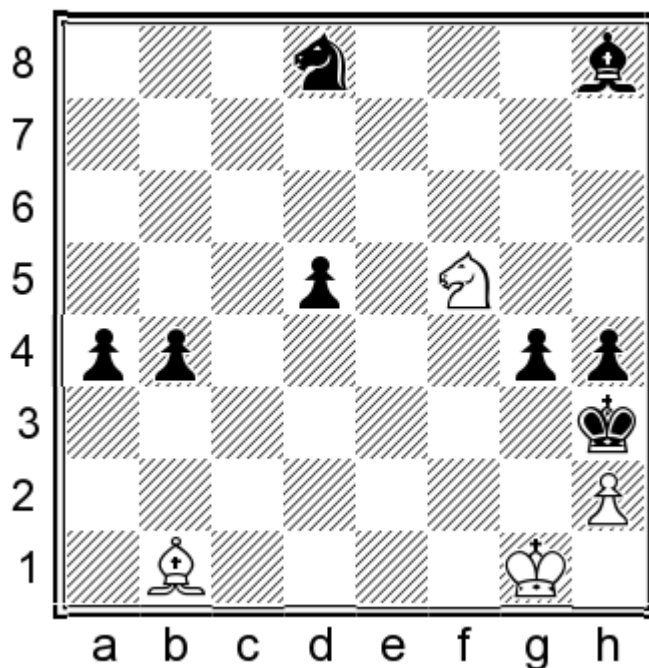
2.c3! Bxc3 3.e5!

The second pawn is sacrificed.

3...Bxe5 4.h8Q!

And the third.

4...Bxh8



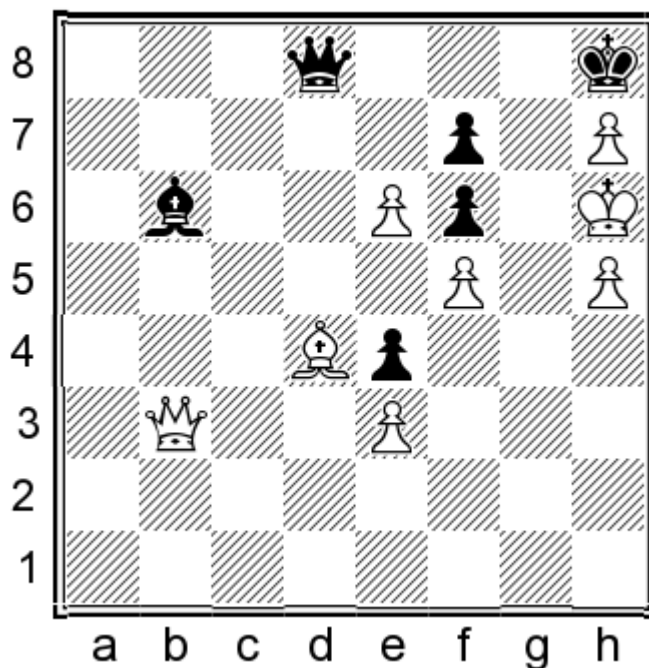
5.Ng7!

This was White's intention. The square f5 is vacated for the bishop. With the immediate 5.Bd3 g3 White would achieve nothing.

5...Bxg7 6.Bd3 Bd4+ 7.Kh1 g3 8.Bf5#

In the tourney of Het Tijdschrift van de KNSB in the year 1948, the Dutch endgame study composer J.Fernhout received the first prize for the following study.

Fernhout 1948



White to play and win

The intended solution was: 1.e7 Qxe7 2.Qa3 Bd8 3.Bc5 Qe5 4.Bb6 Qe7 5.Bxd8 Qd6 6.Be7 Qd8 7.Bf8 with mate.

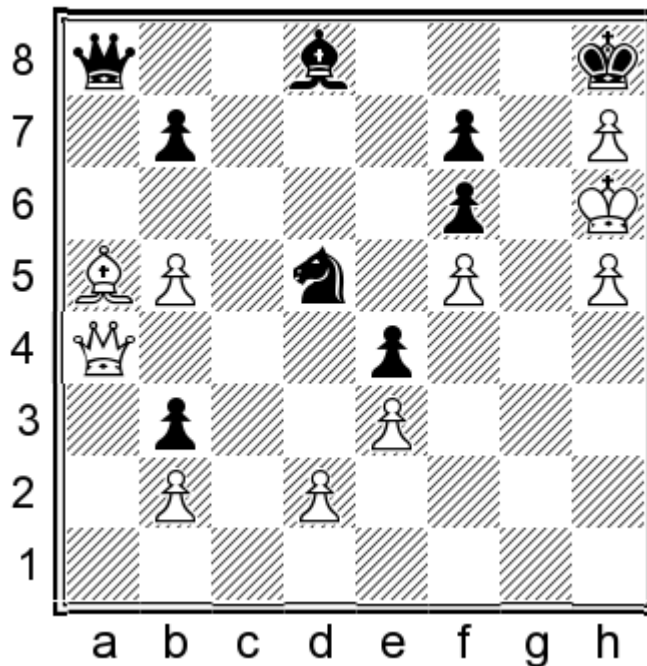
Unfortunately this variation contains a number of duals, which is why that first prize was withdrawn later. On the first move 1.Qb4 is winning, on the 4th move the alternative 4.Qa4 is also sufficient. On move 6 there are all kinds of methods to force mate. On the last move, 7.Qa8 forces mate in a more elegant way.

The Dutch endgame study composer Jan van Reek tried to repair the study, but his attempts weren't too successful. He put the white queen on d3, removing the first dual. Next, his main line continued with 3...Bb6 (instead of 3...Qe5), but here, too, the fun is over after 4.Qa8+. On 4...Qd8, 5.Bd4 is a nice coup de grâce, but the prosaic

exchange on d8, followed by manoeuvring the bishop to f8, is also quite sufficient.

I thought not much was left of the attractive motifs in the original study. After delving deeper into the matter I managed to construct a good version with the same motifs.

Timman 1990



White to play and win

The kings are condemned to each other's company in the same way as before. Anchored in the corner, they cannot move. No other substantial changes have been made to the position either. White is going to try to give mate, but he must watch out for stalemate, and even his own king will face mate threats.

1.Bb4

The first queen sacrifice. After 1...Qxa4 2.Bf8 Black would be mated.

1...Qb8

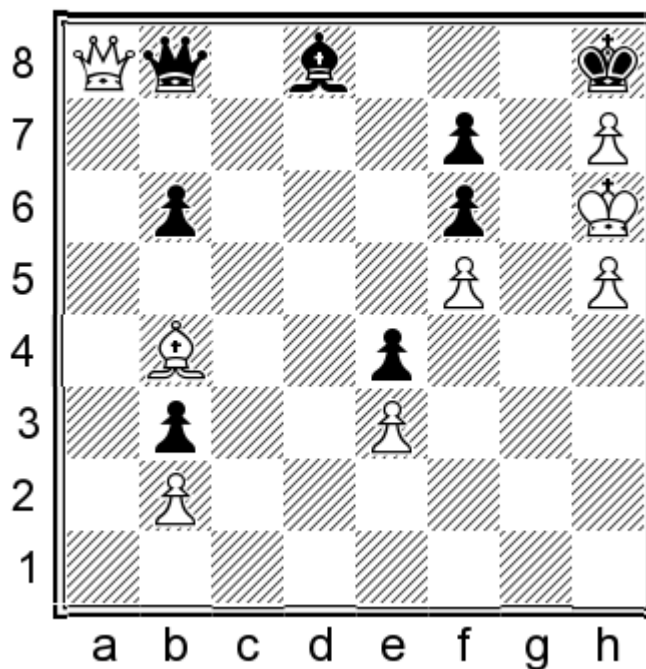
Now 2.Bf8 doesn't work on account of 2...Qg3 and Black wins.

2.Qa8!

The second queen sacrifice.

2...Nxe3 3.dxe3 b6

The first counter-sacrifice of a queen.



4.Bc5!

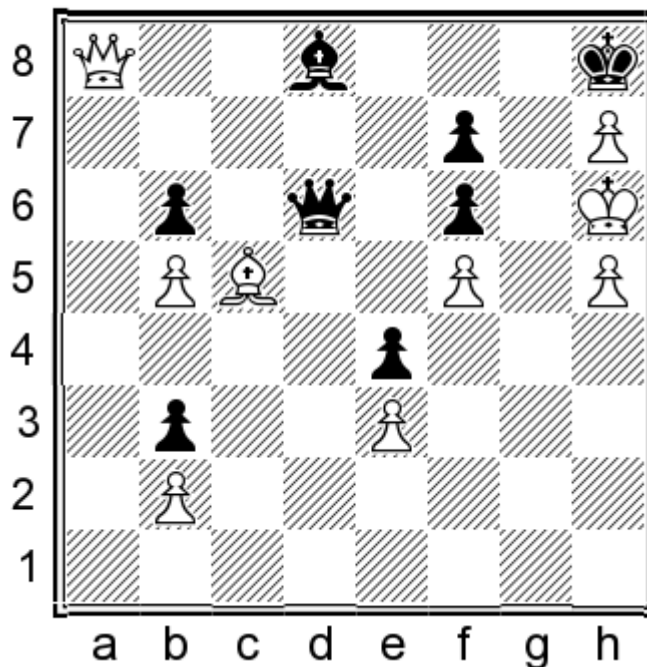
Only in this way can White force the win. Alternatives do not suffice, see:

- A) 4.Bf8? Qg3 and Black wins;
- B) 4.Be7 Qd6! and the white bishop is caught in a bizarre way – stalemate is inevitable;
- C) 4.Ba3. This quiet little bishop move is hard to refute. Black saves himself in the following long variation: 4...Qd6 5.Qd5 Be7! 6.Qxf7 Bf8+ 7.Kg6 Qg3+ 8.Kxf6 Be7+! (forcing the white king to

go to a less favourable square) 9.Ke6 (if White takes, Black will have a 'kamikaze queen') 9...Bxa3 10.Qe8+ Kxh7 11.Qg6+ Qxg6+ 12.hxg6+ Kg7 (here it becomes clear why Black's 8th move was useful: the square g7 has been vacated for the king) 13.Ke5 Bc5 14.Kxe4 Kf6 15.Kd3 Bf8! 16.e4 Ke5 and Black can prevent the enemy king from penetrating.

4...Qd6!

The second counter-sacrifice. Now 5.Qc6 or 5.Qxe4 would not yield anything in view of 5...Be7, followed by 6...Bf8+, and after the bishop and the queen have been captured, Black is stalemated.



5.Qd5!!

The third queen sacrifice, and at the same time the climax of the study. All pieces are hanging, but neither of the two sides shows any intention of capturing anything. 5...Qxd5 would obviously be met by 6.Bf8 and mate.

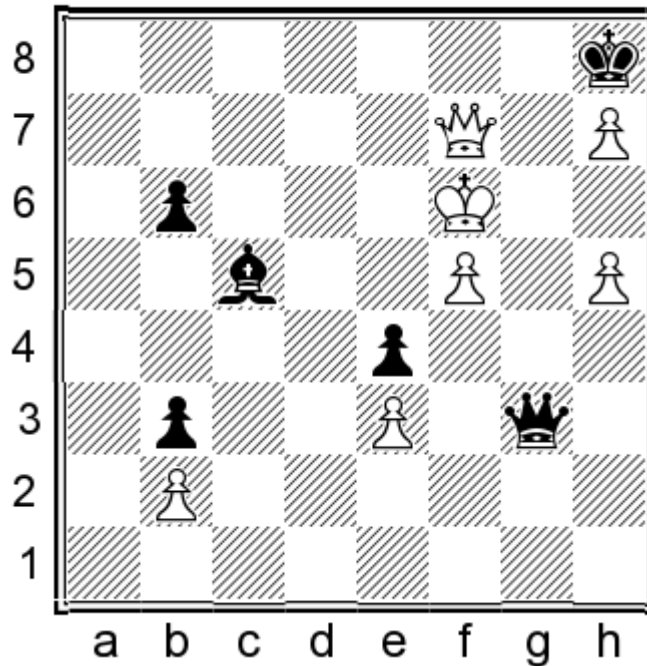
5...Be7

The third counter-sacrifice. Black is still hoping for stalemate.

6.Qxf7

Vacating the g6-square for the white king. The rest is rather prosaic.

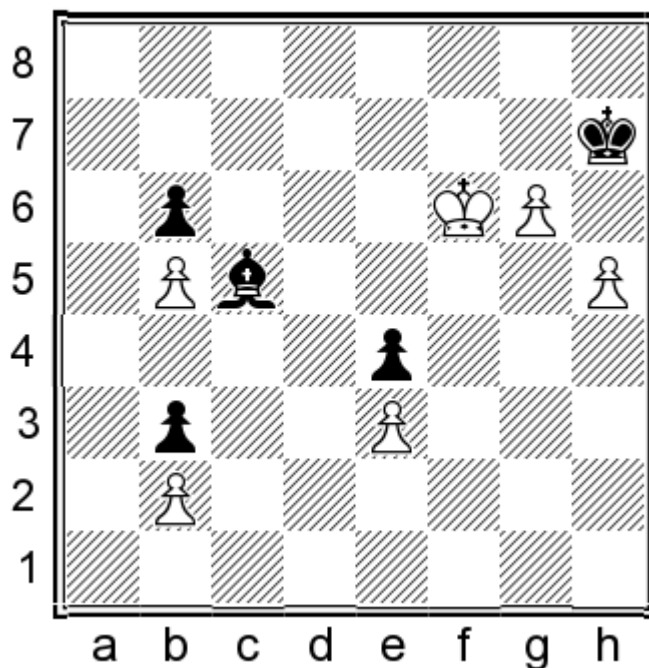
6...Bf8+ 7.Kg6 Qg3+ 8.Kxf6 Bxc5



9.Qe8+

White is aiming for a queen exchange, otherwise he won't achieve anything.

9...Kxh7 10.Qg6+ Qxg6+ 11.fxg6+



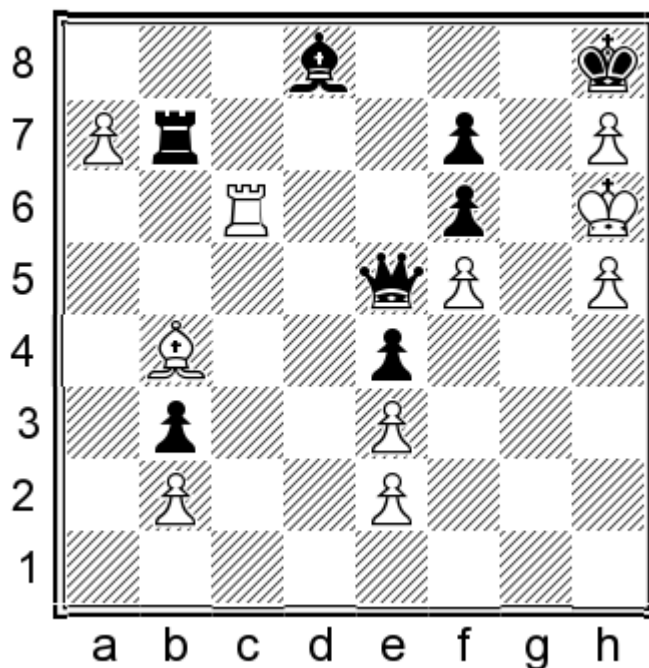
Here we see the difference with Variation C after White's 4th move. The long diagonal is inaccessible to the black bishop.

11...Kg8 12.h6 Bxe3 13.h7+ Kh8 14.g7+ Kxh7 15.Kf7

And wins.

During my holidays in 2016 on the Greek island of Zakynthos, in the village Alykes, I composed a better study with the same theme.

Timman, 'Armenian Cup' 2017



White to play and win

The first move is obvious.

1.Rc8 Rb8!

A subtle defence; Black plays for stalemate.

2.Rxb8 Qxb8 3.a8Q!

The other move to avoid stalemate is 3.axb8B, but Black will manage to force stalemate anyway: 3...Bb6 4.Bf4 Bc5 5.Bg5 Bxe3! 6.Bd2 Bxd2 7.Bxd2 e3 with a draw.

3...Qd6

The only move.

4.Bc5!

If White tries to gain space by 4.Qc8, Black has 4...Qd2!, forcing an immediate draw.

The queen sacrifice 4.Qd5 runs into 4...Be7!, e.g. 5.Qxf7 Bf8+ 6.Kg6 Qg3+ 7.Kxf6 Bg7+ 8.Ke6 Qe5+ 9.Kd7 Qb5+ with a perpetual.

4...Qb8 5.Ba3!

A bishop manoeuvre to reach the same position with Black to move.

5...Qd6 6.Bb4! Qb8 7.Bc5 Qd6 8.Qc8

Now White can make progress; the pawn on e3 is protected.

8...Qb8 9.Qd7

Gaining more and more space.

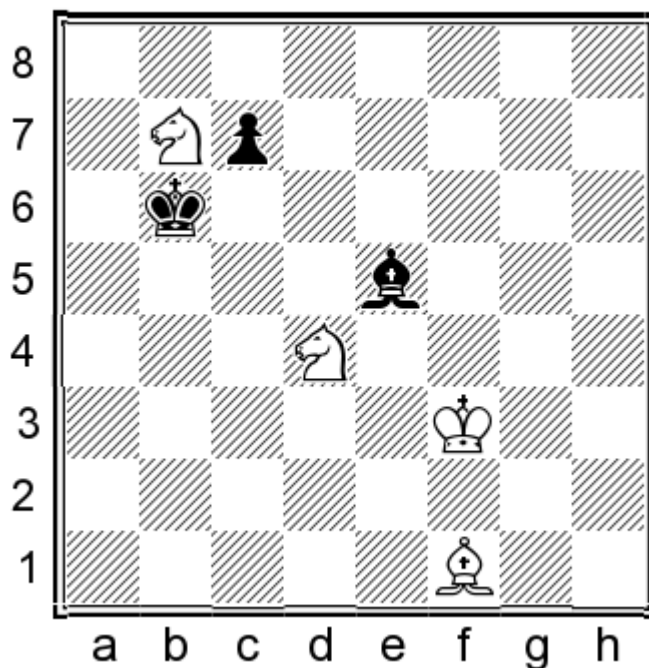
9...Bc7 10.Qxf7 Bf4+ 11.Kg6

And wins.

Mating patterns with the king in the corner are essentially the most natural. There is a well known motif where bishop and knight keep the enemy king captive in the corner.

The French endgame study composer E. Ratner was the first to work out this theme.

Ratner, 'La Stratégie' 1920



White to play and win

White must lose a knight. However, he manages to drive the black king into the corner.

1.Nb3! Kxb7 2.Na5+ Ka8

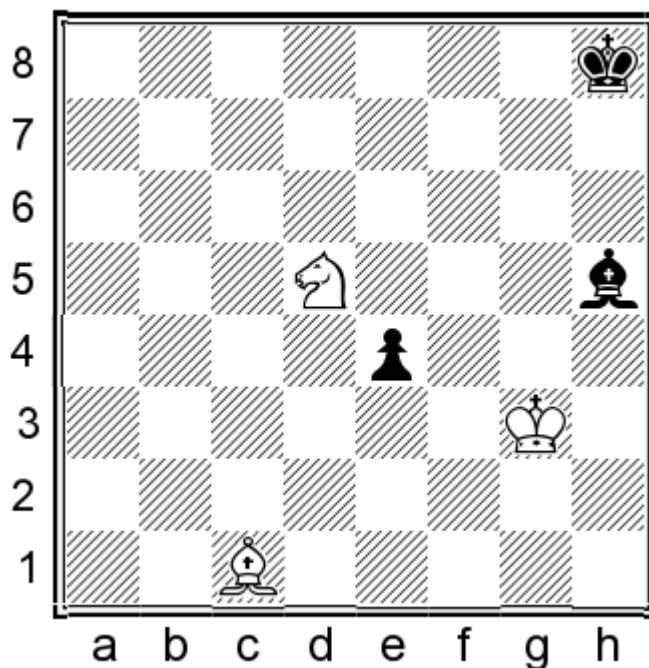
There's nothing to be done about it. After any other king move, Black loses the bishop.

3.Nc6

Followed by 4.Ba6, and the white king marches to c8 undisturbed, after which the bishop will give mate.

That was quite easy. The adaptation by the Dutch endgame study composer C.J. de Feijter has more content.

De Feijter 1932



White to play and win

White begins by walling in the enemy king.

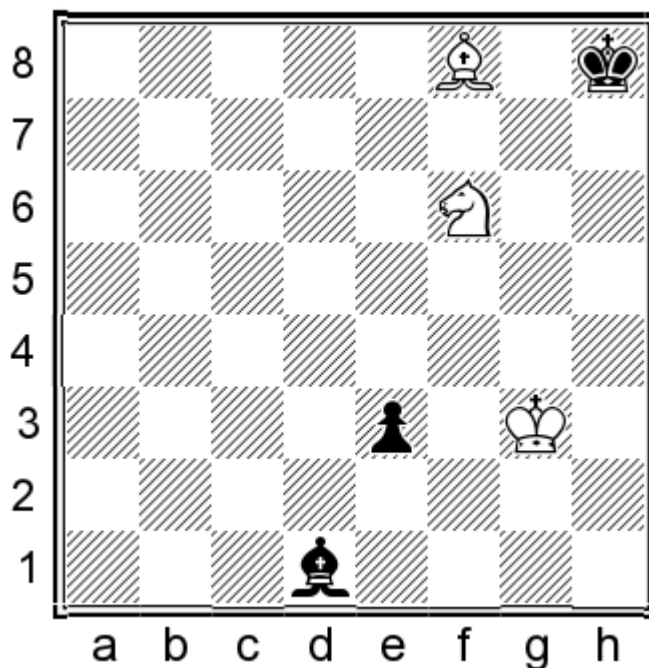
1.Nf6 Bd1

The best defence. Black wants to push his passed pawn as far as possible.

2.Bh6 e3

Now White has to watch out. If he plays the careless 3.Kg2, 3...Be2! follows. Black transfers the bishop to the f1-a6 diagonal and advances his pawn, and White has no way to make progress. Therefore he has to opt for another waiting move.

3.Bf8!



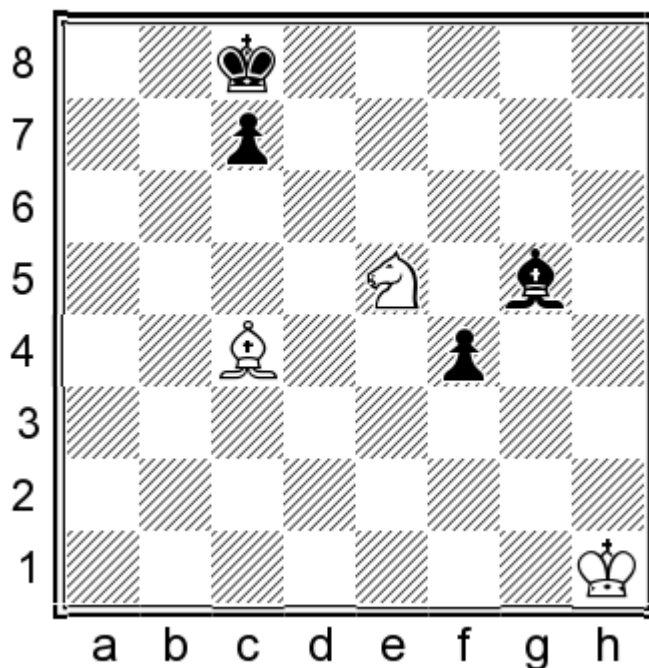
Black is in zugzwang.

3...e2 4.Kf2

Winning the e-pawn. After that, the king will have free rein.

The Finnish endgame study composer Julius Gunst elaborated on this theme later on, with the following result.

Gunst, 'Tijdschrift van den KNSB' 1949



White to play and win

The starting position is clearly based on Ratner's study. Thanks to the unfortunate pawn on c7 Black cannot prevent his king from being driven into the corner.

1.Ba6+ Kb8

Otherwise the bishop will be lost.

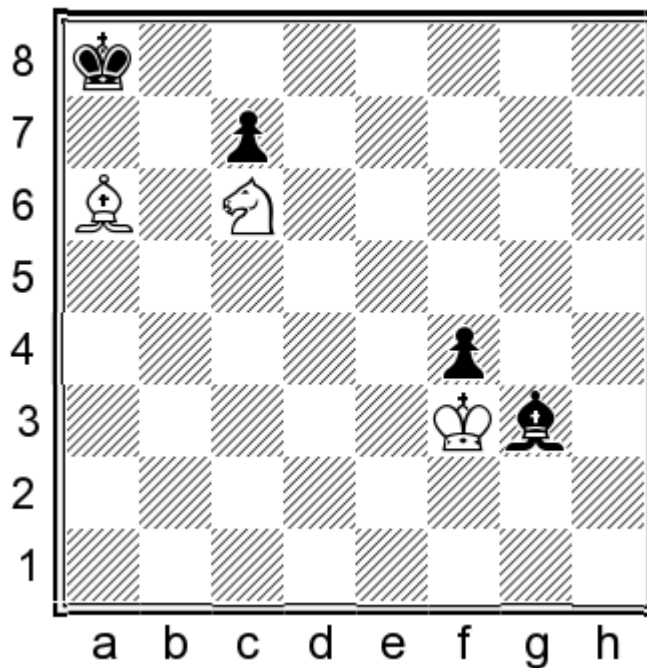
2.Nc6+ Ka8 3.Kg2

White cannot allow the black pawn to reach the f2-square.

3...Bh4

If the black pawn had been on f5, the draw would have been inevitable. Black could have played his bishop to a square on the c1-h6 diagonal, after which he has enough tempo moves. With the pawn on f4, his movements are restricted.

4.Kf3 Bg3



Now White faces a problem. After 5.Kg4 Bh2 he cannot follow up with 6.Kf5 because then Black holds the draw with 6...f3 7.Ke6 f2 8.Kd7 f1Q 9.Bxf1 Kb7 and the black king escapes just in time.

5.Bc8!

The same tempo move as in De Feijter's study.

5...Bh2 6.Kf2

The start of a king triangulation.

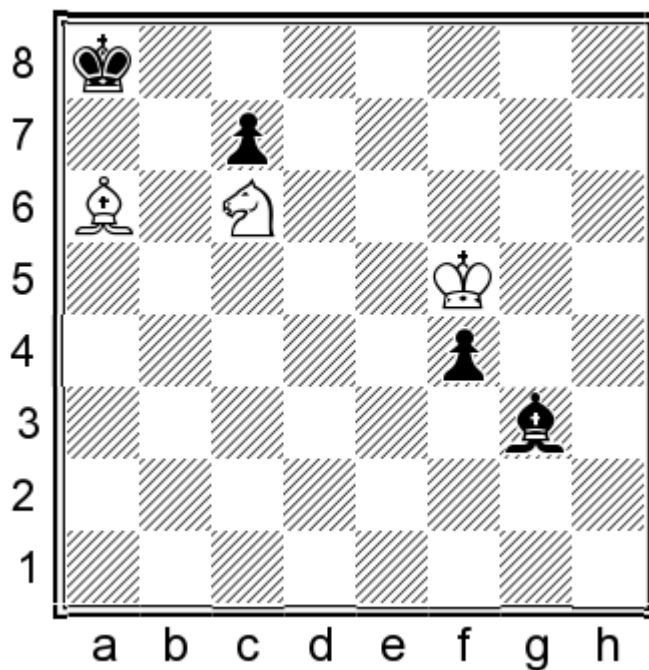
6...Bg3+ 7.Ke2!

Certainly not 7.Kg2? in view of 7...Be1!, followed by 8...Bd2, and the bishop makes it to the safe diagonal.

7...Bh2 8.Kf3 Bg3 9.Kg4

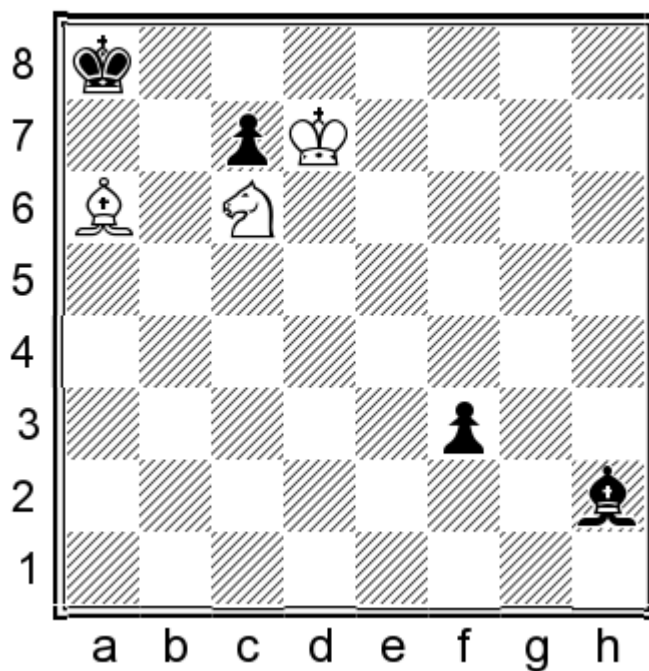
Good alternatives are 9.Ba6 and 9.Ke4.

9...Bh2 10.Ba6! Bg3 11.Kf5



Now it becomes clear what White has achieved with his king triangulation. As the black bishop is on g3, 11...f3 fails to 12.Kg4 and the f-pawn is lost.

11...Bh2 12.Ke6 f3 13.Kd7



Just in time.

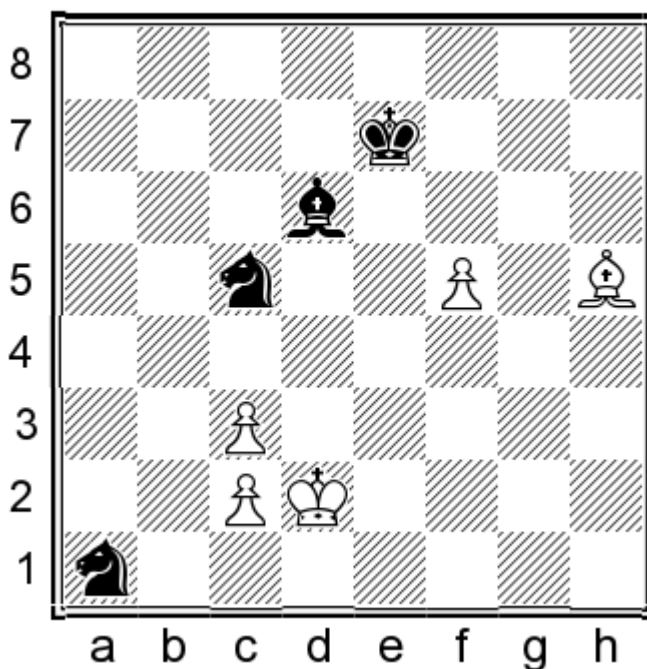
13...f2 14.Kc8 f1Q 15.Bb7

Mate.

This mating net with B+N is especially effective, since the attacking side always has a tempo move with the bishop.

There are situations where the defending side can save himself by avoiding the mating net with all his might.

Timman 2009



White to play and draw

If Black succeeds in liberating the knight on a1, he will win easily. Therefore the first move is obvious.

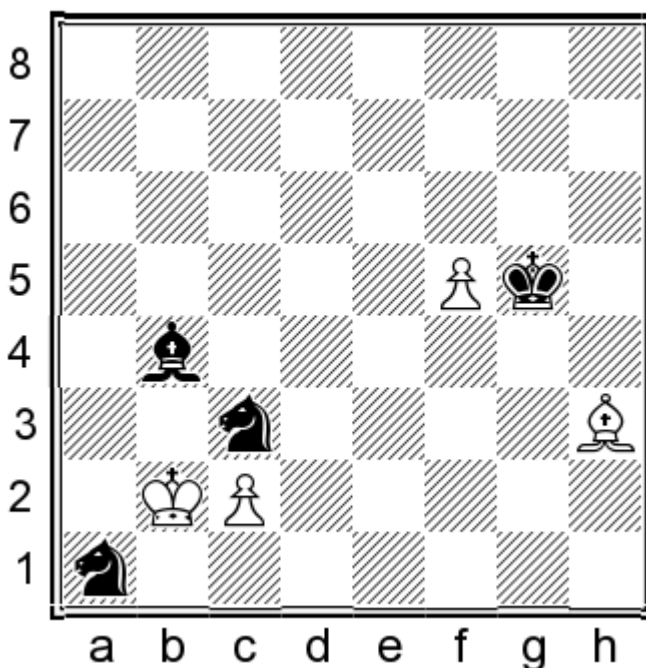
1.Kc1

On its way towards collecting the knight.

1...Na4 2.Kb1

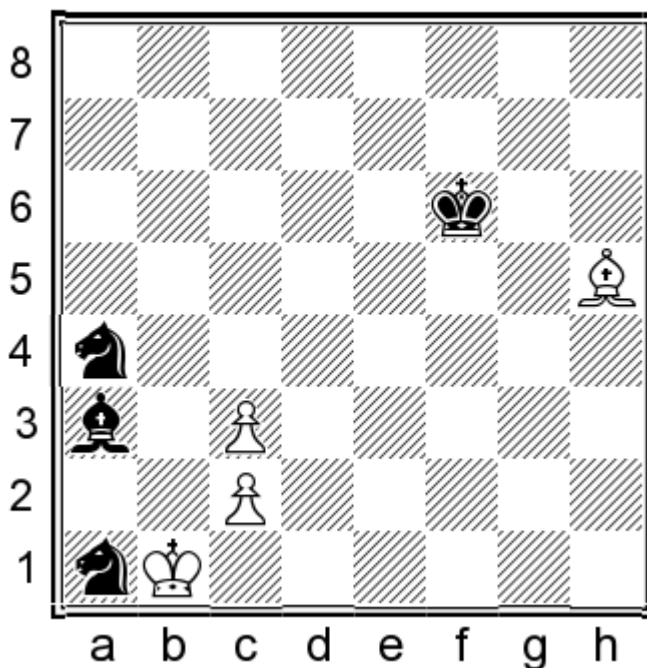
Now there are two main lines:

A) 2...Nxc3+ If White now took the knight, the play would transpose to Gunst's study with reversed colours. However, White has something better: 3.Kb2!! White leaves the knight in peace. The reason is that now Black cannot gain a tempo with his bishop, whereas the knight can always be captured at a later stage. 3...Bb4 4.Bf3! Again, the only move. After 4...Bg4 Kf6 5.Bh3 Kg5 White would end up in zugzwang. 4...Kf6 5.Bg4 Kg5 6.Bh3



A mutual zugzwang situation. Black cannot make any progress;

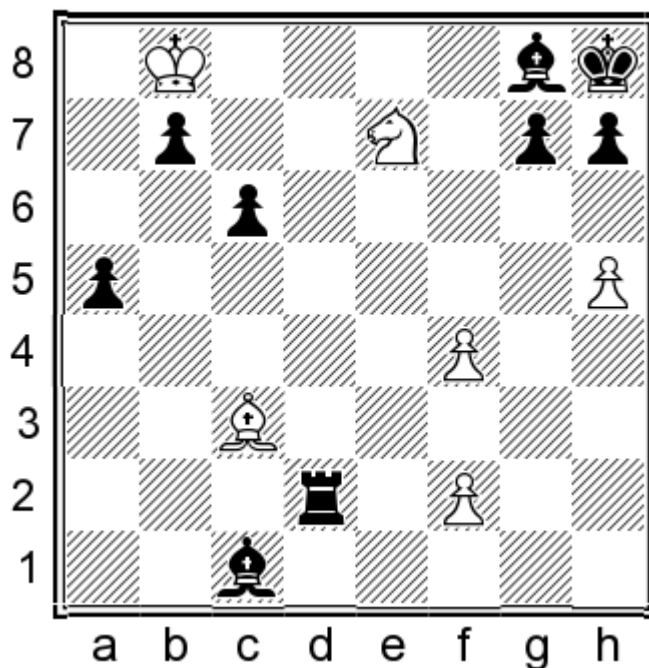
B) 2...Ba3 Another try to tempt White into capturing on a1. White doesn't fall for it. 3.f6+! Not 3.Ka2? on account of 3...Bb2! 4.f6+ Kf8. Black maintains his knight on a1 and will eventually liberate it. 3...Kxf6 Otherwise, with his pawn on f6, White would capture on a1 after all.



4.Ka2! Bc1 5.Kb1! The white king keeps oscillating around the knight. 5...Bb2 Otherwise he will not make progress. Now, however, a piece is lost. 6.Be8 The point of the check on the third move: it's a draw.

Bishop and knight can also force the enemy king into a mating net, if the defending side has pieces and pawns around his king.

Timman 2011



White to play and win

White's task is clear.

1.h6

Threatening mate in one. There is only one defence.

1...Rd4!

Interrupting the long diagonal of the white bishop and opening the c1-h6 diagonal for his own king's bishop. 1...Rd8+ fails to 2.Ka7, when Black will be irrevocably mated.

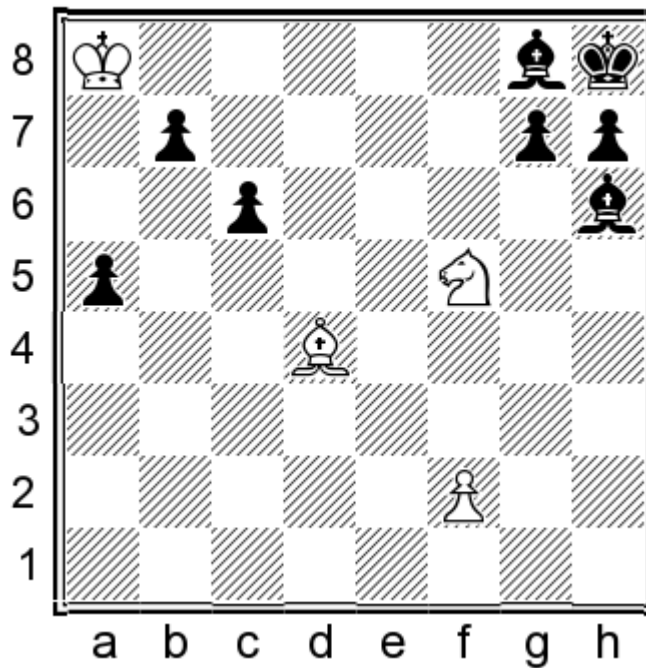
2.Bxd4 Bxf4+

Now where should the white king go?

3.Ka8!!

Unbelievable, but true. In the near future the white king has to avoid all contact with the black bishops. The reason will soon become clear.

3...Bxh6 4.Nf5



Now Black has the clumsiest bishop pair imaginable.

It is important that the white king is on the corner square. Had he played 3.Ka7, then Black would now have had the pinning move 4...Be3!.

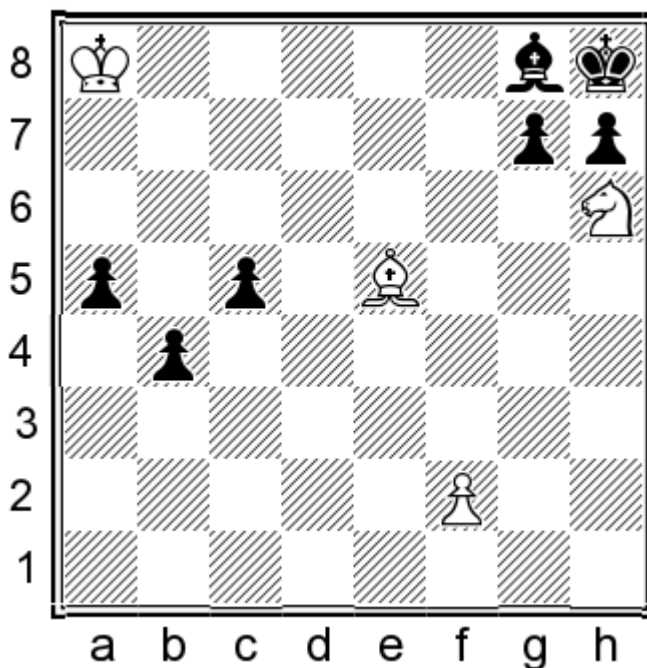
4...c5 5.Be5!

The only good square for the bishop. Now it becomes clear why White couldn't take on b7 on move 3: Black would have a check on d5 in that case.

5...b5

The king's bishop cannot be saved. Therefore Black sets his queenside pawn majority in motion.

6.Nxh6 b4



Now White has two plans that both look promising: he can either bring his king to f8 or advance his f-pawn. If he chooses the first plan, things can continue as follows:

7.Kb7 c4 8.Kc6 and now the lines fork:

A) 8...c3 9.Kd6 c2 10.Bf4! (not 10.Bb2? in view of 10...a4 11.Ke7 a3 and Black wins) 10...b3 11.Bc1 Bd5 12.Ke7! gxh6 13.Kf8 and mate follows. It's nice to see how the white bishop temporarily leaves the long diagonal in order to slow down the advance of the black pawns;

B) 8...a4! 9.Kd6 a3 10.Ke7 a2 11.Kf8 a1Q 12.Bxa1 c3 and the white bishop is cut off from play. After 13.Nxg8 h5! 14.Ne7 Kh7 White cannot win.

7.f4!

The second plan is the correct one.

7...c4

Black can also try 7...Be6, in order to immediately sacrifice the bishop. After 8.f5 Bxf5 9.Nxf5 c4 10.Kb7 a4 11.Kc6 c3 12.Ne3 a3 13.Nc2 a2 14.Na1! White wins in the nick of time.

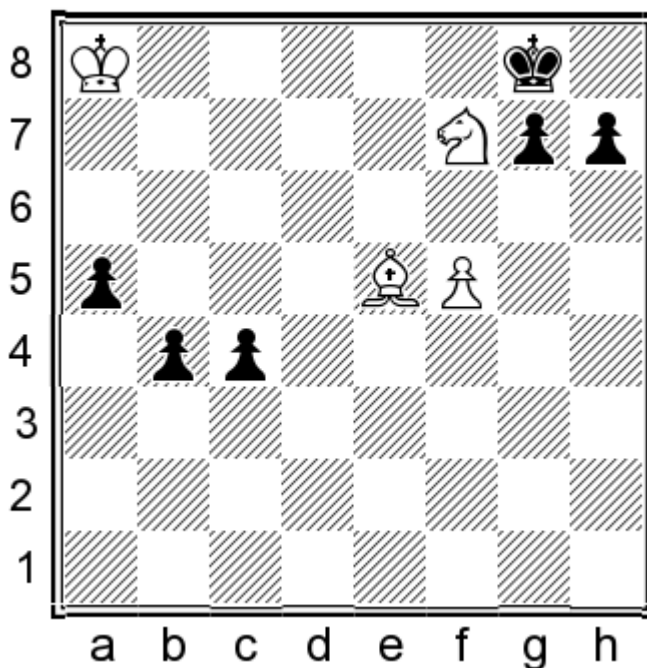
8.f5

With the devastating threat of 9.f6.

8...Bf7!

Only by sacrificing his bishop can Black prevent mate.

9.Nxf7+ Kg8



10.Nd8!!

The knight also has to go to the rim. After other knight moves, Black could achieve a draw.

10...c3 11.Nc6

This is the square White had to go to.

11...c2 12.Bb2 h5 13.Nxa5 h4 14.Nb3

Just in time. The knight stops the c-pawn, enabling White to use his bishop to stop the h-pawn.

14...Kh7 15.Bc1!

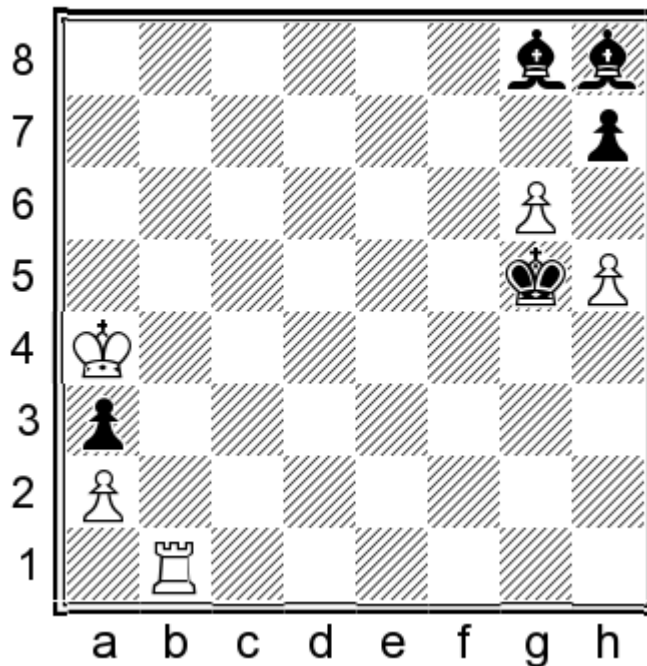
Holding off the king.

15...g6 16.f6! h3 17.Bf4

And wins. The white king, which has been standing on the corner square for 14 moves, will arrive back in time to keep its colleague at bay.

It's a pretty sight if the enemy king is drawn to the corner to be mated.

Kuznetsov/Sakharov 1954



White to play and win

It is clear that White will have to try and win one of the black bishops. However, 1.Rb8 is insufficient in view of 1...Bxa2 2.Rxh8 hxg6, and Black saves himself. Therefore White must first give a check, in order to drive the enemy king to a less favourable square.

1.Rb5+! Kh6 2.Rb8 Bxa2

An important alternative was 2...Kg7. In that case White continues 3.h6+ Kxh6 4.Rxg8 and now:

A) 4...Bb2 5.gxh7 Kxh7 6.Rg3, followed by 7. Ra3 and wins;

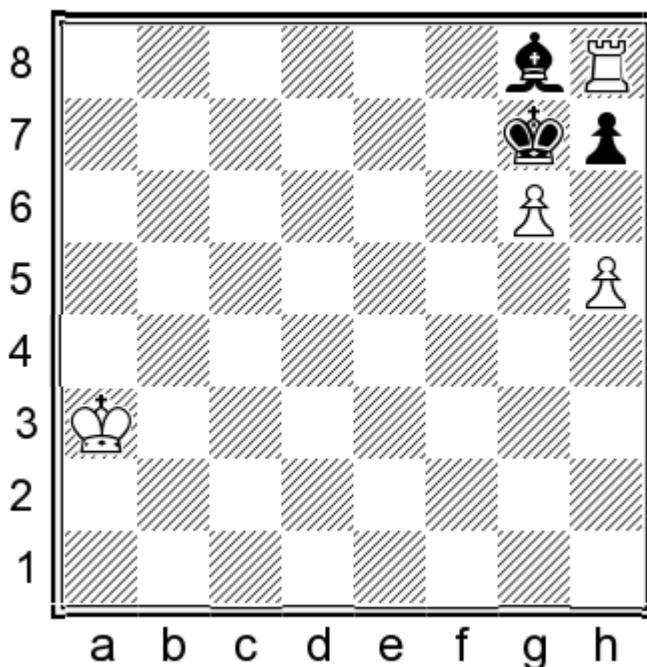
B) 4...Bg7. Now White has to be careful, as 5.gxh7 Kxh7 6.Re8 Bb2 leads to a theoretical draw. However White wins after 5.Rxg7! Kxg7 6.gxh7 Kxh7 7.Kxa3 and the black king will be held off by its white counterpart.

3.Rxh8 Bg8!

A surprise. The black bishop returns in order to lock in the rook.

4.Kxa3 Kg7

It may seem as if White has not achieved anything, but...

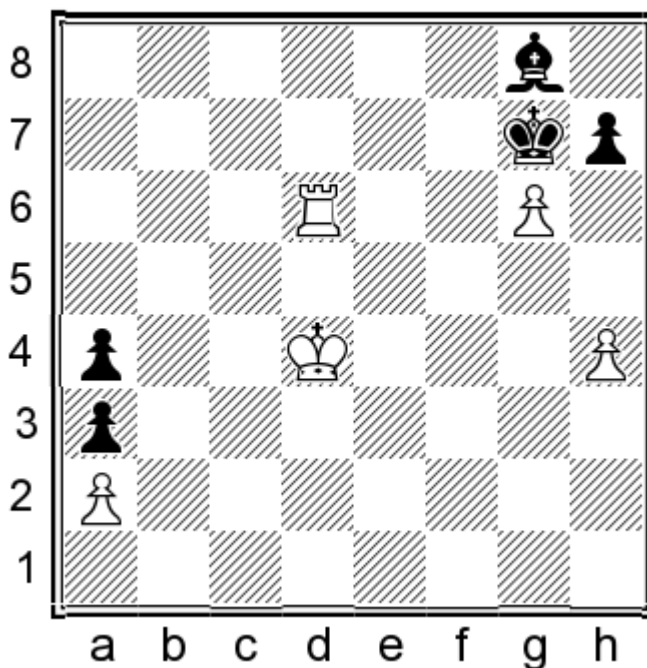


5.h6+! Kxh8 6.g7

Mate.

I thought that a better study could be built around this mating position.

Timman 2010



White to play and win

The problem for White is that his a-pawn is hanging. For example, 1.gxh7 would not suffice for the win on account of 1...Bxa2.

1.h5

Preventing the capture on a2.

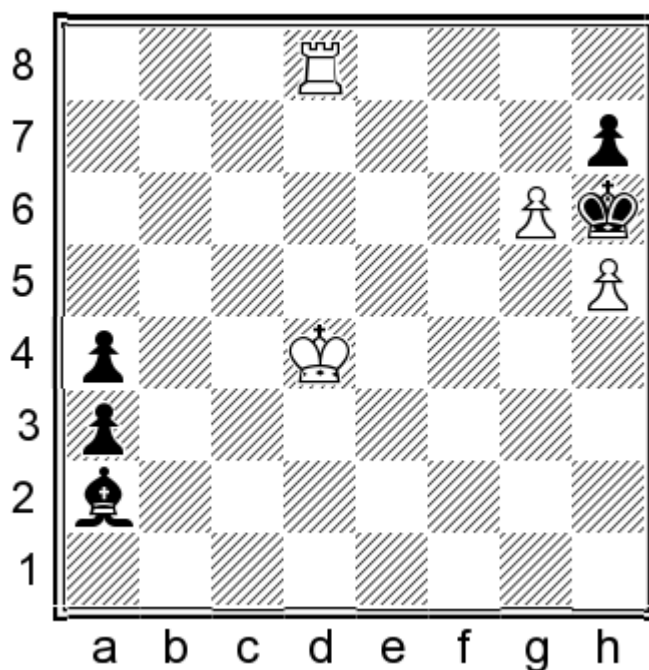
1...Kh6

The best defence. Black renews the threat of taking on a2. Bad was 1...hxg6 in view of 2.Rxg6+ Kh7 3.Rg2 and the white a-pawn is protected, after which he wins easily.

2.Rd8!

Only so. After the tempting 2.g7+ Kxg7 3.h6+, Black would deliberately allow White to lock him up after 3...Kh8. The stalemate motifs would then render the win impossible.

2...Bxa2



3.Rh8!

The only way to worry Black. On 3...Kxh5, 4.g7 wins. Black has to give his bishop for the g-pawn, and then the white rook and king will prevail over the enemy pawns. However, Black again has the self-incarceration trick.

3...Bg8! 4.Kc3

The king has to rush to the queenside in order to stop the foremost a-pawn.

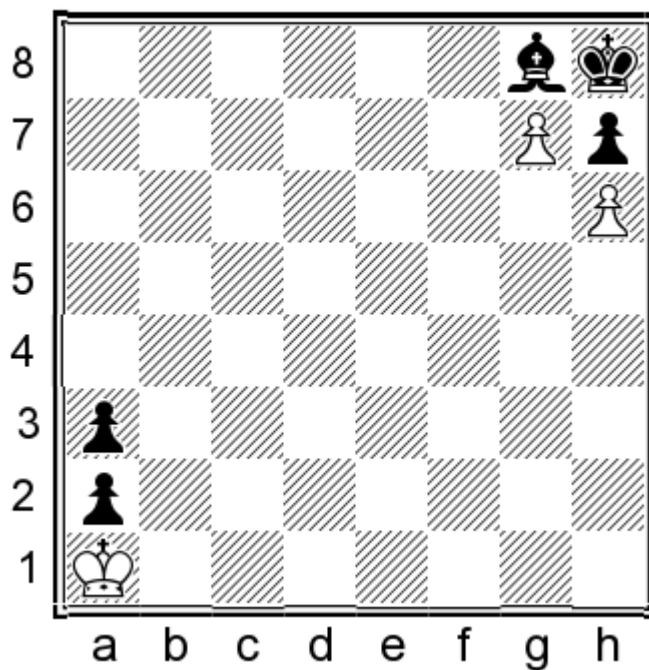
4...a2 5.Kb2 a3+ 6.Ka1

The white king is bricked in. Now the same will happen to its colleague, with the difference that the latter will not be stalemated, but mated.

6...Kg7 7.h6+! Kxh8 8.g7

Mate.

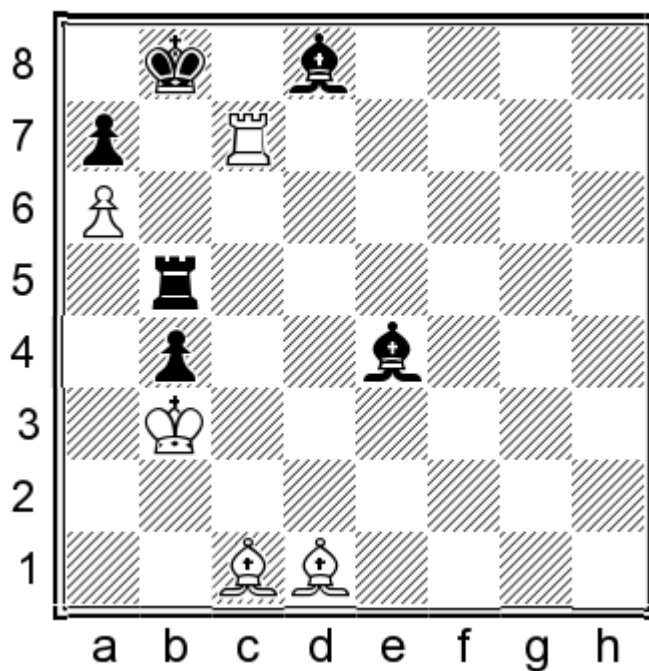
A magnificent spectacle that deserves another diagram.



As if by a magnet, both kings have been drawn to the corner squares.

The mating position in the corner can also be completely different.

Timman 1983/2011



White to play and win

White is a pawn down, but in spite of the reduced material he has dangerous attacking chances.

1.Rc4

With this attack on the bishop White wins an important tempo; he will manage to give a bishop check on f4. His rook will land in a pin, but that is less important.

1...Bd5 2.Bf4+ Bc7!

Black sacrifices his bishop, to block the c-file. After 2...Ka8 3.Bf3 he would be quickly mated.

3.Bxc7+ Ka8

Not 3...Kc8 in view of 4.Bg4+ and mate.

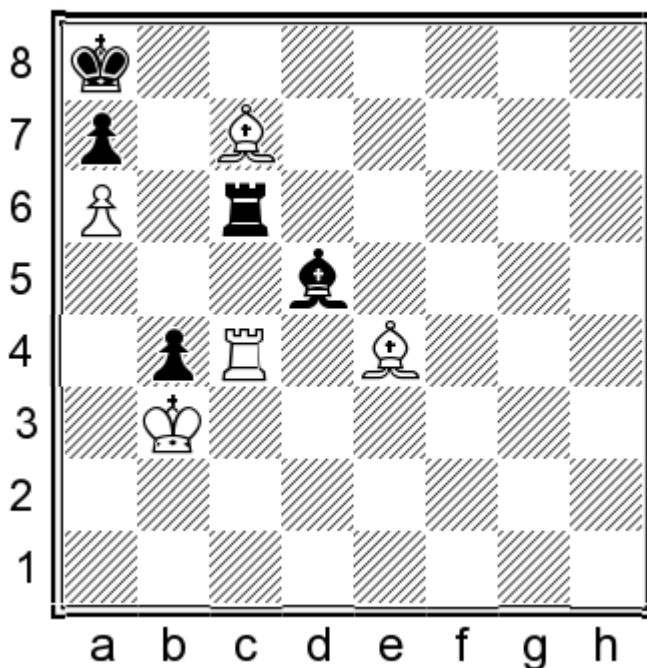
4.Bc2!

A quiet move. White is going to bring his bishop to e4. The move 4.Bf3 was insufficient for the win. After 4...Bxf3 5.Rf4 Bd5+, followed by 6...Rb8, Black achieves an endgame that is just tenable.

4...Rc5

The best defence. Black is playing for stalemate.

5.Be4 Rc6!



A curious situation. The rook interrupts the pin by the bishop which, in turn, keeps the white rook pinned. White cannot take the bishop because of stalemate. Now the study reaches its climax.

6.Kb2!

A quiet unpinning move. Black is forced to exchange on e4.

6...Bxe4 7.Rxe4 Rxa6

Otherwise a back-rank mate follows. Now mate comes from the other side.

8.Rxb4

And mate on b8 can only be prevented with decisive material loss. The black rook is on the most unfavourable square imaginable.

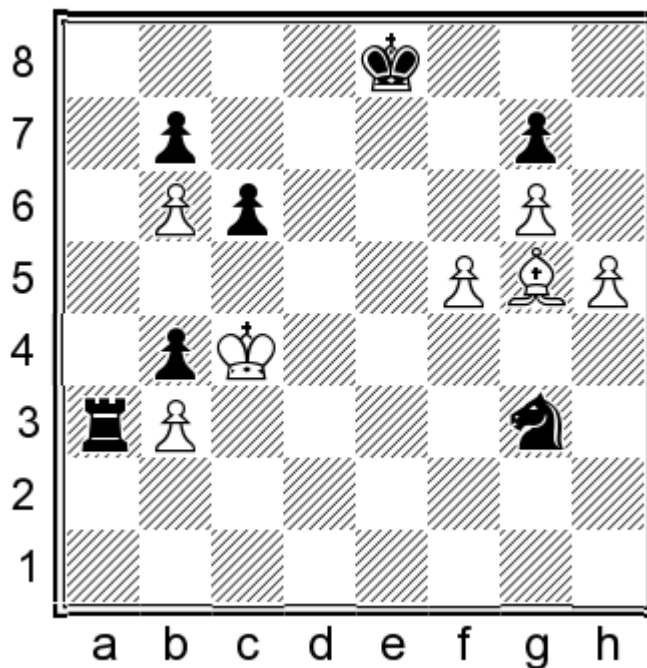
Chapter 8

Stalemate patterns

Stalemate patterns have in common with mating patterns that they are very attractive when they occur with the king in the middle of the board.

The great Russian endgame study composer Leonid Kubbel wove many stalemate motifs into his studies.

Kubbel, 'Shakhmatny Vestnik' 1914



White to play and draw

White is a rook behind, but he can create threats on the kingside.

1.f6 Nxf5

Not 1...Kf8 on account of 2.h6!.

2.f7+ Kf8

The black king is now bricked in and, consequently, vulnerable. White is going to exploit this in a curious way:

3.Bd2! c5

Please take note: White still has four squares for his king here.

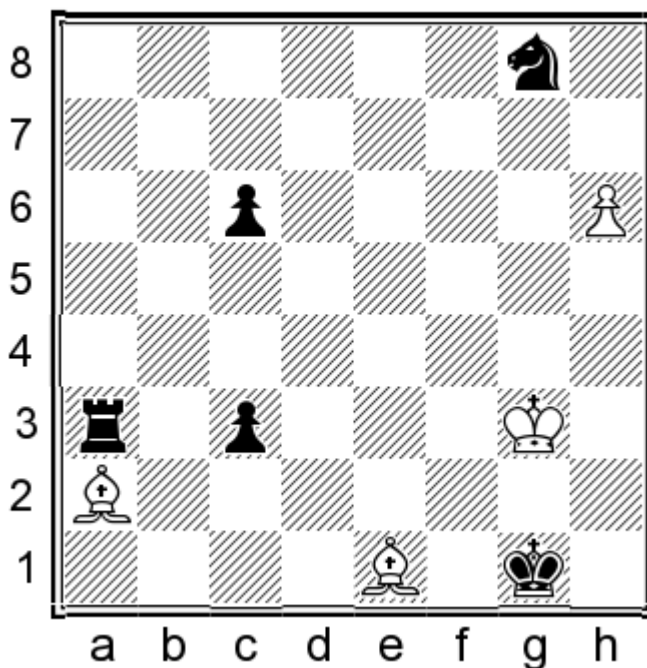
4.Be3 Ra5 5.Bf4! Nxf4

Stalemate.

This is hardly one of Kubbel's best studies, but it is nice to see how Black, due to the mate threats against his own king, is forced to deprive the white king of its last squares.

In Kubbel's study, White's king did not move. It is more attractive if it moves to the middle of the board in order to be stalemated. Kubbel also composed studies with this motif.

Kubbel, 'Shakhmaty' 1925



White to play and draw

Both sides have a dangerous passed pawn. Due to certain circumstances, the black king turns out to be the safer of the two.

1.Bf2+

Driving the king into the corner.

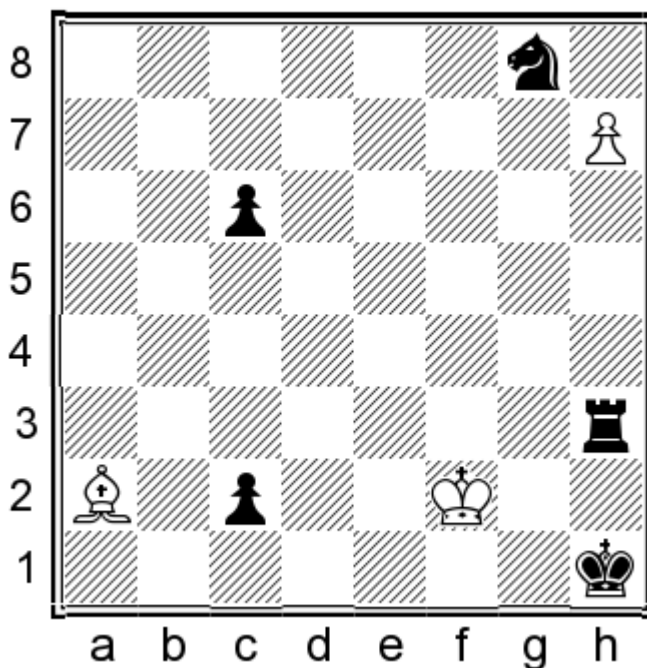
1...Kh1 2.h7 c2+

Now the white king cannot move upwards: 3.Kg4 fails to 3...Nf6+, while 3.Kh4 does not work in view of 3...Ne7, when there is a family check in the position.

3.Be3!

White sacrifices his bishop in order to obtain the f2-square for his king.

3...Rxe3+ 4.Kf2 Rh3



Things look gloomy for White. After 5.hxg8Q Rh2+ 6.Kf3 c1Q he has nothing to hope for.

5.Bd5+!!

But with this bishop sacrifice White introduces a surprising stalemate.

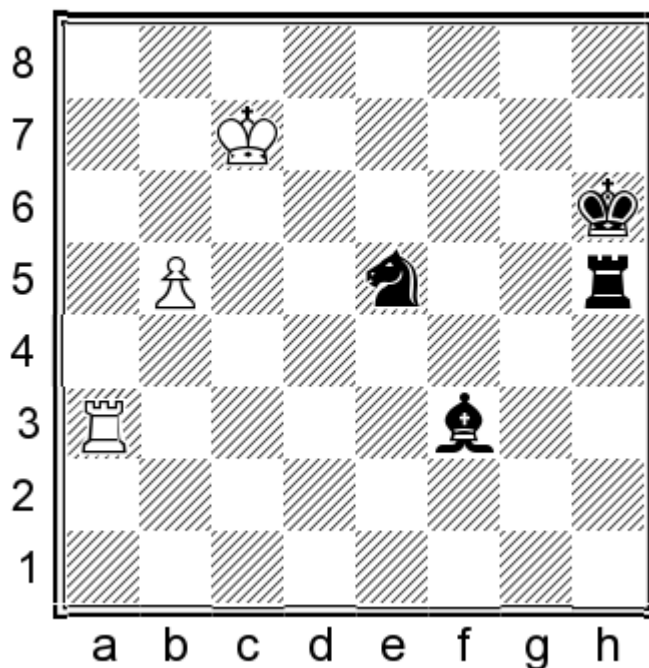
5...cxd5 6.hxg8Q Rh2+ 7.Kf3 c1Q 8.Qg2+!!

The beautiful point of the bishop sacrifice.

8...Rxxg2 stalemate.

For this study, Kubbel received first prize in the Shakhmaty tourney. Jan Rusinek is a past master in this genre.

Rusinek, 'Problem' 1973



White to play and draw

White is two pieces behind, but his passed pawn is not easy to stop.

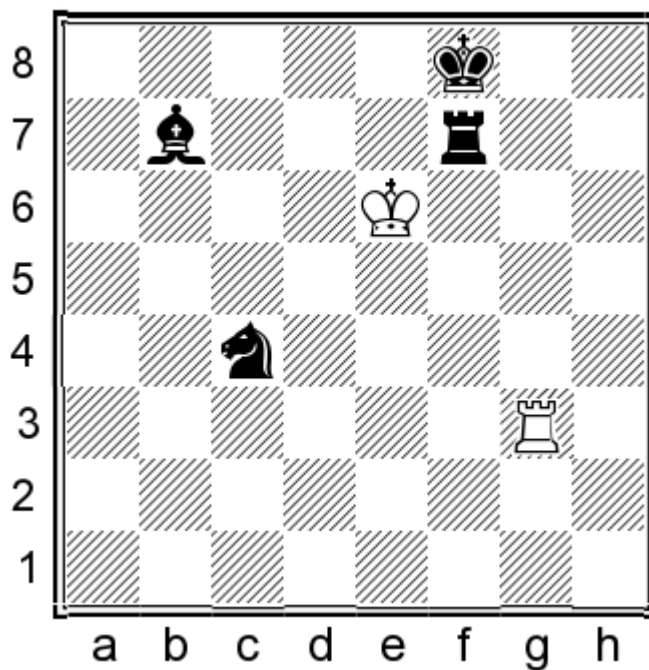
1.b6 Rf5 2.b7!

White sacrifices the pawn in order to disturb the coordination in the enemy camp.

2...Rf7+ 3.Kd6 Nc4+

It looks as if White is heading for disaster. However, there is a hidden rescue.

4.Ke6 Bxb7 5.Rh3+ Kg7 6.Rg3+ Kf8

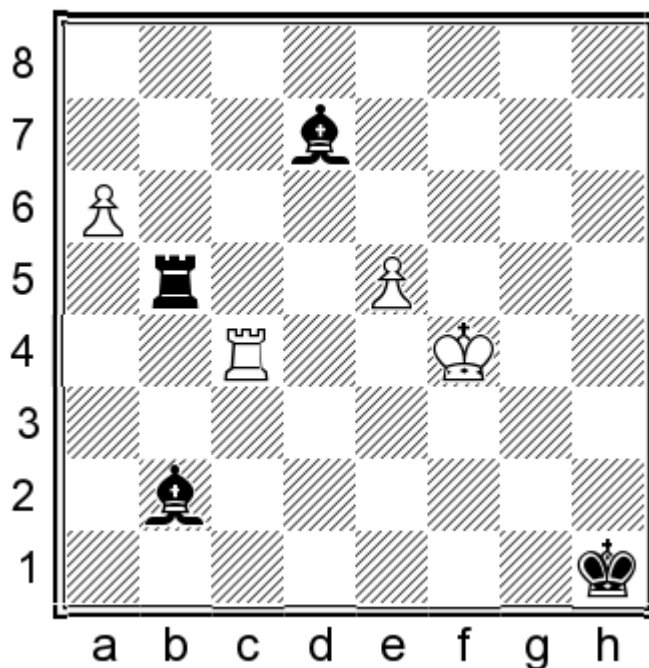


7.Rg8+! Kxg8

Stalemate.

For this study, Rusinek received first prize in the Problem tourney. Five years later he made a new variation on this theme, which again was awarded first prize!

Rusinek, 'Szachy' 1978



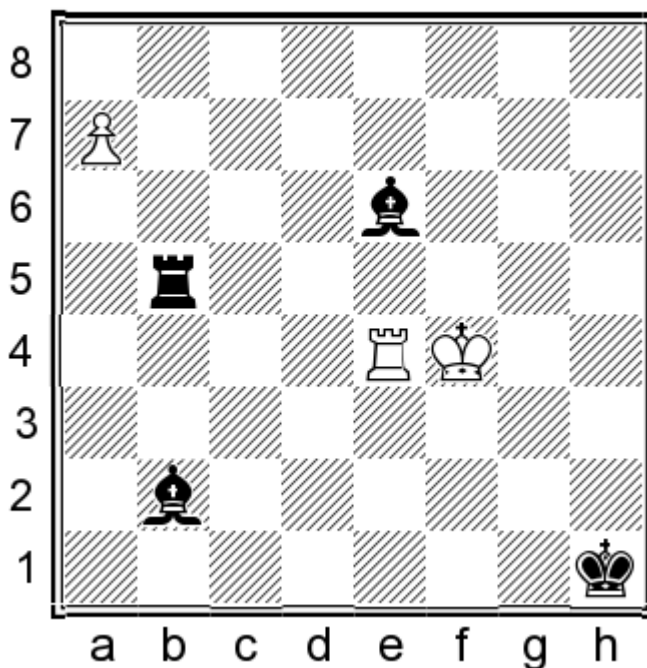
White to play and draw

Again White is two pieces behind, and again he has a dangerous passed pawn.

1.a7 Ra5 2.e6!

With this pawn sacrifice White tries to disturb the coordination in the enemy camp. Black has to take the pawn.

2...Bxe6 3.Re4



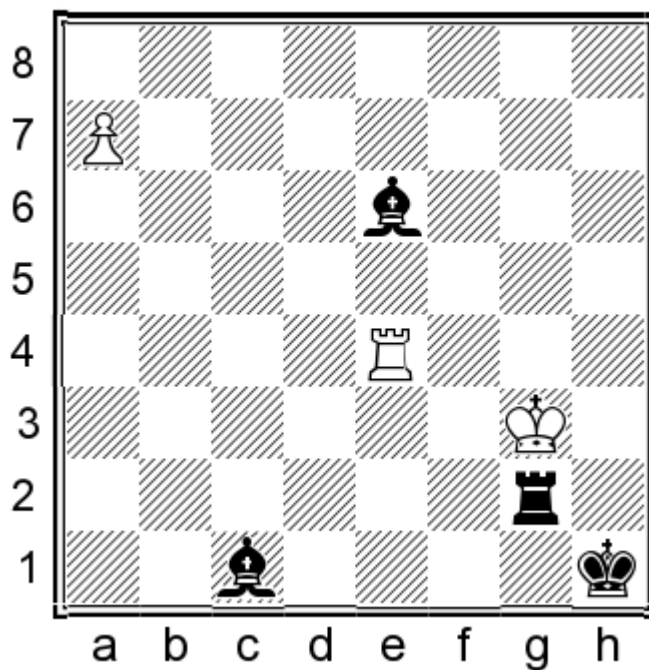
The point of the previous move. White attacks the queen's bishop and at the same time threatens to give check on e1.

3...Bc1+ 4.Kg3 Ra3+ 5.Kf2!

White must choose the squares for his king with care.

5...Ra2+ 6.Kg3 Rg2+

Again it looks as if White is hopelessly lost. And again, salvation is close at hand.



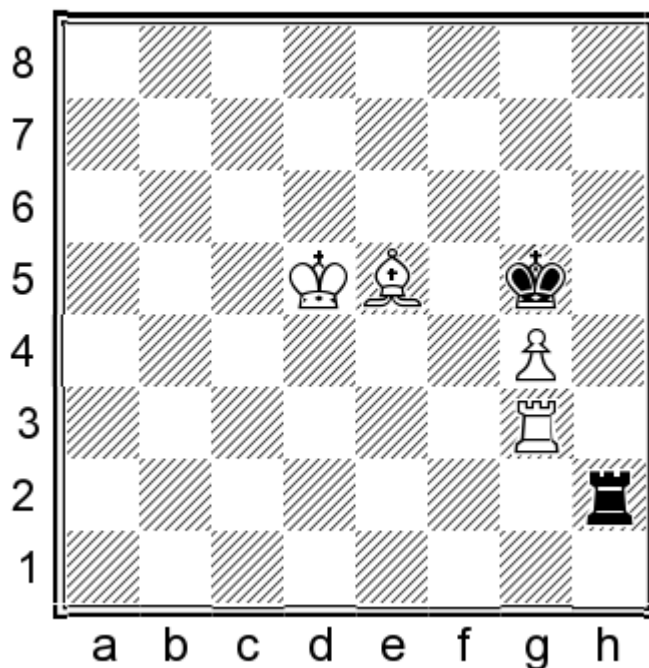
7.Kf3! Bd5 8.a8Q Bxa8 stalemate.

Nice stalemate motifs can also occur in practical play.

Vedder

Gagunashvili

Vlissingen 2004



Position after 72...Rh2

Black threatens 73... Rh4. White has several ways to prevent this.

73.Bd6?

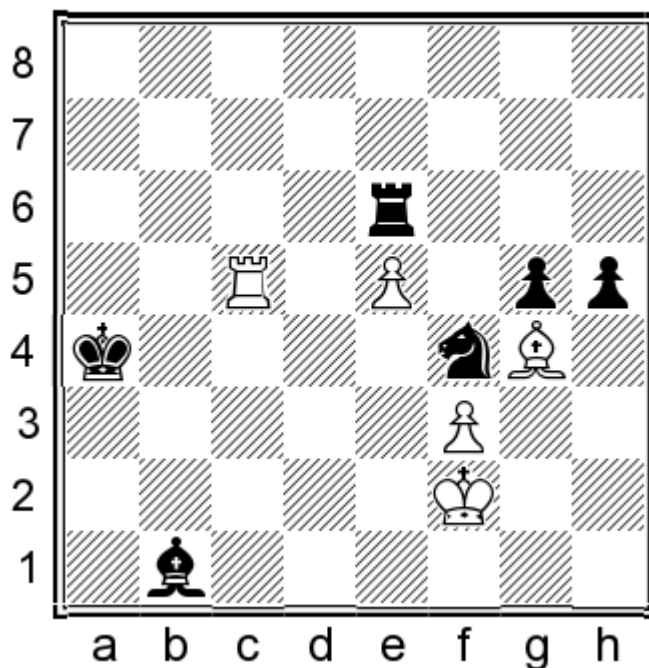
But this is not one of them.

73...Rh4! 74.Be7+ Kf4 75.Bxh4

Stalemate.

A bitter disappointment for Richard Vedder, but it inspired me to make a nice study.

Timman 2011



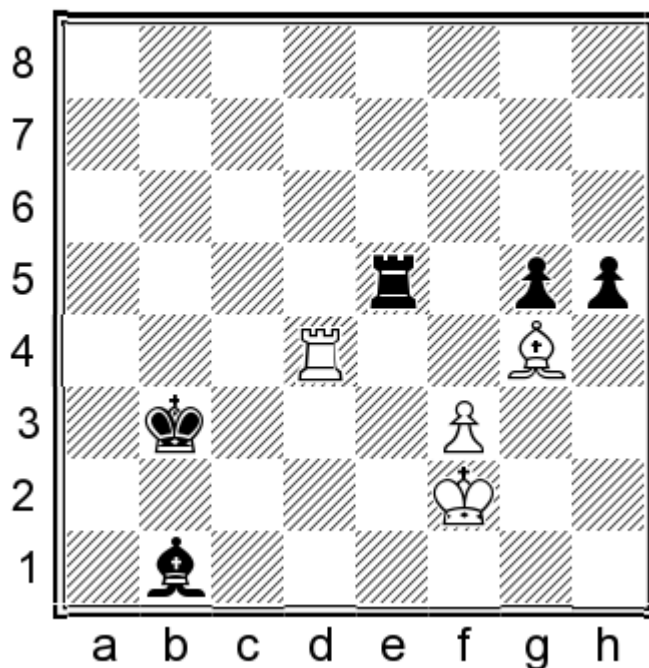
White to play and draw

White cannot capture the rook, since after 1.Bxe6 Nd3+ 2.Ke3 Nxc5 3.Bf7 Bf5! Black obtains a technically winning position.

1.Rc4+ Kb3 2.Rxf4

Here also, 2.Bxe6 was insufficient in view of 2...Nxe6 3.Rc6 Bf5 and now White cannot prevent Black bringing his king closer.

2...Rxe5 3.Rd4

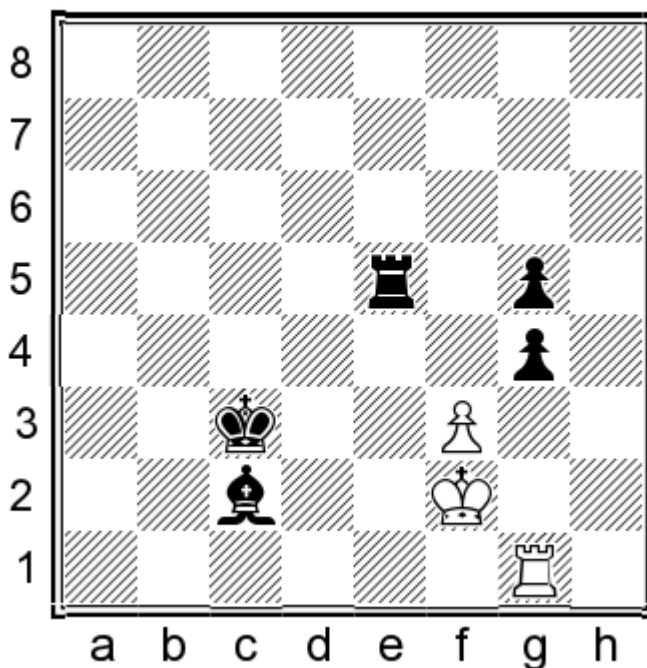


White doesn't have to fear the capture on g4 yet. After 3...hxg4 4.Rxg4 White would be able to trade off the last black pawn.

3...Kc3

Forcing the white rook to leave the fourth rank, since 4.Ra4 is met by 4...Bc2.

4.Rd1 Bc2 5.Rg1 hxg4



Now 6.Rxg4 is insufficient in view of 6...Bd1!, and the f-pawn cannot advance.

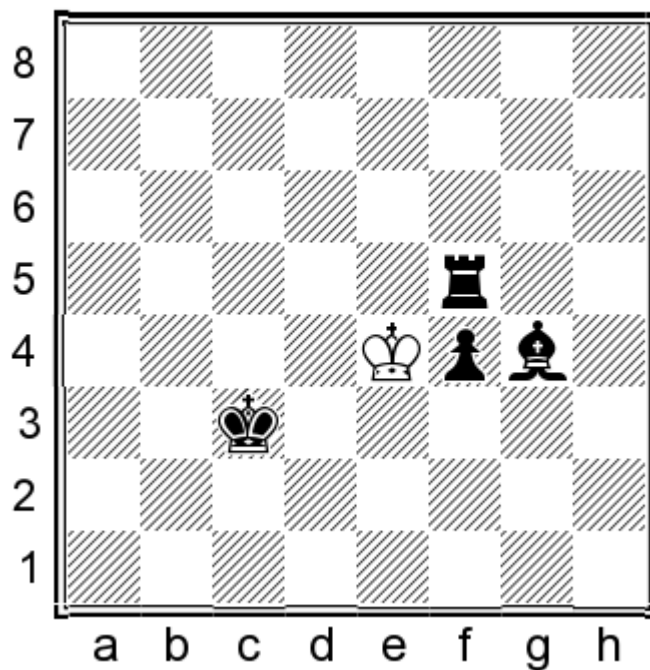
6.f4!!

Highly surprising. White sacrifices a pawn instead of capturing one.

6...gxf4 7.Rxg4 Rf5 8.Kf3!

Steering towards Gagunashvili's stalemate with reversed colours.

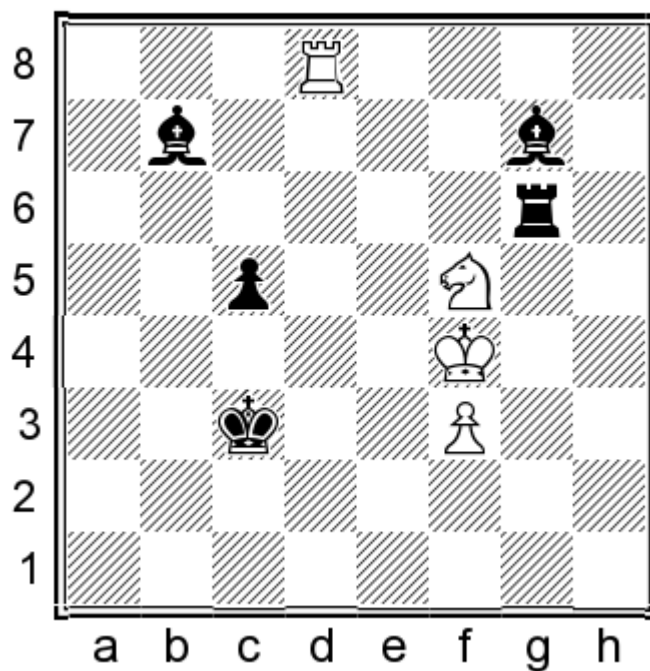
8...Bd1+ 9.Ke4 Bxg4



Stalemate.

In January 1984, I made the following study on a flight from Belgrade to Amsterdam.

Timman 1984



White to play and draw

White is a piece down, but it looks as if he won't have any trouble winning it back.

1.Rd7 Bc8

On closer inspection, this turns out to be not so easy. On 2.Rxg7 Black replies 2...Rf6! and after 3.Rg5 c4, followed by a general exchange on f5, he wins the pawn ending. Not, however, 2...Bxf5 in view of 3.Rc7! with a draw.

2.Rc7 Bxf5

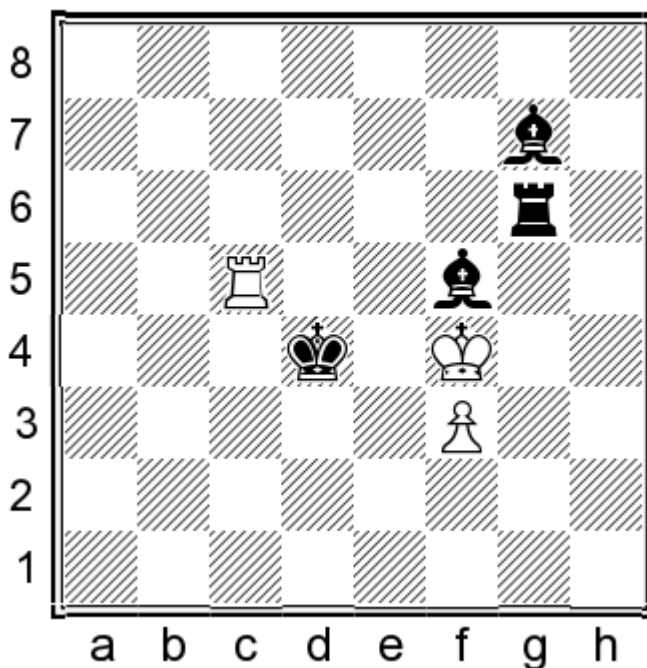
Now White has two possibilities:

A) 3.Kxf5 Rf6+ 4.Kg5 Black now has to abandon either the bishop or the pawn. Of course, he opts for the first. 4...Kd4 (Why not 4...c4 ? That will soon become clear.) 5.f4 Before capturing the bishop, White first saves his f-pawn. After 5...Bh8 6.Rc8 Black can no longer save his bishop. 5...Rxf4! Now the purpose of Black's 4th move becomes clear. If White captures the rook, there follows 6...Be5; if he takes the bishop he will end up in a lost rook ending, and his situation is not improved by 6.Rd7+ Ke3. The last possibility is 6.Rxc5 whereupon Black deals the final blow: 6...Bh6+!

Despite pointed play, White cannot save himself in this way. So, this variation is the thematic try.

B)

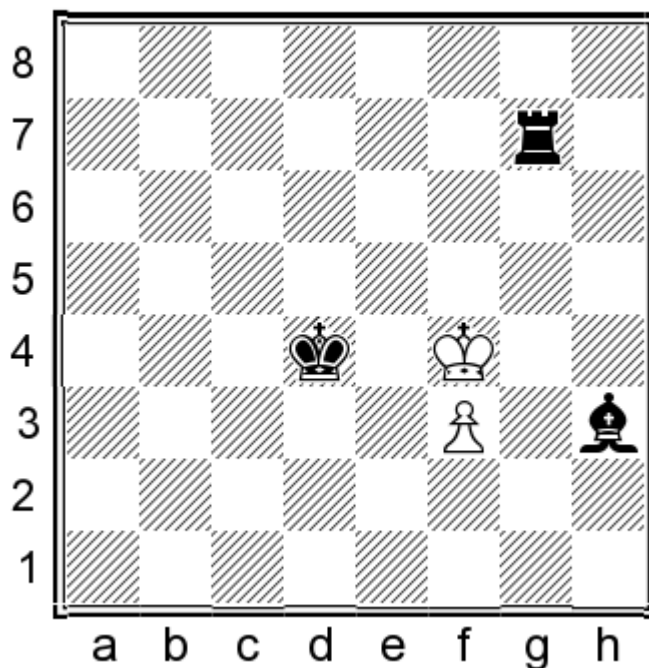
3.Rxc5+! Kd4



This position drove many strong players, to whom I showed the study, to despair. It is clear that White cannot capture the queen's bishop in any way, since after both 4.Rxf5 Bh6+ and 4.Kxf5 Rf6+ he loses his rook. So he will end up two bishops down, and then what does he have in this position?

4.Rc7!

This is the answer. The rook returns to capture the black king's bishop, if the queen's bishop is removed from f5. After, for instance, 4...Bh3 5.Rxg7 Rxg7...



White is stalemated.

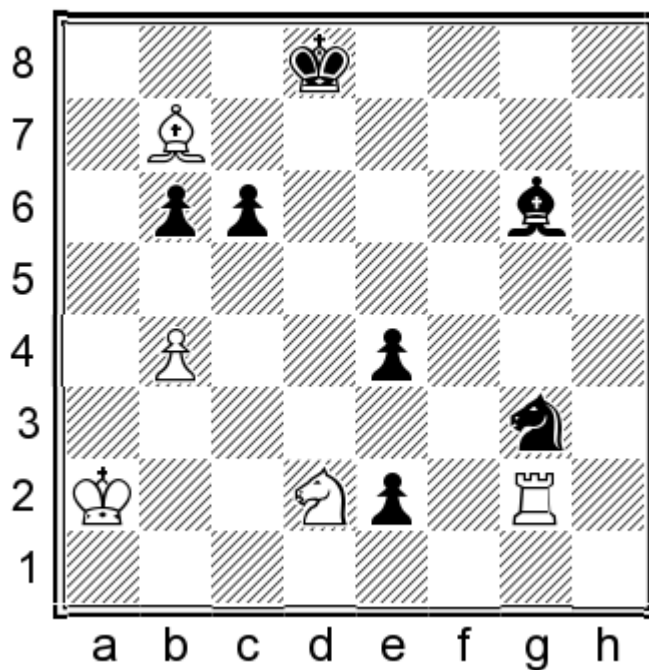
4...Be4 5.fxe4 Be5+ 6.Kf5 Rf6+ 7.Kg5

Draw.

The stalemate in the diagram position was my starting point for this study. In fact, it is not more special than a stalemate on the edge of the board, as the black king plays the part of ‘the edge’ here. It deprives the white king of all squares on the e-file.

Chapter 3 centred on the famous combination from the game Ortueta-Sanz. This fragment did not contain a stalemate combination. Nevertheless, it is possible to conceive of a stalemate combination against this background.

Timman 2011



White to play and draw

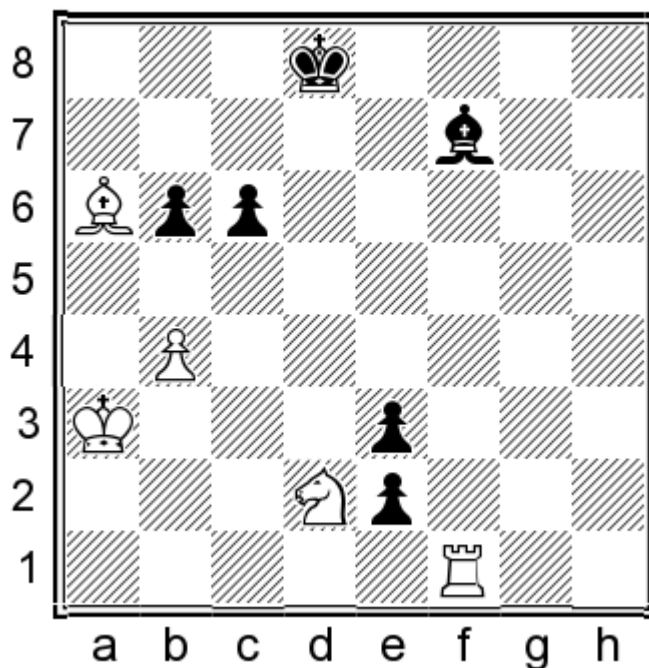
1.Rg1 Bf7+ 2.Ka3!

The only square for the king. After six moves, the reason will become clear.

2...Nf1

Black starts the combination.

3.Rxf1 e3 4.Ba6!



This seems the final straw, but the position contains a hidden resource.

4...b5

Closing off the diagonal for the bishop. However, White is not discouraged.

5.Bxb5! cxb5 6.Re1!

Preparing the stalemate.

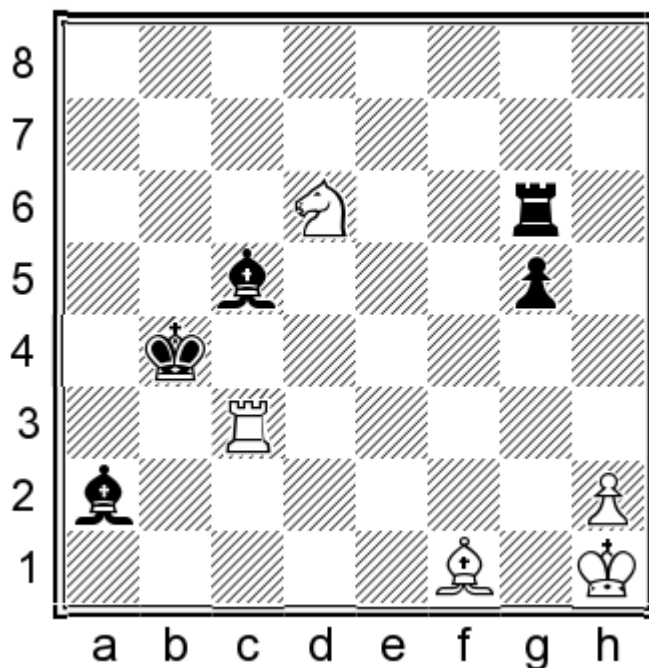
6...exd2 7.Rxe2 d1R

Promotion to queen leads to the same.

8.Rd2+! Rxd2 stalemate.

In the following study, the king saves itself on the corresponding square on the kingside.

Timman 2009



White to play and draw

The white pieces are hanging. He will have to wriggle and squirm to avoid decisive material loss.

1.Ne4 Bd5 2.Bg2

Only move. On 2.Bd3, 2...Re6 would have decided immediately.

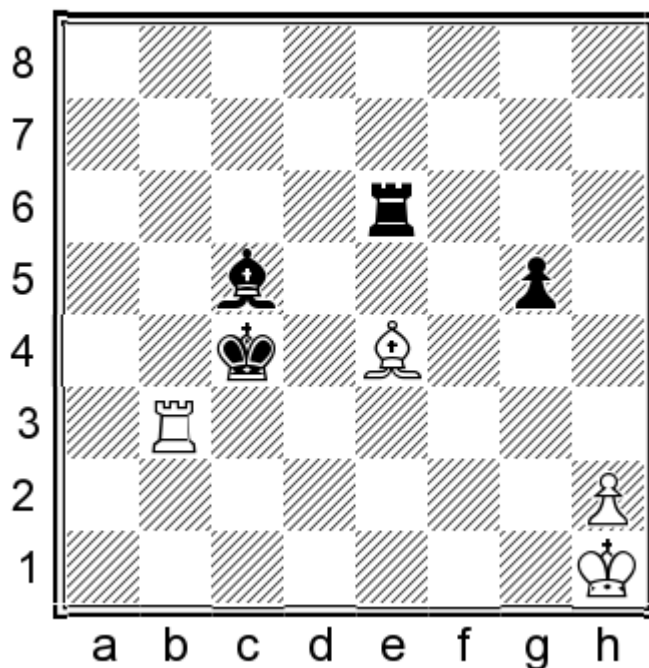
2...Bxe4 3.Bxe4 Re6

Again White has to think of something to avoid the loss of a piece. He cannot capture on c5, as then an endgame arises which is a theoretical win for Black.

4.Rb3+!

Forcing the king to step aside.

4...Kc4



5.Bc2!!

Introducing a stalemate combination.

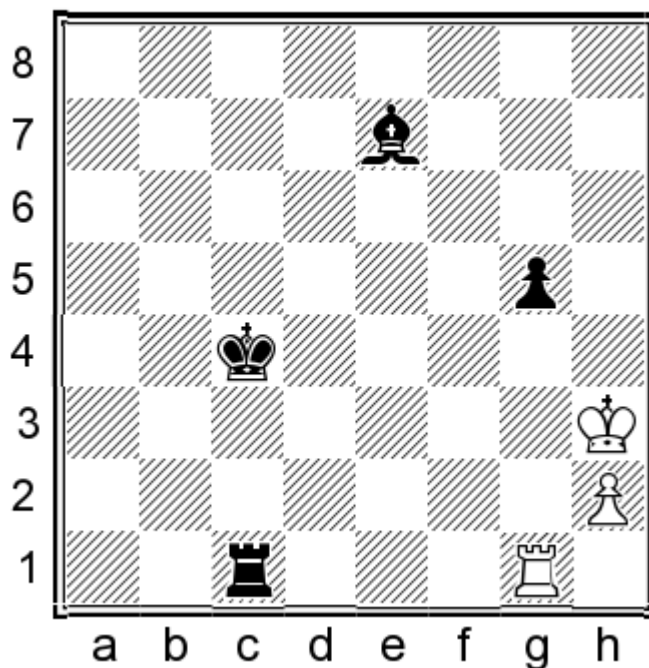
5...Re1+ 6.Kg2 Re2+ 7.Kh3

Only on this square will the king turn out to be safe.

7...Rxc2 8.Rg3 Be7

The only way to protect the g-pawn. However, now the black king and rook turn out to be unfortunately placed.

9.Rg2 Rc1 10.Rg1!



This stalemate trick saves White.

10...Rc3+ 11.Rg3 Bb4

A final attempt.

11...Rxc3+ is met by 12.Kxc3, followed by 13.h4, when Black is left with the bishop of the wrong colour.

12.Rxc3+ Bxc3

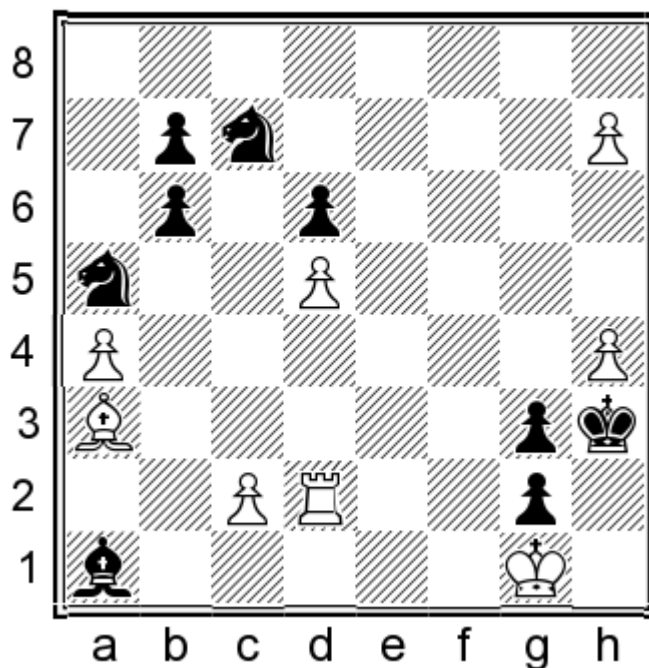
Threatening 13...Be1, after which the bishop could nestle on h4. But White pips him at the post.

13.Kg4

Draw.

The following study is much more complicated. In the various stages, the variations are so complicated that this version is devalued by duals.

Timman 1987



White to play and win

Here the black king has barricaded itself on the same square as the white king had in the previous study. White has a clear material plus and also a far-advanced passed pawn. However, the position contains all kinds of stalemate motifs, and moreover the white king is not entirely safe.

1.Rd3!

A quiet move with a positional justification. White's plan is simple: he wants to play 2.c3 and then promote his h-pawn.

1...Nb5!

The first knight sacrifice, which White has to accept.

2.axb5 Nb3!

The point of the previous move. White cannot accept the second knight sacrifice, since after 3.cxb3 Bb4+! 4.Rxd4 Black is stalemated.

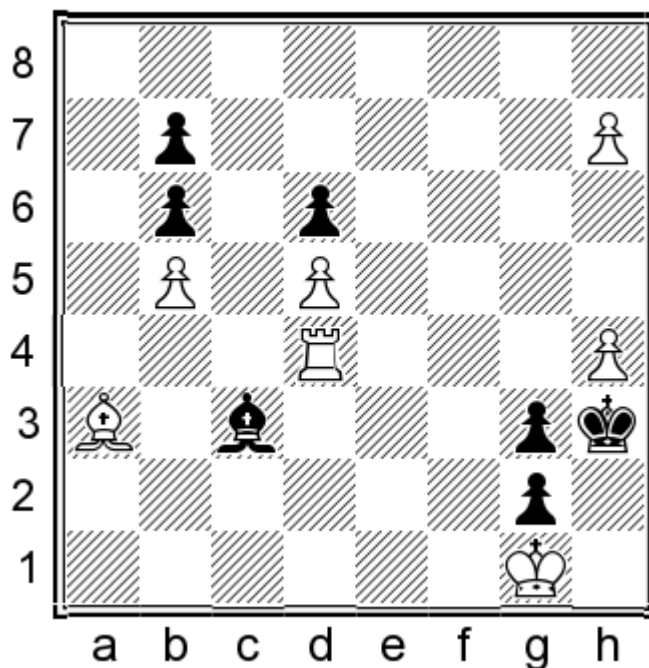
3.c3!

White continues the struggle for the d4-square. However, also sufficient for the win was 3.h8Q, in order to drive the bishop to the other end of the diagonal. The main line runs as follows: 3...Bxh8 4.c3 Nc5 5.Re3 Ne4 6.Bb4! Be5 7.h5 Ng5 8.h6 Bf4 9.Rd3 Be5. This is as far as Mark Dvoretsky's variation goes in his book *Studies for Practical Players*, followed by the conclusion that Black can hold. However, with careful manoeuvres White can still make progress: 10.Ba3 Bf4 11.Bb2! Nh7 12.c4 Bxh6 13.Bd4 and White will collect the b-pawn. Here too, he has to keep playing accurately. An important line is 13...Ng5 14.Bxb6 Bg7 15.Bf2! Be5 16.c5! Ne4 17.Bd4! Bxd4+ 18.Rxd4 Nxc5 19.Rf4 and Black is powerless against the penetration of the white rook.

3...Nd4!

Only by sacrificing the knight again can Black continue the battle. After 3...Bxc3 4.Rxc3 Nd4 5.Re3, he would run out of possibilities.

4.Rxd4 Bxc3



Black's defence is based on the fact that White cannot get a queen. Now comes the climax of the study:

5.Bb2!!

As preparation for a bishop promotion White first sacrifices his queen's bishop. The purpose of this is to force the black bishop to move to a less favourable square on the long diagonal. After immediately 5.h8B? Be1 he would even lose.

5...Bxb2 6.h8B!

Here we have the Phoenix Principle which I discussed in Chapter 5. Now it looks as if White wins easily, but Black can continue the struggle since the white king is still unsafe.

6...Bc3

Again threatening 7...Be1.

7.Be5!

With the idea of capturing on g3.

7...dxe5 8.Re4

In this phase of the study, White must keep restraining the black king's bishop with his rook. With the text move he takes control of the square e1.

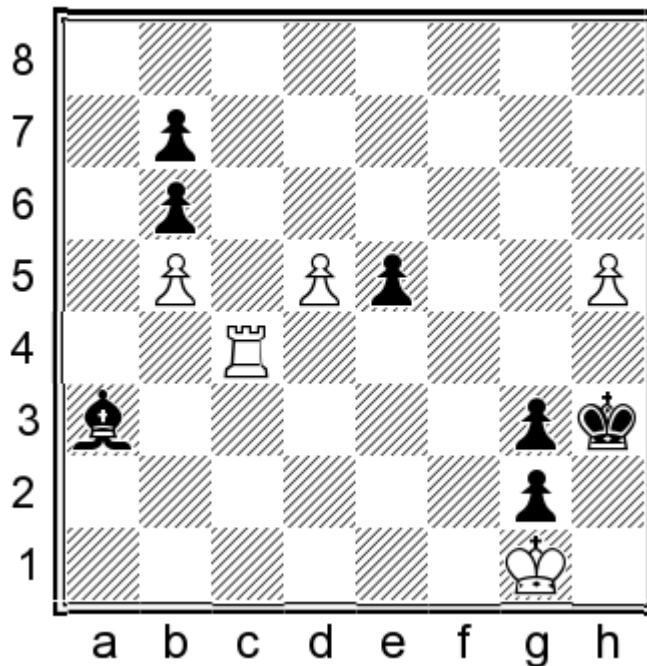
8...Bb2

The bishop is looking for new squares.

9.h5

Certainly not 9.d6 in view of 9...Ba3 with the double threat of 10...Bc5+ and 10...Bd6. With the text move White creates a new strong passed h-pawn.

9...Ba3 10.Rc4



Preventing the deadly check on c5.

From here on, the study contains a few more duals. 11.Rc2 is forced only after 10...Bf8, and then it is indeed a clear win. The real main variation continues as follows:

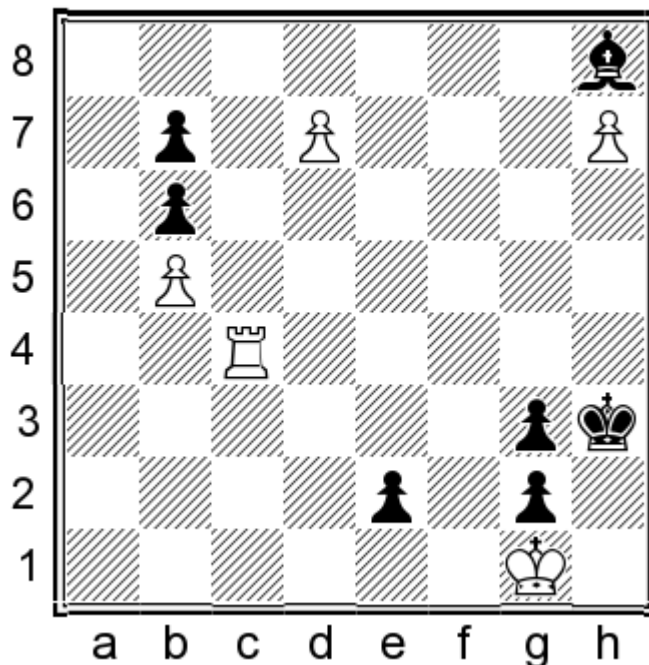
10...Bb2 11.h6

11.d6 also wins.

11...e4 12.h7

Also here, 12.d6 is a dual solution.

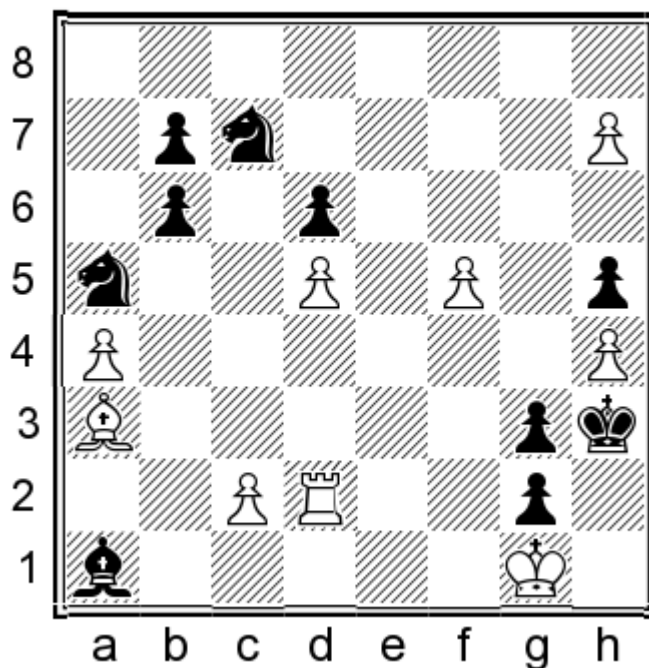
12...Bh8 13.d6 e3 14.d7 e2



15.Rh4+! Kxh4 16.d8Q+ and wins.

For this study I received second prize in the Kaminer Memorial. That was nice, of course, but the duals in the final play continued to nag at me, even though the first dual, on move 3, had gone unnoticed by the jury. I decided to make a new version, with a correct finale.

Timman 1987/2011



White to play and win

Instead of a passed pawn on h4, White has one on f5. This makes no difference for the opening phase of the study, apart from the joyful fact that the dual has been eliminated.

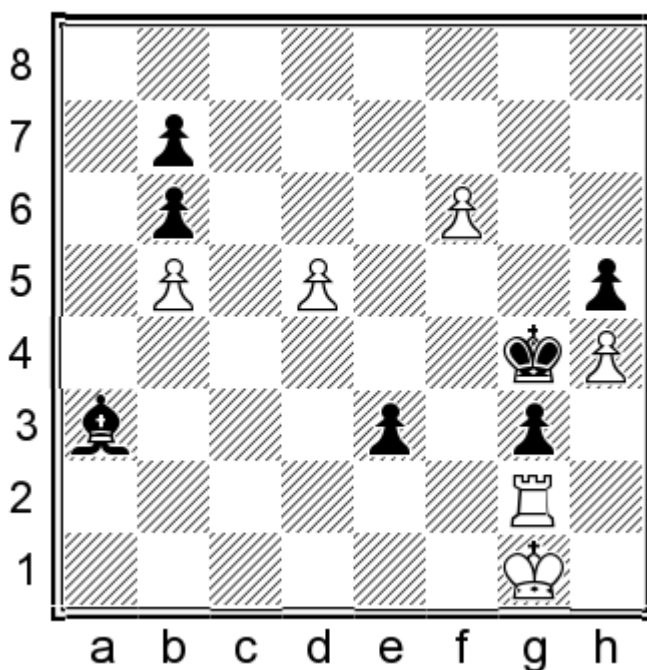
**1.Rd3 Nb5 2.axb5 Nb3 3.c3 Nd4 4.Rxd4 Bxc3 5.Bb2 Bxb2
6.h8B Bc3 7.Be5 dxe5 8.Re4 Bb2 9.f6**

From here on, things will be different. The white f-pawn is less dangerous for Black than the h-pawn, since both White's passed pawns can be stopped by the bishop on the a3-f8 diagonal. This means that White will have to play very accurately in order to convert his advantage to a win.

9...Ba3 10.Rc4 e4 11.Rc2!

The only way to win. The foremost black g-pawn has to be eliminated.

11...e3 12.Rxg2 Kg4



Black threatens to bring his king to f3, after which White would not be able to win. Black would just keep playing waiting moves with his bishop on the a3-f8 diagonal.

13.Ra2!

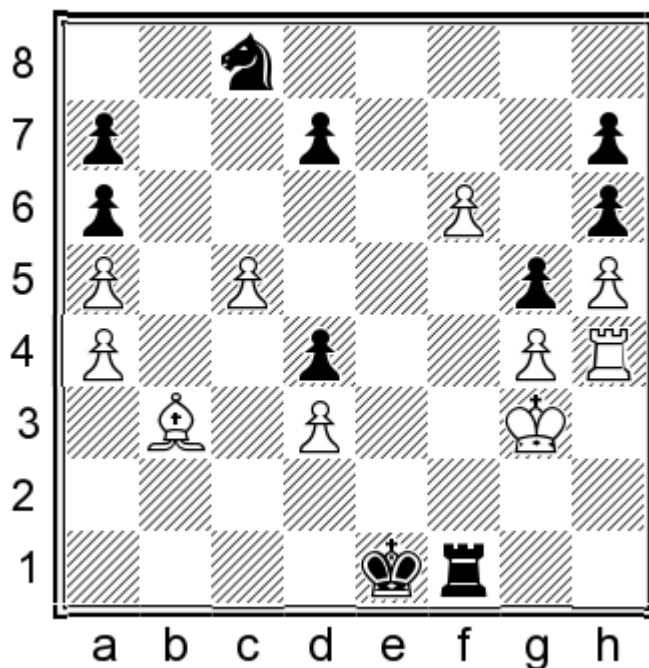
With this attack on the bishop White vacates the g2-square for his king with gain of tempo.

13...Bc5 14.Kg2

And wins.

A satisfactory version of the study. All the pieces take part. In the following study, the stalemate is hidden.

Timman 2008



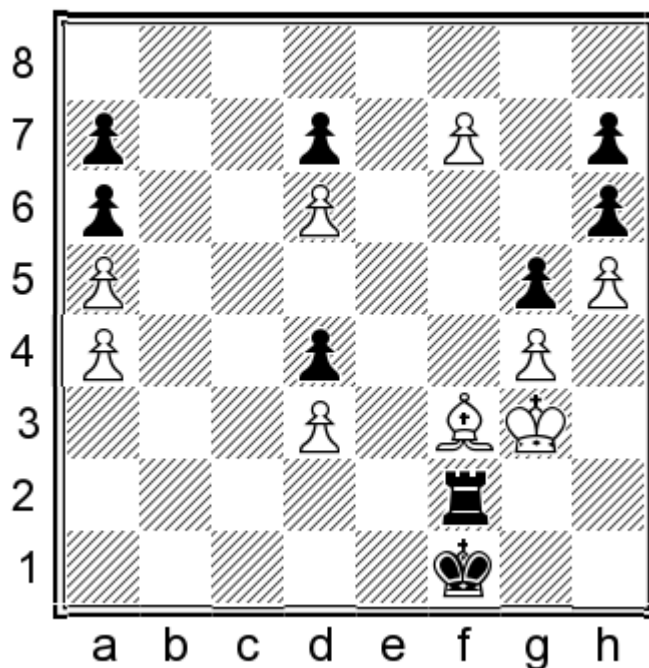
White to play and win

The white rook is under attack, and so is the f-pawn. White makes a virtue out of necessity by sacrificing the rook.

1.Rh1! Rxh1 2.Bd5 Rf1 3.Bf3

The point of the rook sacrifice. The black rook is held off and it looks as if White will win without trouble. However, there is a stalemate combination for Black:

3...Nd6! 4.cxd6 Rf2! 5.f7 Kf1



Black's plan becomes clear. If White queens, he plays his king to g1, after which White cannot evade the rook checks on g2 and h2.

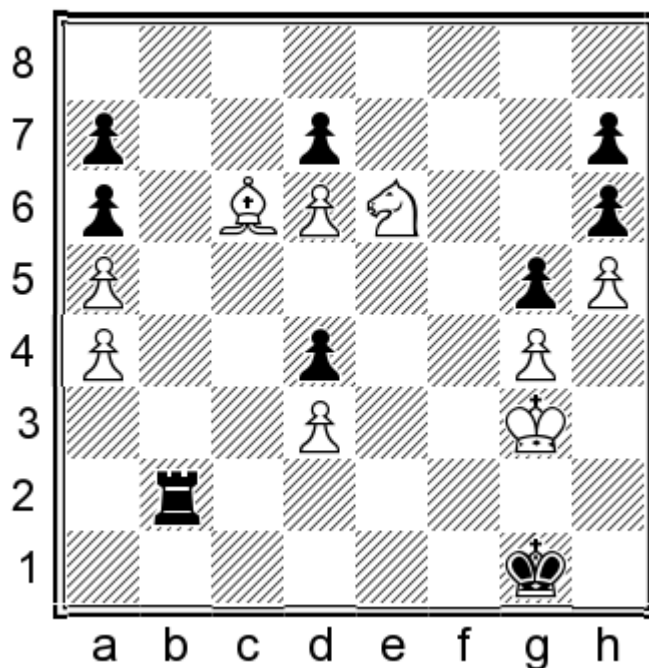
6.f8N!

Shadows of Chapter 5. Only by this knight promotion can White avoid the stalemate. But the stalemate threat continues to loom in the background.

6...Kg1 7.Ne6 Rb2!

The best defence, as we will see. If White now plays his knight, Black again has the check on g2.

8.Bc6!!



A curious position. White deliberately puts both his minor pieces en prise, thus eliminating the stalemate threat. Now the study enters a new phase.

8...dxe6 9.d7

Here there is a dual. The alternative 9.Kf3 would lead to the same result.

9...Rb8

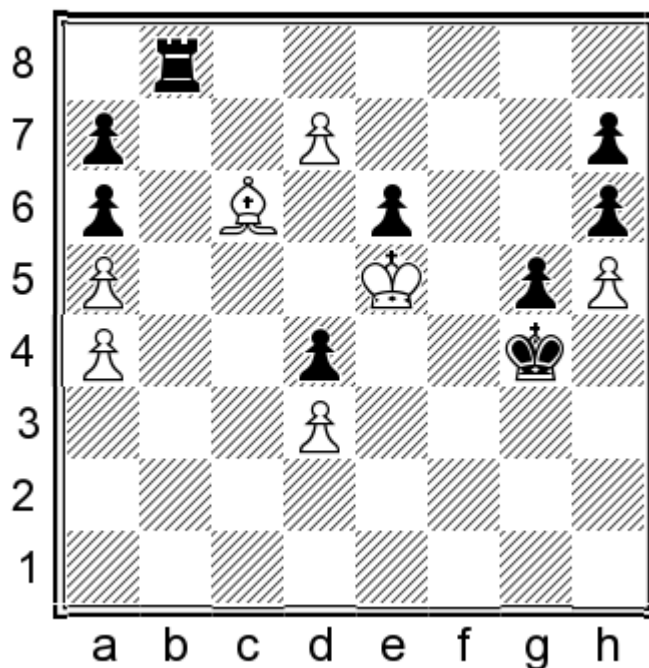
This is why Black's 7th move was best. The rook can go back and defend.

10.Kf3 Kh2 11.Ke4 Kg3

Now the kings dominate the battlefield.

12.Ke5 Kxg4

Now there is no time to take the e-pawn:



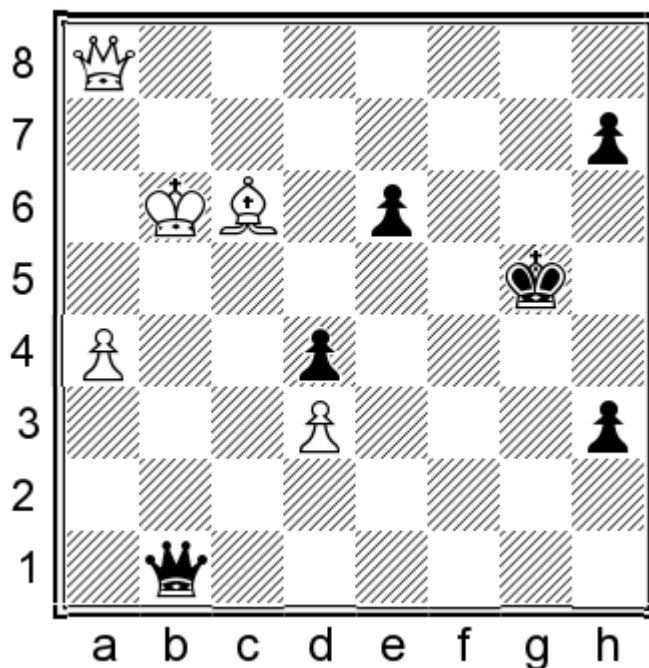
13.Kd6! Kxh5 14.Kc7 Rf8 15.d8Q Rxd8 16.Kxd8

From this point on, there are duals in the main line. White is going to collect the a-pawns, which can be done in two different ways. Despite this, the struggle remains sharp, since it will be decided by a race.

16...g4 17.Kc7 Kg5 18.Kb7 h5 19.Kxa7 h4 20.Kxa6 h3 21.Kb6!

The best king move.

21...g3 22.a6 g2 23.a7 g1Q 24.a8Q Qb1+



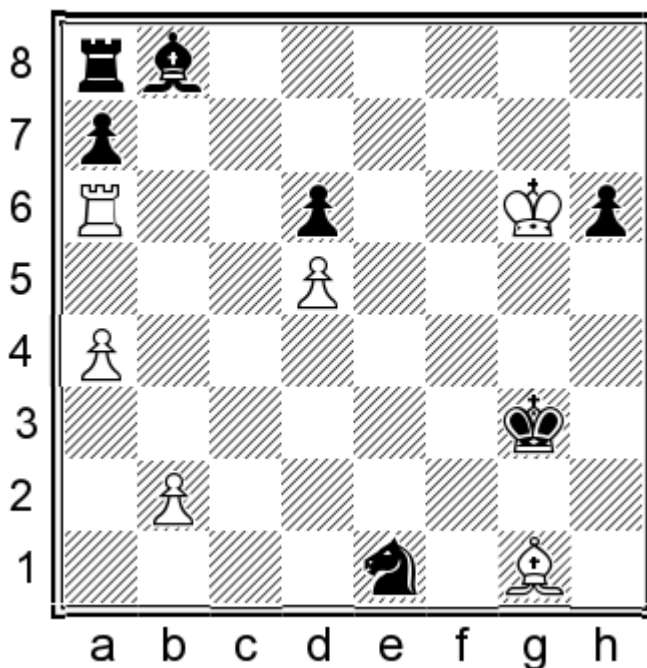
Another important moment.

25.Bb5

Protecting the d-pawn, after which White wins easily.

In Chapter 6, I introduced the Excelsior theme. It also features in the following study.

Timman, 'The Problemist' 2009



White to play and draw (dedicated to Geertje)

The black rook and bishop are boxed in on the queenside. The bishop cannot very well move, as then the a-pawn falls. However, the black knight threatens to liberate its colleagues in a few moves. Therefore White must act very energetically.

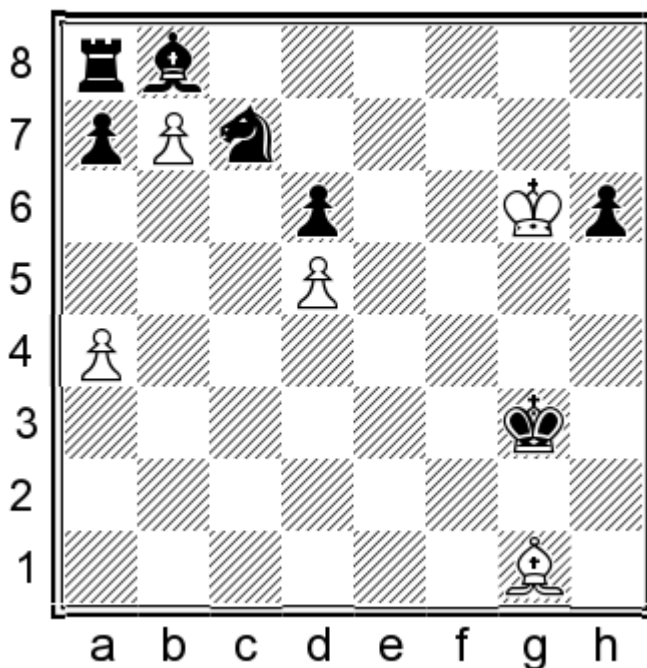
1.b4! Nd3 2.b5 Nb4

The situation looks critical for White.

3.b6!

Not 3.Ra5 in view of 3...Bc7 4.b6 Rg8+, followed by 5...axb6, and Black wins.

3...Nxa6 4.b7 Nc7



Now all Black's pieces are boxed in, but he threatens to free himself with 5...a5 or 5...a6.

5.Bc5!!

A spectacular move that poses Black a difficult question.

5...dxc5 6.d6 a5!

The only move that doesn't lose.

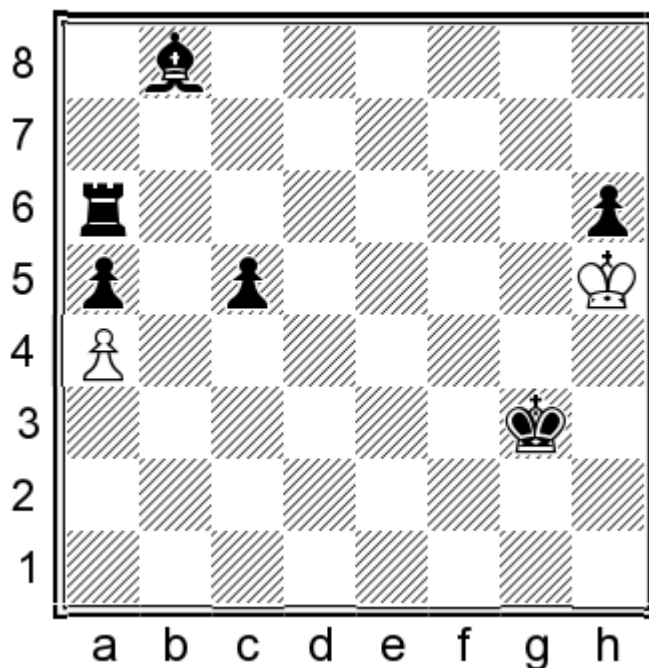
7.dxc7 Ra6+ 8.Kh5!

Preparing the stalemate.

8...Bxc7 9.b8Q

Excelsior!

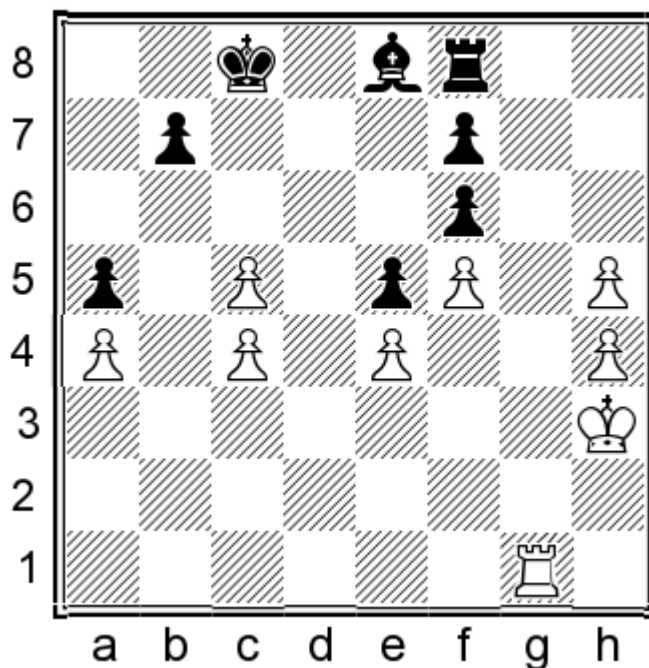
9...Bxb8



Stalemate.

In the following study, White spends a number of moves on the creation of a self-stalemate. Black manages to dismantle this threat, but then the white king finds a new square on which to get stalemated.

Timman 1986



White to play and draw

White is a piece behind and has to act courageously in order to prevent Black consolidating his position.

1.h6 Rh8 2.h7

White must sacrifice this pawn as quickly as possible. Other moves will not do, for example: 2.Rg7 Kd8 3.h7 Ke7, followed by a decisive intervention by the bishop.

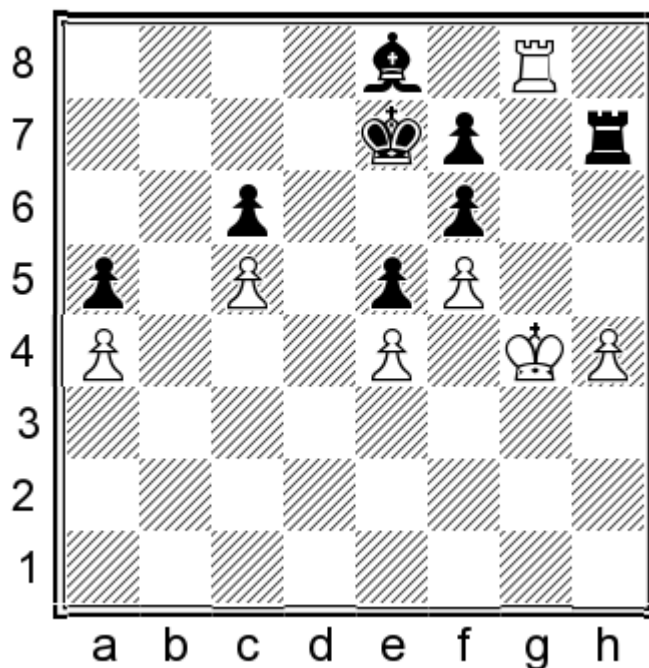
2...Rxh7 3.Rg8

Shutting the black rook off from play.

3...Kd8 4.c6!

Limiting the black bishop's freedom of movement.

4...bxc6 5.c5 Ke7 6.Kg4



Black is a full bishop to the good, but he cannot free his pieces. The white rook keeps both Black's rook and his bishop under control at the same time. Still, White has to keep playing purposefully, because if he keeps alternating between g3 and h3 with his king, he will lose. See: 6.Kg3 Bd7 7.Kh3 Rh6 8.Kg3 Be6! and Black frees his bishop, since in the pawn ending after 9.fxe6 Rg6+ White doesn't stand a chance.

6...Rg7+!

This rook sacrifice is Black's best chance. He has to make it right away, as after 6...Bd7 7.h5 it would be too late. In that case White could never be brought into zugzwang, as he would always have the squares g4 and h4 for his king.

7.Rxg7 Kf8

By sacrificing his passive rook, Black has now managed to put the white rook out of play.

8.Rh7

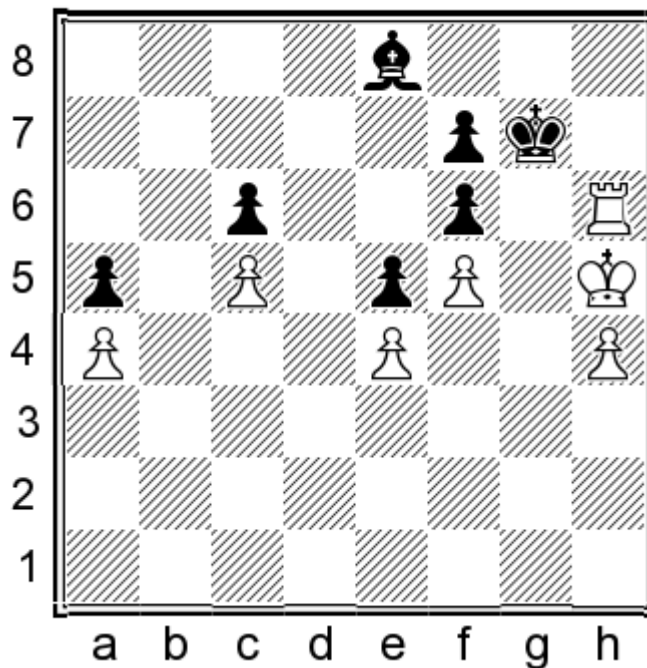
Tempting is 8.Rg5. Black then wins in the nick of time: 8...fxg5 (not 8...Bd7 9.h5!) 9.Kxg5 Kg7 10.f6+ Kh7 11.Kf5 Bd7+ 12.Kxe5 Be6 13.Kd6 Bb3 14.Kxc6 Bxa4+ 15.Kb6 Bc2!. Or 14.e5 Kg6 15.Kxc6 Bxa4+ 16.Kb6 Bc2 17.Kxa5 Kf5 and the rest is not difficult.

Originally I had made this study without the a-pawns. In this variation the reason for their presence becomes clear. Since the pawn on a4 is vulnerable, White cannot achieve the draw in this way.

8...Kg8 9.Rh6!

Only move. 9.Rh5 is prospectless, as Black will then bring his bishop outside the chain and attack the white pawns.

9...Kg7 10.Kh5



White is about to create a self-stalemate situation.

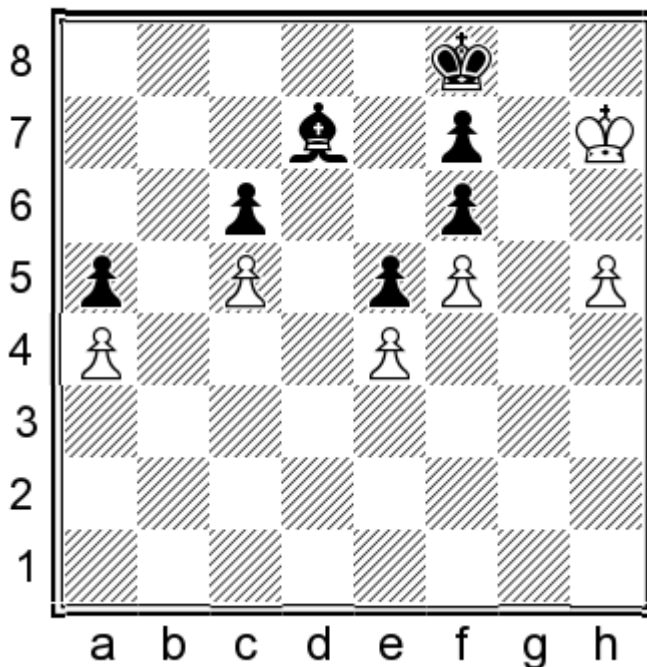
10...Bd7 11.Rh8!

The consequence of the preceding play. The enclosed rook is sacrificed.

11...Kxh8 12.Kh6 Kg8

The black king has to leave the corner in order to eliminate the stalemate threat.

13.h5 Kf8 14.Kh7



The white king is on its way to the corner in order to establish a new self-stalemate situation there.

14...Bxf5+

There was no time to play the bishop round to a better square. So it is better to sacrifice it right away in order to create a passed e-pawn.

15.exf5 e4 16.h6 e3 17.Kh8 e2 18.h7

Forcing the black king to leave f8.

18...Ke7 19.Kg8

Not 19.Kg7 in view of 19...e1Q 20.h8Q Qg3+ 21.Kh7 Qh3+ 22.Kg7 Qg4+ 23.Kh6 Qg5+ and the f-pawn will be lost with check.

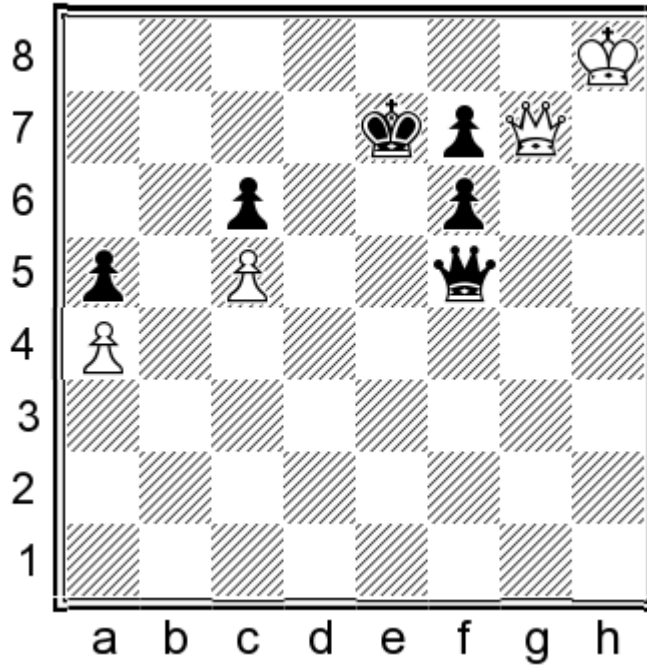
19...e1Q 20.h8Q

Finally a queen ending has arisen, where White still has to find a few accurate moves.

20...Qg3+ 21.Qg7 Qg5

The most interesting try. After 21...Qb8+ 22.Kh7 White would have nothing to fear.

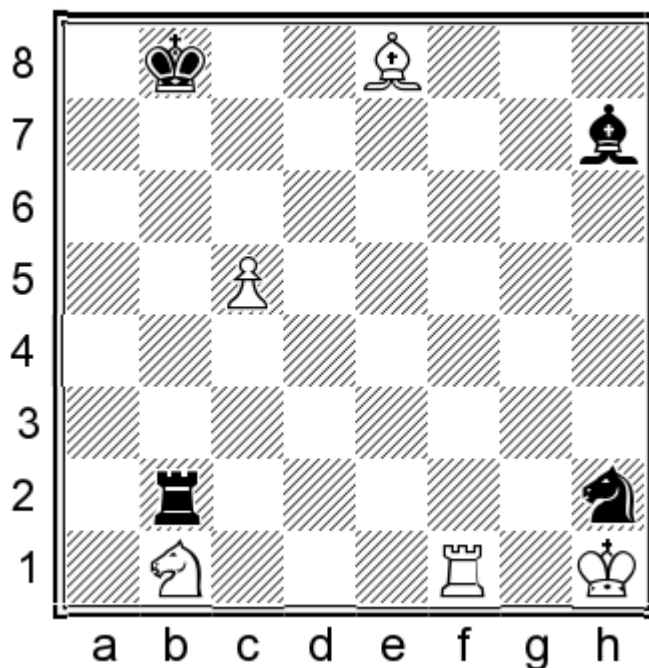
22.K h8 Qxf5



23.Qf8+!

The final point. 23.Qxf7+ would have led to the same result: draw. A simple example of stalemate in the corner is seen in the following study.

Timman, 'The Problemist' 2004



White to play and draw

The white king is caught in a mating net. White has to keep the enemy bishop from the e4-square.

1.Rf4!

The only way to control both the e4- and the f3-square.

1...Be4+!

With this bishop sacrifice, the knight gets access to the crucial f3-square.

2.Rxe4 Nf3

Now White will have to achieve the aim by either sacrificing all his pieces or reaching the h-file with his rook.

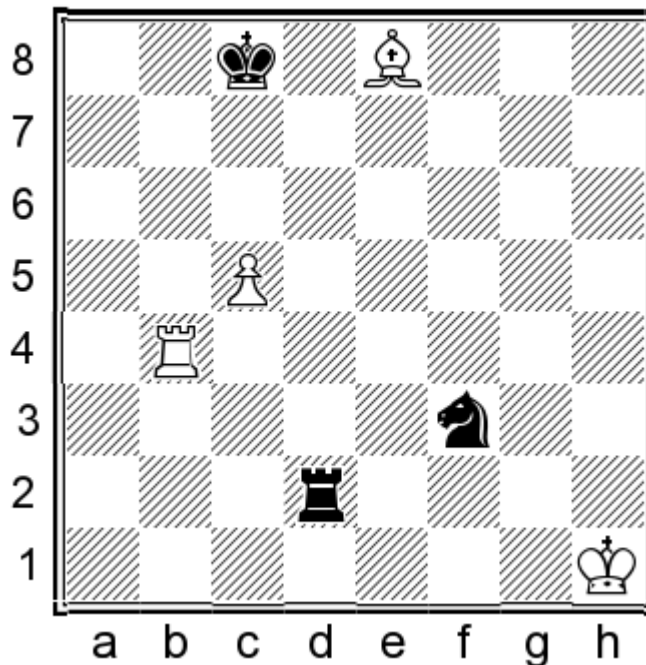
3.Nd2

First the knight.

3...Rxd2 4.Rb4+

With the knight sacrifice White has cleared the way to the b-file for the rook.

4...Kc8



A new sacrifice is hanging in the air.

5.Bd7+!

If the king now takes the bishop, there follows a check on b7, after which the white rook reaches the h-file.

5...Kc7 6.Rb7+!

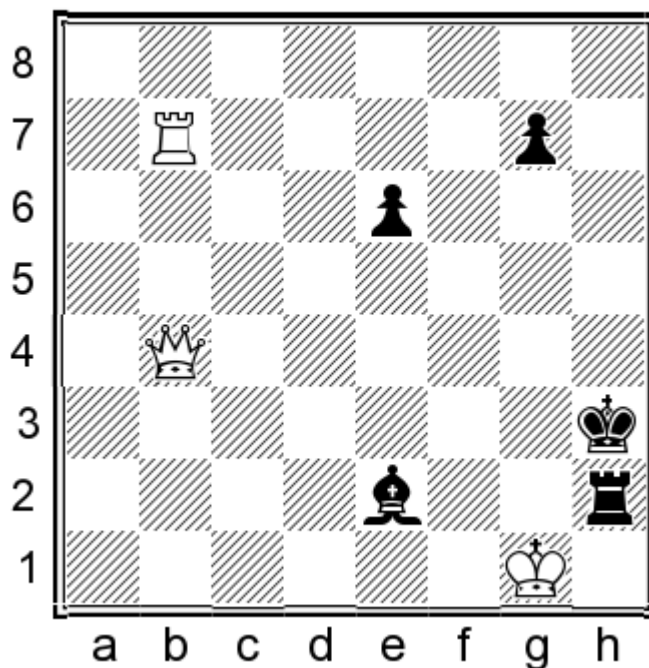
Black must always accept this rook sacrifice.

6...Kxb7 7.Bc6+! Kxc6

Stalemate.

In the following study it is even clearer that White aims for stalemate.

Timman 1989



Black to move – White draws

White has an overwhelming material surplus, but Black now sets up a lethal battery.

1...Rg2+ 2.Kh1 Bf3 3.Rf7

Only by attacking the bishop with the rook can White defend himself. After 3.Qb3 Rg3+ 4.Qxf3 Rxf3 5.Rxg7 Rf1+ Black would win the pawn ending.

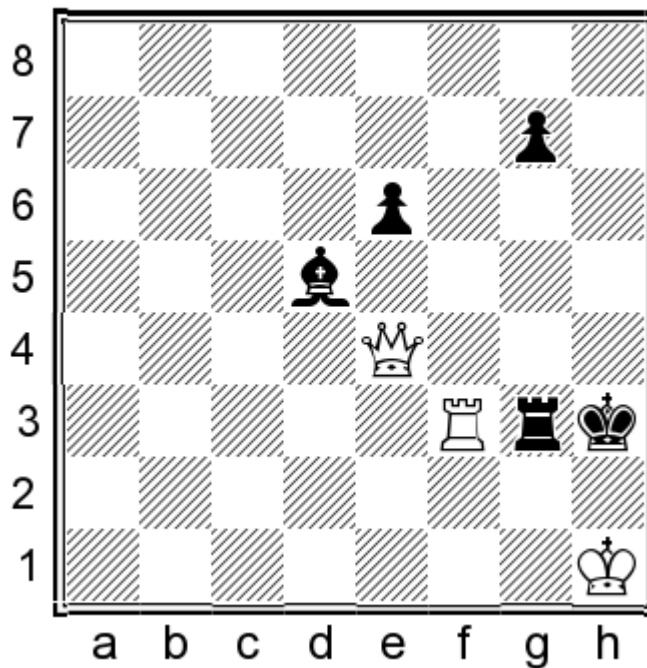
3...Bd5

The only safe square on the long diagonal. The bishop has to be on a protected square.

4.Rf3+

With clear intentions: after 4...Bxf3 White forces stalemate with 5.Qh4+.

4...Rg3 5.Qe4!



Generally the queen doesn't get a defensive role, but necessity knows no law. Now 5...g5 would not yield anything after 6.Qh7+ Kg4 7.Kh2.

5...g6!

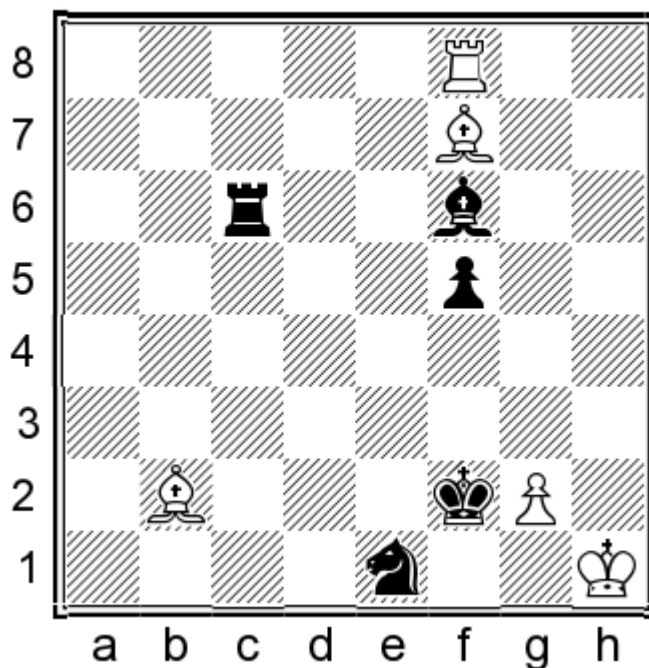
An extremely level-headed reply. Black prevents check on h7 and again puts the question to White: how does he want to lose both of his pieces?

6.Qf5+!

Bull's eye. Black must take the queen, and then the stalemate is achieved.

Stalemate in the corner can be much more subtle.

Timman 2010



White to play and draw

The white king is in danger. Moreover, he cannot exchange on f6 as then the bishop on f7 will be lost.

1.Bd5! Rc7!

Threatening mate in one.

2.Be5!

A beautiful, problem-like move which serves to bring the bishop to the h-file.

2...Rh7+ 3.Bh2

White seems to have warded off the danger. However, now Black starts an interesting combination:

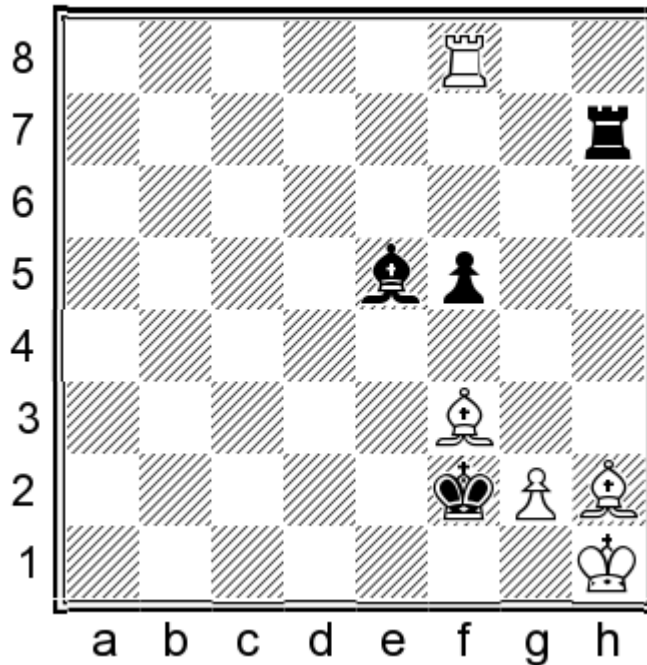
3...Nf3!

With this knight sacrifice, the f-file is closed.

4.Bf3

The only move. After 4.gxf3 Be5 White would be irrevocably mated.

4...Be5



5.Bh5!

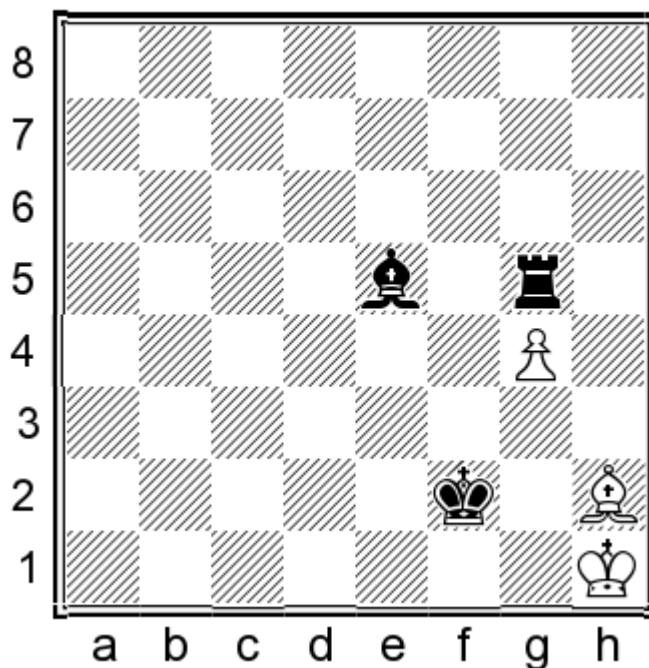
In turn, White sacrifices his king's bishop in order to re-open the f-file.

5...Rxh5 6.Rxf5+!

This rook sacrifice is the consequence of the bishop sacrifice.

6...Rxf5 7.g4 Rg5

The only square for the rook. Now comes the climax of the study.



8.Bf4!

With this second bishop sacrifice White puts the black rook in a predicament. Black cannot capture the bishop, as that would mean stalemate.

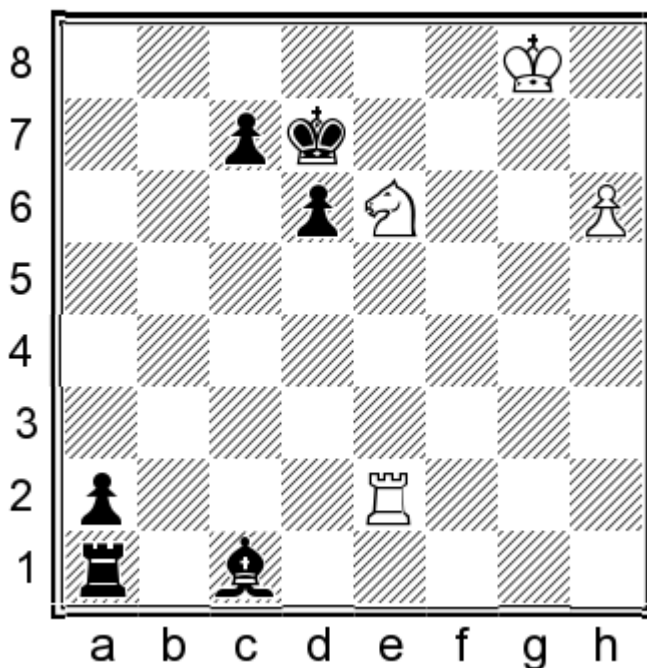
8...Rxg4 9.Bxe5 Rg1+ 10.Kh2 Rg5

A last try.

11.Bd4+ draw.

The construction of the following study is even more complex.

Timman 2010



White to play and draw (dedicated to Geertje)

Both sides have a far-advanced passed pawn, so White's first move speaks for itself.

1.h7 Bb2

But now things become complicated. Not only has Black prevented promotion, but he also threatens to give a devastating rook check.

2.Nc5+!!

This knight sacrifice introduces a stalemate combination eight moves deep. Alternatives were:

A) 2.Rxb2 Rg1+ 3.Kf7 Rf1+ 4.Kg6 (it looks as if Black cannot win, as after the mutual promotions, the white king would be safe enough) 4...Rf6+!! (a tremendous surprise) 5.Kxf6 a1Q and wins;

B) 2.Nf8+ Kc6 3.Rxb2 Rg1+ 4.Kf7 Rg7+! (an echo of Variation A) 5.Kxg7 a1Q 6.h8Q Qxb2+ 7.Kg8 Qxh8+ 8.Kxh8 and now both 8...d5 and 8...Kd5 suffice for the draw.

The point of the text move will be revealed later on.

Incidentally, White could not switch round the first and second moves. After 1.Nc5+ dxc5 2.h7 Black would win with 2...Rb1!; for example, 3.Rxa2 Rb8+ 4.Kg7 Be3, followed by 5...Bd4+.

2...dxc5

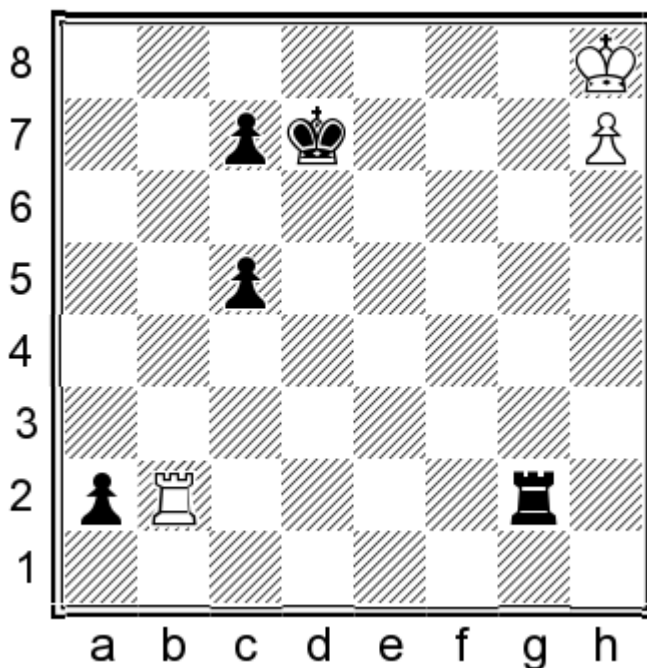
On the alternative 2...Kc6 White had the following road to a draw: 3.Rxb2 Rg1+ 4.Kf7 Rf1+ 5.Kg6 Rf6+ 6.Kxf6 a1Q 7.Nd3!, followed by promotion. The knight is used to protect the rook. Now stalemate motifs start to play a role.

3.Rxb2 Rg1+ 4.Kh8!

The stalemate trap is set. Black cannot promote to a queen.

4...Rg2!

The best try. After 4...a1R 5.Rd2+ White would have a ‘rampant rook’. This means that he can keep giving checks with his rook, even in it is en prise. If the opponent accepts the sacrifice, White is stalemated.



5.Rb1!!

A fantastic riposte. Firstly White threatens 6. Rd1+, when he would again have a rampant rook. And on 5...Rh2, 6.Ra1 suffices for the draw.

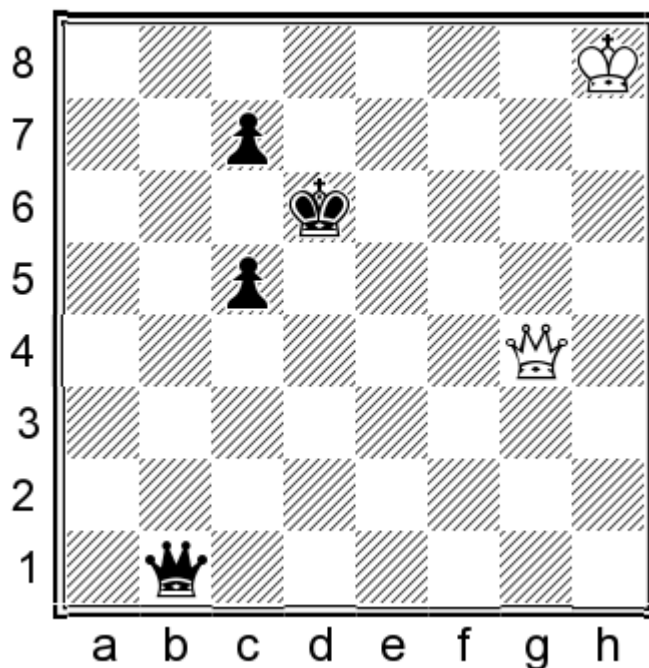
5...Rg8+!

A stunning attempt. Black also sacrifices his rook, steering towards a queen ending where he has two extra pawns.

6.hxg8Q axb1Q 7.Qg4+

The only correct check. He must not let the black king escape via c8.

7...Kd8 8.Qg8+ Kd7 9.Qg4+ Kd6



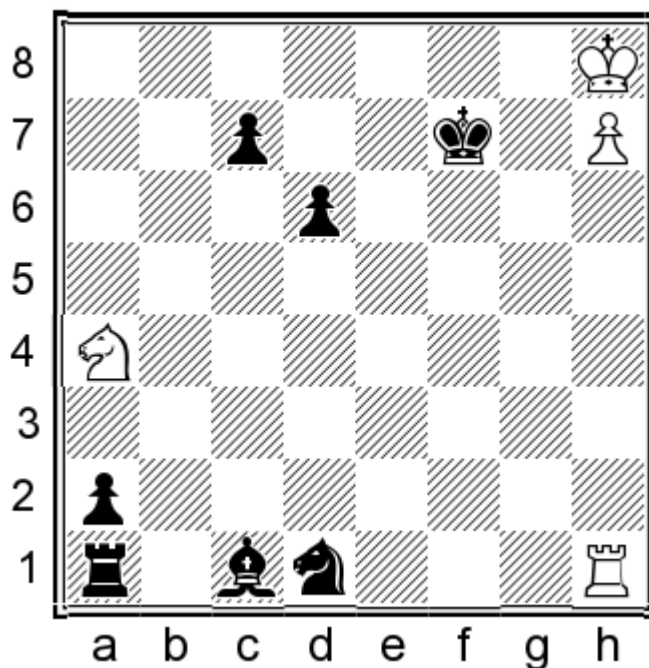
There's nothing to be done about it. Now White finally forces stalemate – with a queen sacrifice.

10.Qg6+! Qxg6 stalemate.

For this study I received second prize in the Nona 2010 tourney. It is dedicated to my wife Geertje, because I made it just before her 36th birthday.

The study was received enthusiastically and published in many places. Unfortunately, later it was discovered that it contained a dual. In Variation B, in the comments to White's second move, 3.Rc2 Kd5 4.Rxb2 Rg1+ 5.Ng6! Rxc6 6.Kh8 leads to a draw. Here, too, White gets a rampant rook; I hadn't thought of that possibility at all. I had to construct a new version. It looks like this:

Timman 2011



White to play and draw

White's king is stuck in the corner. He has to give check.

1.Rf1+ Nf2!

With this knight sacrifice, Black creates space for his rook, although this cannot be seen at this point. After other moves White could play 2.Kg8 without trouble.

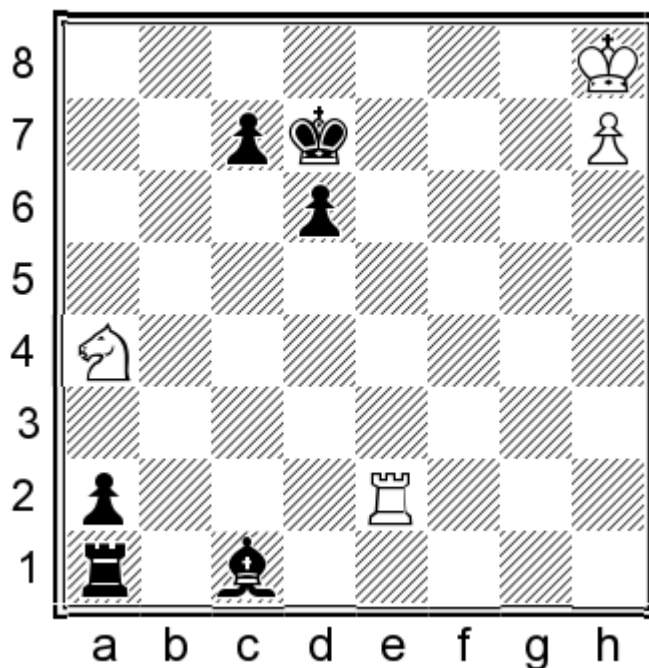
2.Rxf2+ Ke7

On 2...Ke6 White would already have 3.Nc5+.

3.Re2+

White has to keep giving checks. After 3.Nc3 Rb1! 4.Nd5+ Ke6 5.Nxc7+ Kd7 6.Rxa2 Kxc7 Black would be winning. The white passed pawn is not strong enough.

3...Kd7



4.Nc5+!

The well known sacrifice – only the knight comes from the other side this time.

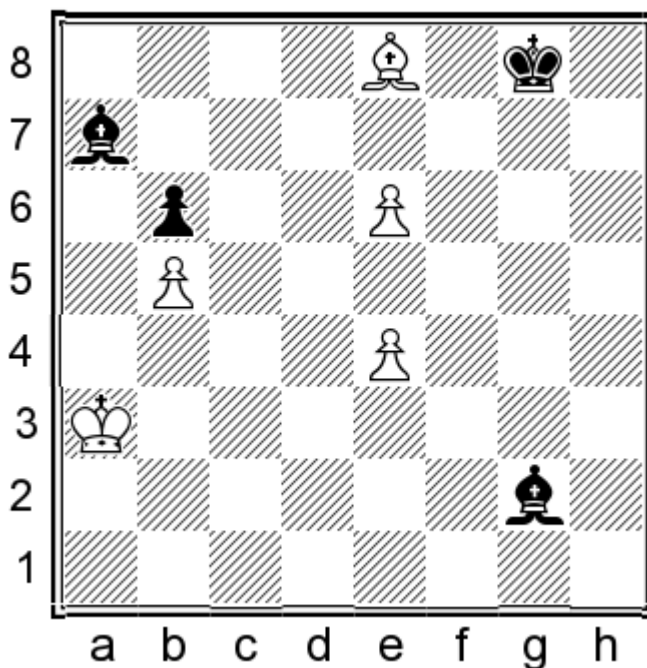
4...dxc5 5.Kg8 Bb2 6.Rxb2

And we know the rest.

The echo variations are lost, but instead a pretty knight sacrifice for Black has been added.

Besides a rampant rook, there is also such a thing as a rampant bishop.

Kubbel, 'Kölnische Volkszeitung' 1926



White to play and draw

The white king has so many squares that stalemate looks improbable. Nevertheless, the decisive stalemate trick will appear soon enough.

1.e7 Bb8

The only way to stop the foremost e-pawn.

2.e5!

An important pawn sacrifice.

2...Bxe5 3.Bd7 Bd6+ 4.Ka4!

The king barricades itself on the edge of the board.

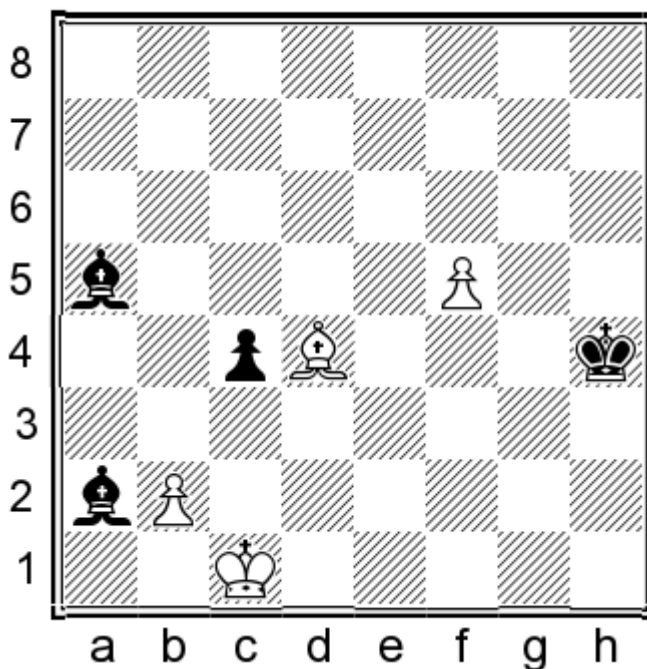
4...Bxe7 5.Be6+ Kg7 6.Bd5!

Black cannot capture the bishop in view of stalemate.

6...Bf1 7.Bc4 Bh3 8.Be6

And the black bishop cannot escape the attacks.
The same principle is also possible with the king in the corner.

Timman 1983/2009



White to play and draw

This is an extended version of an old study of mine. White must push his f-pawn.

1.f6 Bb4 2.f7

Threatening 3.Bg7, so Black's reply is forced.

2...Bf8

Now what is left for White to do? Black threatens to collect the f-pawn with his king.

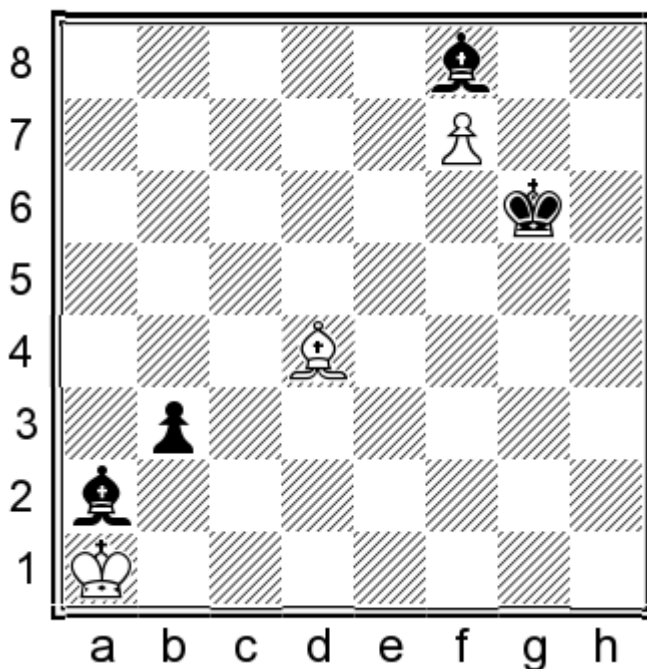
3.b4!

Threatening 4.Bc5, so Black has to take en passant.

3...cxb3 4.Kb2

Now a new motif emerges. If White managed to exchange bishops, the position would be a dead draw, even without the f-pawn, since the black queen's bishop is very unfortunately placed on a2. If Black succeeds in avoiding this exchange, then he will bring his king to d1 and give check on c1, driving the white king into the corner. Next he will play his king to c2 and his queen's bishop to b1, and give mate. In order to avoid this scenario, White has a hidden manoeuvre at his disposal that gives him a rampant bishop.

4...Kg5 5.Ka1 Kg6



6.Bb2!

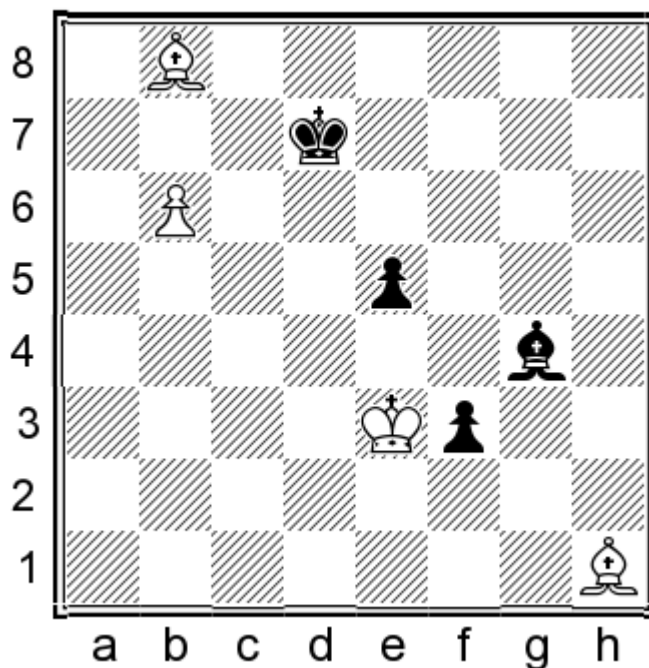
The bishop retreats to make the drawing mechanism work.

6...Bc5 7.f8Q Bxf8 8.Ba3 Bg7+ 9.Bb2 Bh6 10.Bc1

Draw.

A follow-up study shows how accurately the attacking side must play in order to avoid the exchange of bishops.

Timman, 'Ausgewählte Endspielstudien' 1995



Black to play – White wins

I composed this study in 1993.

1...e4!

The only try.

2.Ba7!

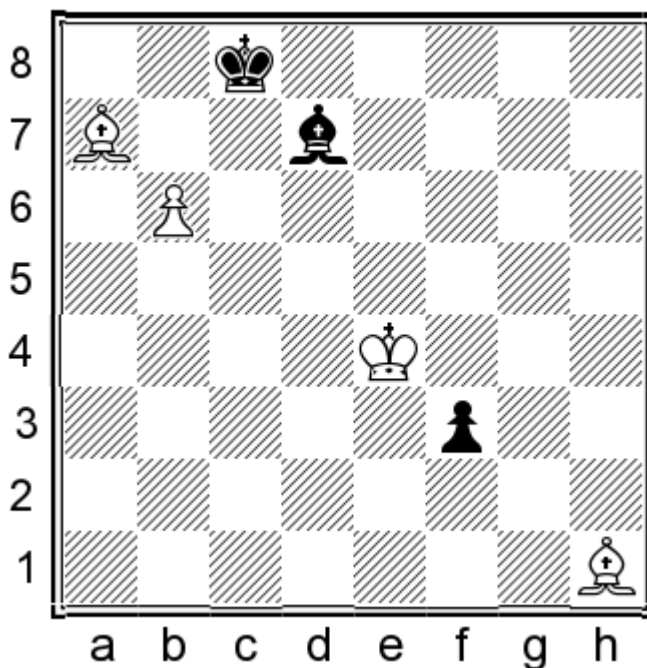
White could not take the pawn because of 2.Kxe4 f2 3.Bg2 Be2 with a draw.

The text is not obvious, but well founded. White threatens to push the b-pawn, so Black is forced to move his king to the c-file. The alternative 2.Bc7 Be6 3.Be5 Kc6 4.Bd4 Bd5 would lead nowhere.

2...Kc8 3.Kxe4

In these circumstances White can take the pawn.

3...Bd7



Again the only way. If the black bishop reaches the long diagonal, he has nothing to fear. White's queen's bishop is on the wrong square.

4.Kd5!

The white king moves away from the kingside.

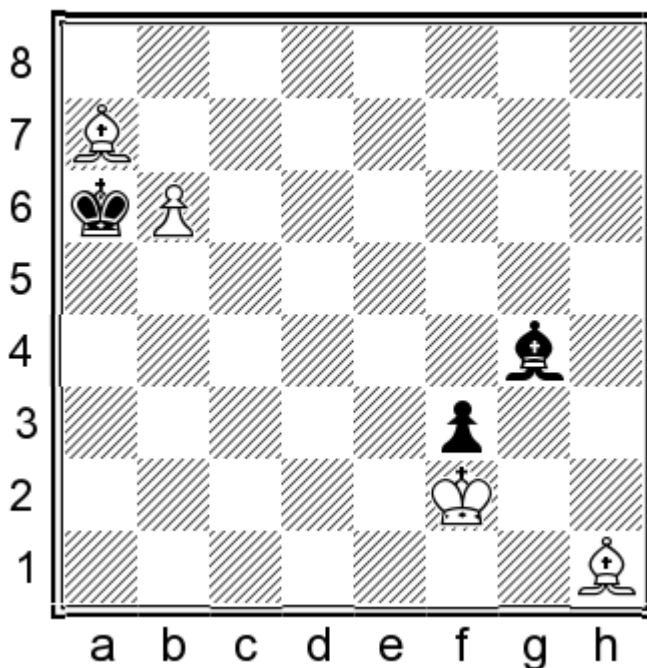
4...Kb7 5.Kc5 Bg4

On 5...Bc6 White wins by 6.Bb8! getting his queen's bishop back in play.

6.Kd4

Now the king returns to the kingside.

6...Ka6 7.Ke3 Bh5 8.Kf2 Bg4



9.Ke1!

An important moment. After 9.Kg3 Bh5 10.Kh4 Black has 10...f2 11.Bg2 Be2 again. So White has to triangulate with the king to get the same position with Black to move.

9...Kb7

On 9...Bh5 White has 10.Kf1.

10.Kd1!

Now the black f-pawn is pinned.

Not 10.Kf1? because of 10...Bh3+ followed by 11...Bg2.

10...Ka6 11.Kd2 Bh5 12.Ke3 Bg4 13.Kf2 Bh5 14.Kg3 Kb7 15.Kh4

White wins.

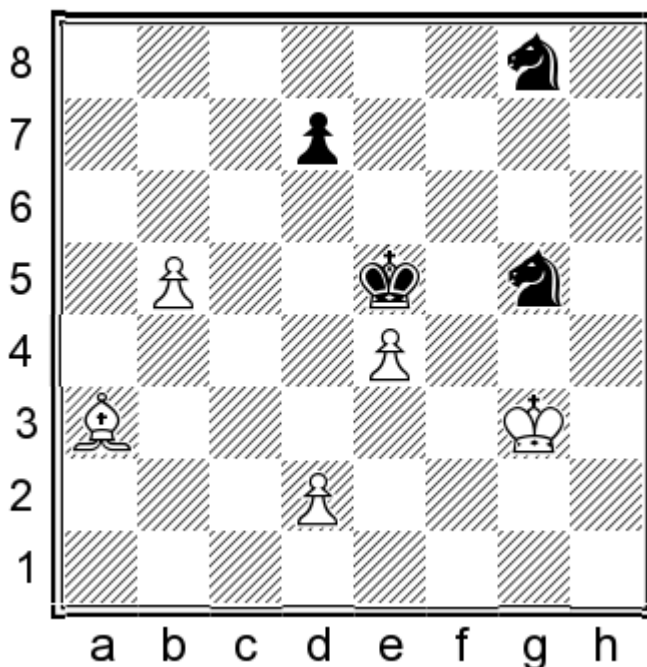
Chapter 9

Mutual zugzwang

In pawn endings, mutual zugzwang (also known as reciprocal zugzwang) within the margins of winning and losing is a common phenomenon. Take, for instance, a white pawn on d4 and a black one on d5, flanked by both kings, a pattern known as trébuchet. The obligation to move inescapably leads to one of the players' downfall.

Outside pawn endings, mutual zugzwang within the margins of winning and losing does not often occur. Kubbel composed a famous study on this theme.

Kubbel 1928/1929



White to play and win

The white b-pawn is dangerous, but if White pushes it right away, Black can stop it with 1... Nxe4+ followed by 2... Nd6.

1.d4+!

The battle for the d6-square flares up.

1...Ke6

The king scorns the white pawns in order to keep control of the square d6.

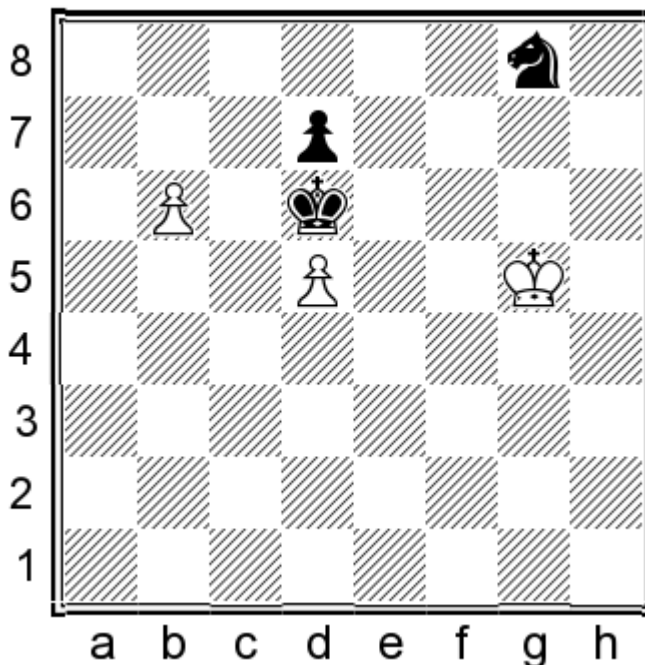
2.d5+ Ke5 3.b6

The time has come for the pawn push.

3...Nxe4+ 4.Kh4!

Avoiding all knight checks.

4...Nd6 5.Bxd6+ Kxd6 6.Kg5!



A situation of mutual zugzwang has arisen. If it were his move, White would lose.

6...Ne7

What else?

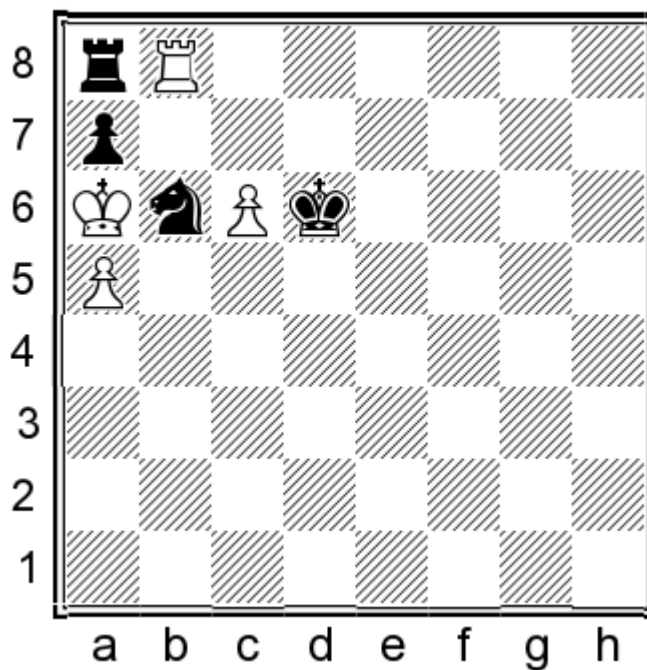
7.b7 Kc7 8.d6+

And wins.

This study gained Kubbel first prize in the 'Siberian Chess Section Tourney'.

The Russian endgame study composer M.G.Kliatskin has made a draft study that has become very famous.

Kliatskin, 'Shakhmaty' 1924



White to play and win

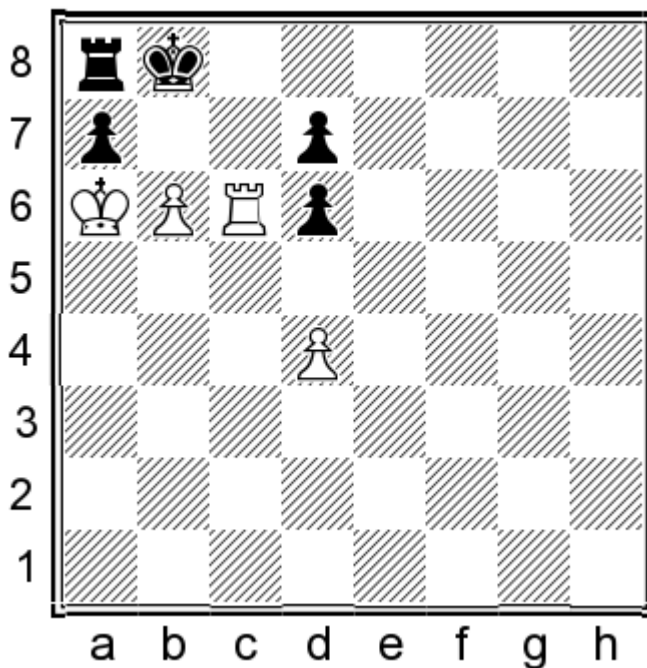
The solution plays itself.

1.c7! Kxc7 2.axb6+ Kxb8 3.b7

And wins. The reciprocal zugzwang is lethal.

More than a decade later, the well-known Russian player and endgame study composer A.S. Selesniev added an element to Kliatskin's draft study.

Selesniev, '64' 1935



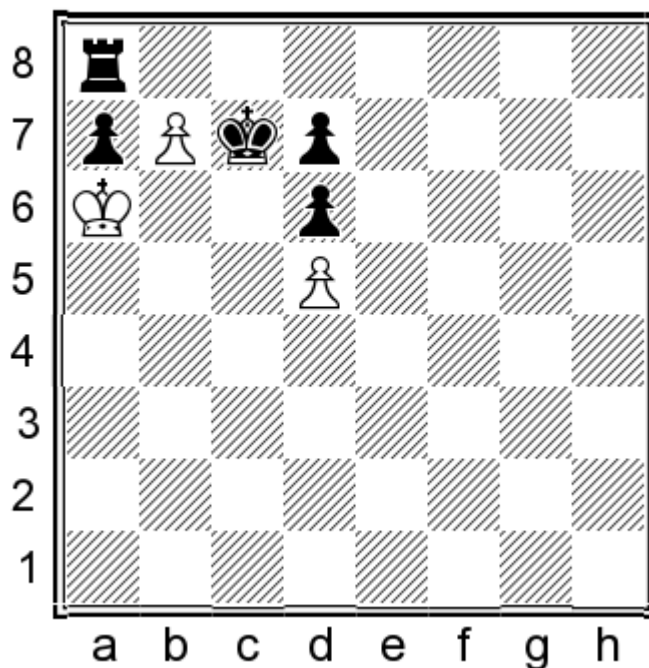
White to play and win

The white rook is under attack and has to be sacrificed.

1.Rc8+! Kxc8 2.b7+ Kb8 3.d5

In Kliatskin's study, the mutual zugzwang meant the difference between a win and a draw, but here we have a win-or-lose situation. Black's doubled d-pawn makes the difference. These two pawns also make a stalemate trap possible.

3...Kc7



It may be exaggerated to speak of a trap, as this is Black's only move. Now White has to take care which piece he promotes to.

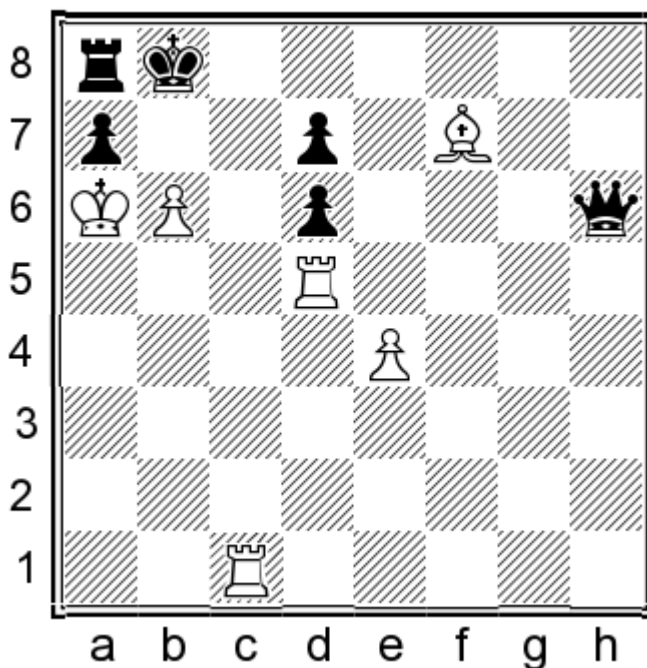
4.bxa8B!

4.bxa8N+ Kb8 spoils the win.

4...Kb8 5.Bb7

And wins. The final position is also a case of mutual zugzwang. It irritated me that Selesniev's study, however pointed, lacked fitting introductory play. I succeeded in making a study where White starts with a double rook sacrifice.

Timman 2011



White to play and win (after Selesniev)

White starts with the same rook sacrifice.

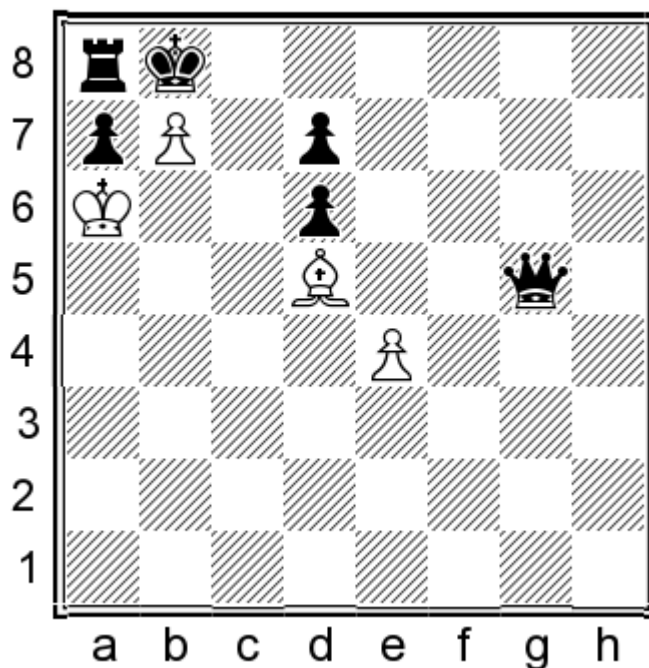
1.Rc8+! Kxc8 2.b7+ Kb8

But now what? Without the rook it would be simple – the bishop would go to d5 with deadly force. With the rook on the board, White must even take care that he does not lose. On 3.Rb5 there would follow 3...d5+.

3.Rg5!!

Absolutely the only move. Black has to take the rook, since after 3...d5+ 4.Rg6 White keeps a devastating check on g8 in reserve.

3...Qxg5 4.Bd5



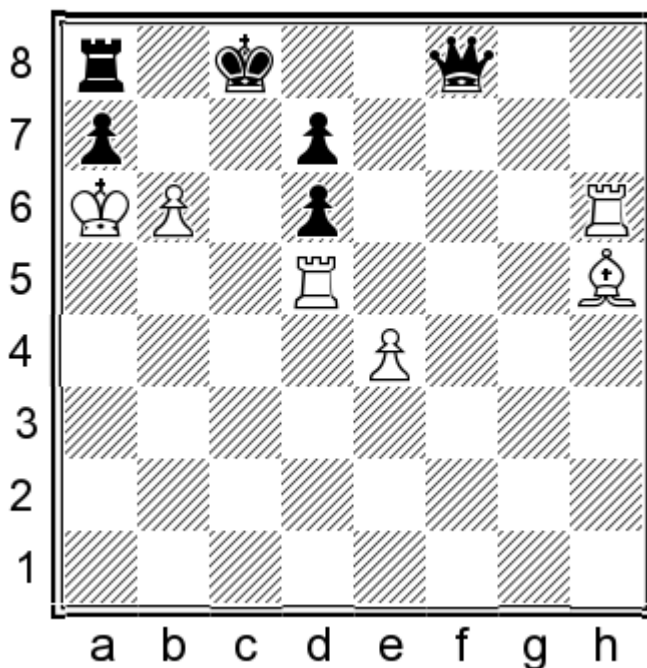
An incredible situation. In spite of his enormous surplus in material Black is lost.

4...Qxd5 5.exd5

And the rest is the same as in Selesniev's study.

In this study, the Phoenix Principle made another appearance: the white bishop, which had been captured by the queen, rose from its ashes on a8. It's possible to build in a knight promotion as well, as we see in the next study.

Timman 2011



White to play and win (after Selesniev)

Here Black has counterplay because he has a check on f1.

1.b7+ Kb8

An important alternative is 1...Kc7. If White then reacts thoughtlessly with 2.bxa8Q?, Black has a perpetual check starting with 2...Qf1+. The only way to win is 2.bxa8N+!. After 2...Kb8 3.Rhxd6 Qf1+ 4.Rd3 Qa1+ 5.Kb5 Qb2+ 6.Kc4 Qc2+ 7.Kb4 Qb2+ 8.Rb3! Black has no useful checks left.

After the text move White has a problem. If he continues with 2.bxa8Q Kxa8 3.Rhxd6, then 3...Qf1+ does give Black enough counterplay; for example, 4.Rd3 Qa1+ 5.Kb5 Qb2+ 6.Kc5 Qc2+ 7.Kd4 Qf2+ and there is no good way for White to escape the checks.

2.Bf7!!

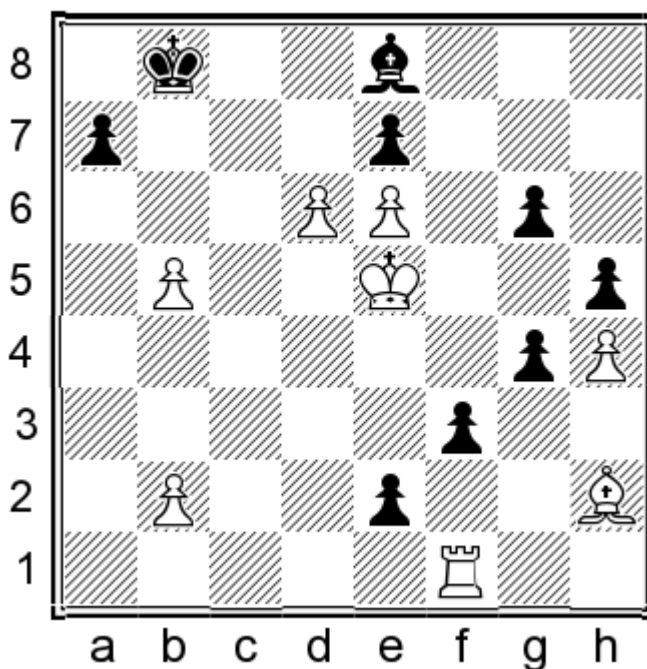
Only with this problem move can White win. The queen's passage to f1 is cut off, and at the same time the bishop is ready to take up its position.

2...Qxh6 3.Rh5 Qxh5 4.Bd5

And the rest is well known.

The play in the following study is quite sharp.

Timman 2011



White to play and win

The black passed pawns are very dangerous. For example, after 1.Re1 exd6+, followed by 2...f2, Black could look to the future with confidence.

1.d7!

Opening the h2-b8 diagonal for the bishop.

1...Bxd7 2.Re1!

The main intention of this little rook move is to block the e-file. After 2.exd7 exf1Q 3.d8Q+ Kb7 4.Qd7+ Kb6 5.Qc6+ Ka5 White wouldn't be able to win.

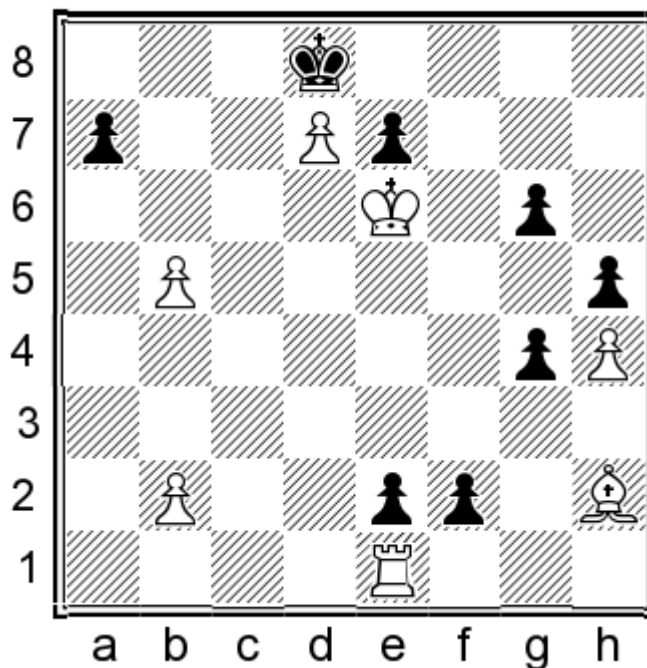
2...f2

Black has to bite the bullet, otherwise White would block the black pawns with 3.Bg3.

3.exd7 Kc7

An important alternative was 3...fxe1Q . Then the play continues as follows: 4.d8Q+ Kb7 5.Ke6! (threatening mate) 5...g3 6.Qd5+ Kb6 7.b4! and the black king is caught in a mating net.

4.Ke6+ Kd8



How can White continue his siege on the black king? He cannot move his rook.

5.b6!

Threatening mate on c7.

5...axb6 6.Bg1!

The point of the previous move. Black cannot take the rook in view of mate on b6. Now a field of tension has been created that looks like Nadareishvili's.

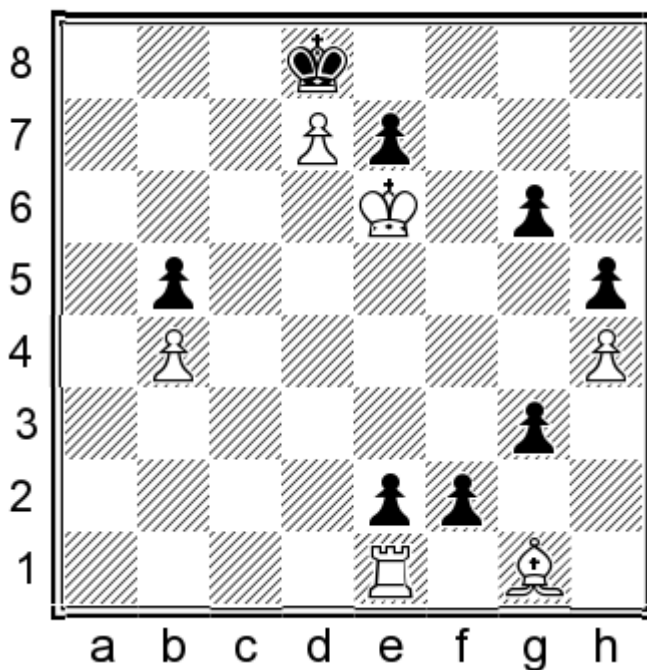
6...g3

Protecting the f-pawn. The situation is extremely sharp. Paradoxically, this calls for a quiet little move.

7.b3!

All other moves lose.

7...b5 8.b4



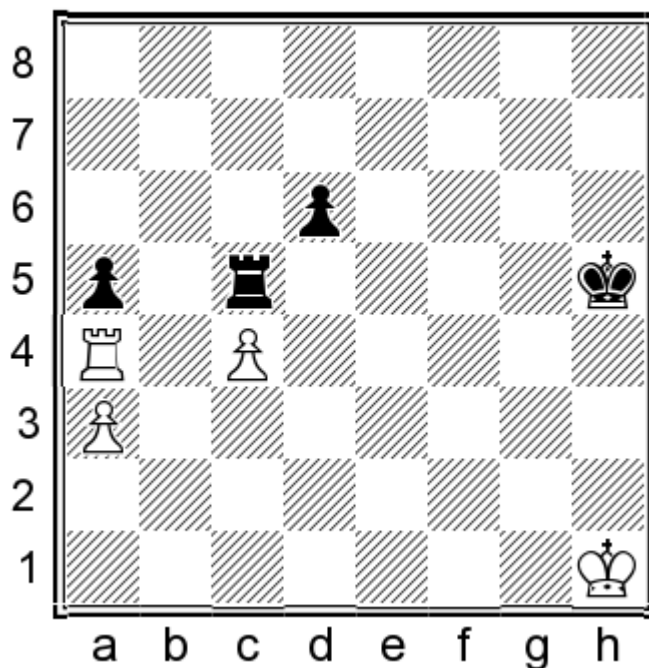
Mutual zugzwang. Black is going to get mated.

8...g5 9.hxg5 fxe1Q 10.Bb6

Mate.

Besides in pawn endings, the opposition motif can also occur in rook endings. And with it, mutual zugzwang.

Timman 1993



White to play and draw

The rooks and pawns on the queenside form an unmovable block. In order to maintain the opposition, White has to keep his king on the first rank.

1.Kg1!

After 1.Kg2 Kg4 White would be lost.

1...Kg5 2.Kf1 Kf5 3.Ke1 Ke5 4.Kd1 Kd4

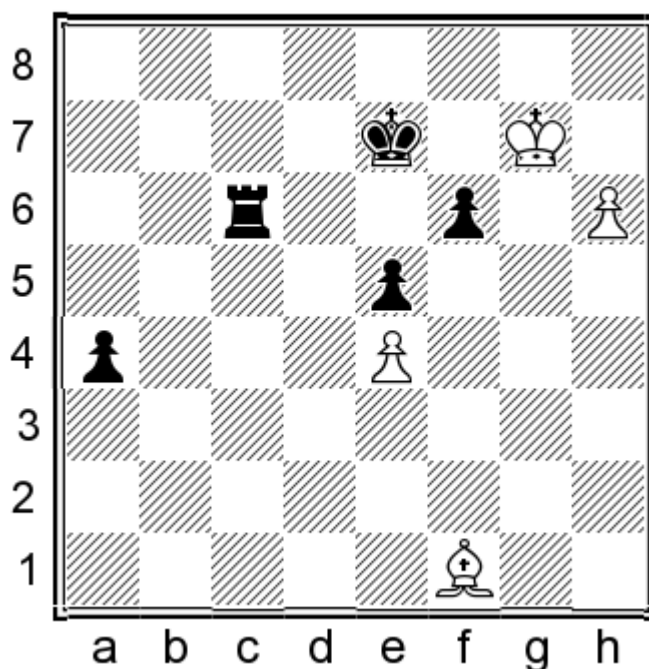
Otherwise Black cannot make progress.

5.Kd2

Mutual zugzwang. Black cannot win.

As opposition and mutual zugzwang go together, so do corresponding squares. This is shown in the following study, where the first few moves are obvious.

Nadareishvili, 'Ceskoslovensky Sach' 1953



White to play and draw

1.h7 Rc8

Now White has to be on his guard. After the obvious 2.Bc4 a3 he would end up in a fatal zugzwang situation, for instance: 3.Bf7 Rb8! 4.Bc4 Rb2 5.h8Q Rg2+ 6.Kh7 Rh2+ 7.Kg7 Rxb8 8.Kxb8 f5! 9.exf5 Kf6 and the bishop cannot stop the two black passed pawns.

2.Bb5!

Forcing the pawn to move forward.

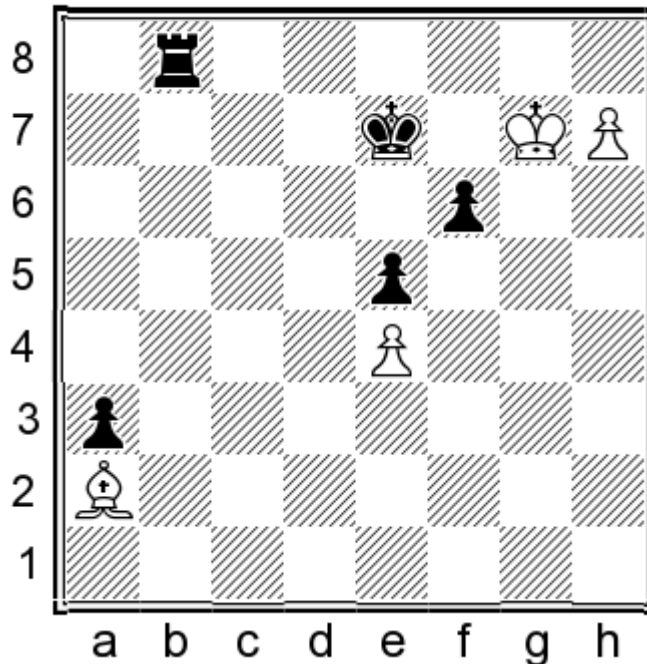
2...a3 3.Bc4

The same position, with Black to move. By carefully choosing the best squares for his bishop, White prevents the black rook from turning up behind the white lines.

3...Ra8 4.Ba2

Stopping the a-pawn.

4...Rb8



An important moment. White does not have the b3-square at his disposal, because there his bishop would simply be captured. Therefore, he will have to find another corresponding square.

5.Bf7!

Now the rook cannot penetrate.

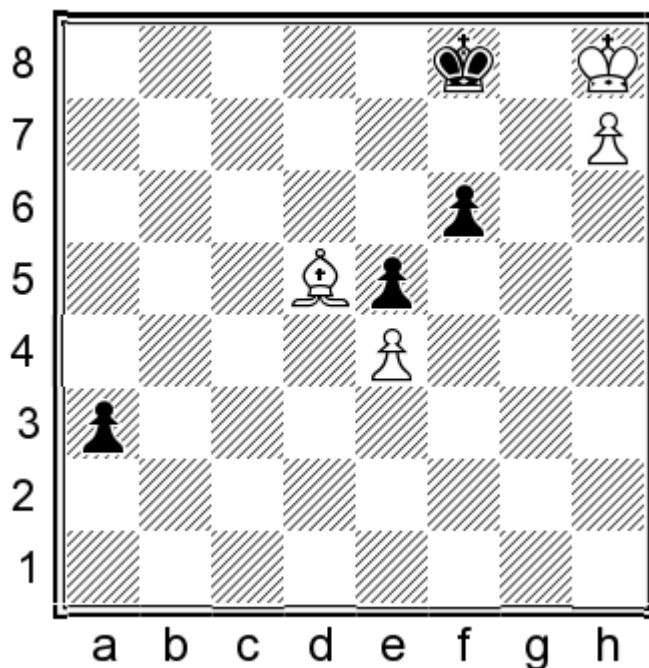
5...Rc8 6.Bc4

This is the corresponding square.

6...Rd8 7.Bd5 Rh8

A last try.

8.Kxh8 Kf8



The situation still looks precarious for White. However, there is a way out.

9.Bg8!

Preparing a self-stalemate.

9...f5 10.exf5 e4 11.f6 e3 12.f7

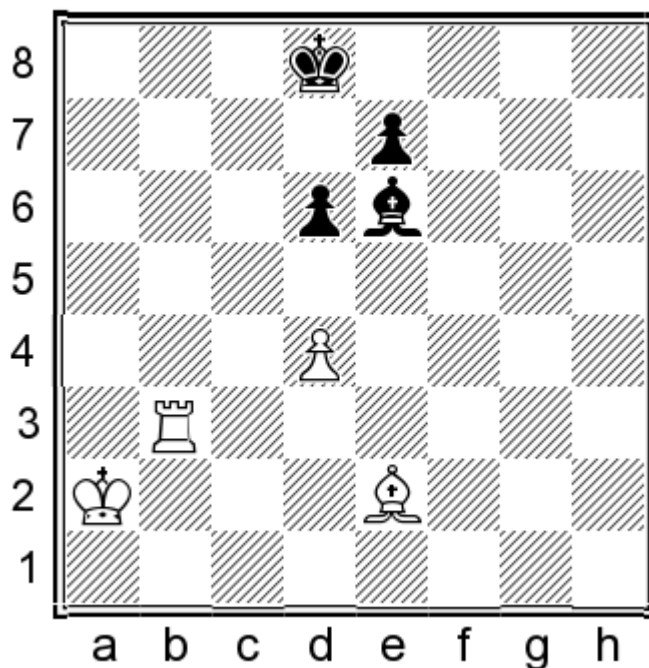
And stalemate is unavoidable.

Summarizing: the corresponding squares were a2-a8, f7-b8, c4-c8 and d5-d8.

For this study Nadareishvili received third prize in the Prague Problem Tourney.

In the endgame position from the next study, mutual zugzwang also plays a crucial role.

Timman 1984/2010



Black to move – White wins

In order to properly understand this position, it is necessary to realize that Black's king aims for f6. After he has swapped his bishop for the pinned rook, he must try to prevent White fixing the e-pawn with d4-d5.

1...Ke8 2.Bh5+!

Not 2.Bf3 right away in view of 2...Bxb3+ 3.Kxb3 Kf7 4.Kc4 Kf6 5.Kb5 d5!, followed by 6...e5, when White's last pawn will be exchanged.

2...Kd7

After 2...Kf8 3.Kb2 Bxb3 4.Kxb3 Kg7 5.d5! White would win effortlessly.

3.Bf3!

Threatening 4. d5, and so forcing Black to capture the rook.
 Insufficient for the win was 3.Kb2 on account of 3...Bxb3 4.Kxb3 d5, followed by 5...Kd6 and 6...e5, with a draw.

3...Bxb3+ 4.Kxb3 Ke6!

Black has to play as actively as he can. Waiting too long would hand White a technically winning position.

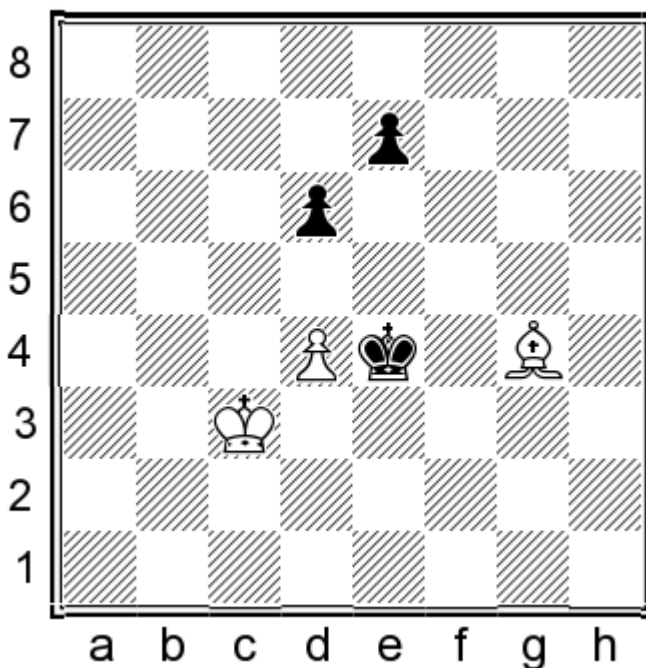
5.Bg4+

Not 5.Kc4 in view of 5...Kf6, with the same position as in the comment to White's second move. The bishop check forces the black king to move forward.

5...Kd5

Not 5...Kf6 as then White fixes the pawn formation by 6.d5.

6.Kc3 Ke4



The critical moment in this study.

7.Bh3!

Only this little bishop move wins. White does not want to put his bishop on e6 until Black has pushed his d-pawn. 7.Bc8 was not a good waiting move, as Black would then hold the draw with 7...e5 8.Bb7+ d5.

7...d5

Now, 7...e5 was insufficient in view of 8.Bg2+, followed by 9.d5, and White keeps his pawn.

8.Be6

Reciprocal zugzwang. Both sides have taken up their optimum positions. Black has to release the pressure on the white d-pawn.

8...Kf4 9.Kb4

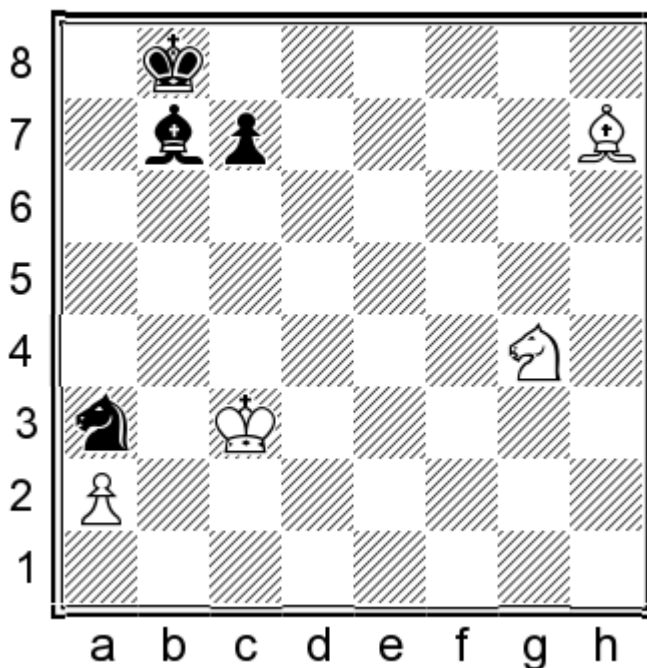
Of course not 9.Bxd5 e5.

9...Ke4 10.Kc5 Kf4 11.Kxd5

And White wins.

In the following study too, the mutual zugzwang arises when both sides have taken up their optimum positions.

Kuriatnikov, 'Shakhmaty (Baku)' 1988



White to play and win

This looks like a simple exercise. The black knight is hemmed in and will be captured by the king.

1.Kb4 Nc4!

After this sharp reply, things turn out to be more complicated. White has to take the knight.

2.Kxc4 Bc8

With a double attack. Black wins the a-pawn.

3.Ne5 Be6+

An important moment. Who wouldn't automatically play 4.Kc5 here? But that is the wrong square.

4.Kb5!

Anticipating the mutual zugzwang situation which will arise shortly.

4...Bxa2 5.Nc6+ Kb7 6.Be4

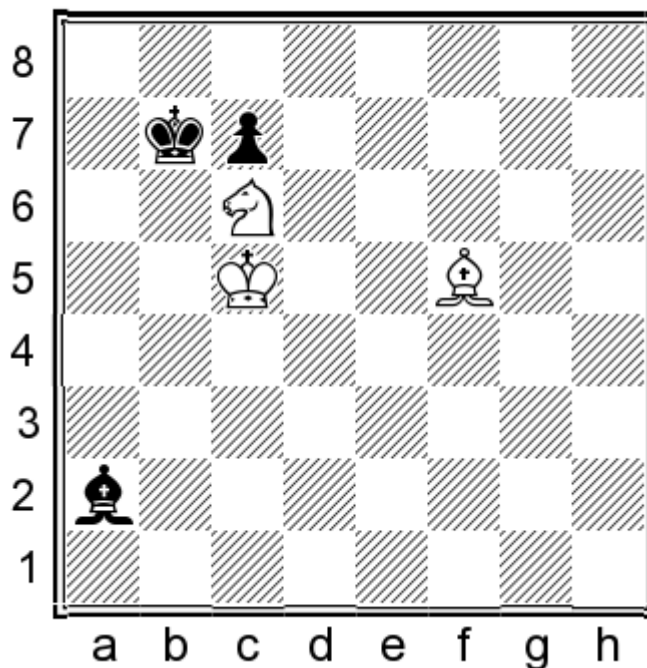
After other bishop moves Black would play 6...Bd5.

6...Kc8

The only move to prevent the immediate loss of the bishop.

7.Bf5+ Kb7 8.Kc5!

Mutual zugzwang.



Black has only one move to prevent the immediate loss of his bishop: 8...Bg8 9.Bb1

Besides the mutual zugzwang, domination also plays an important role in this study. The black bishop is systematically deprived of squares.

9...Ka6 10.Be4!

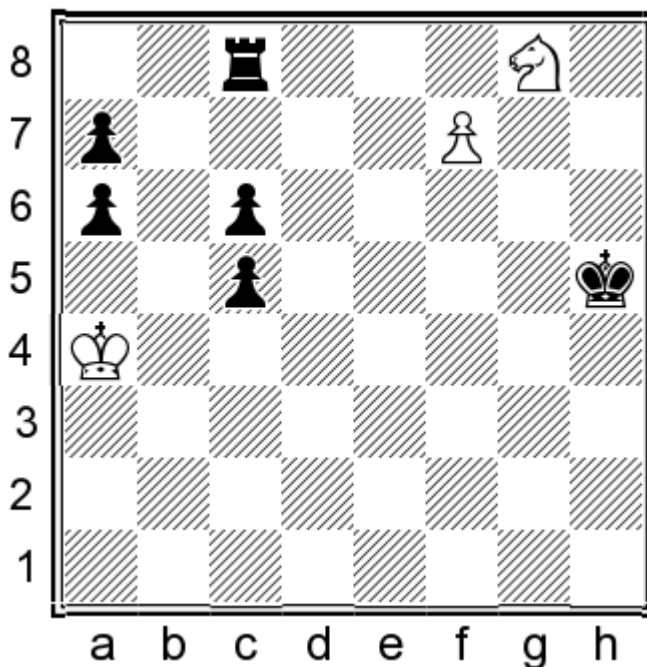
After this accurate move the black bishop is irrevocably lost.

10...Bb3 11.Bd3+ Kb7 12.Na5+

And wins.

Sometimes mutual zugzwang can be overlooked by the best endgame study composers.

Fritz, 'Svobodne Slovo' 1955



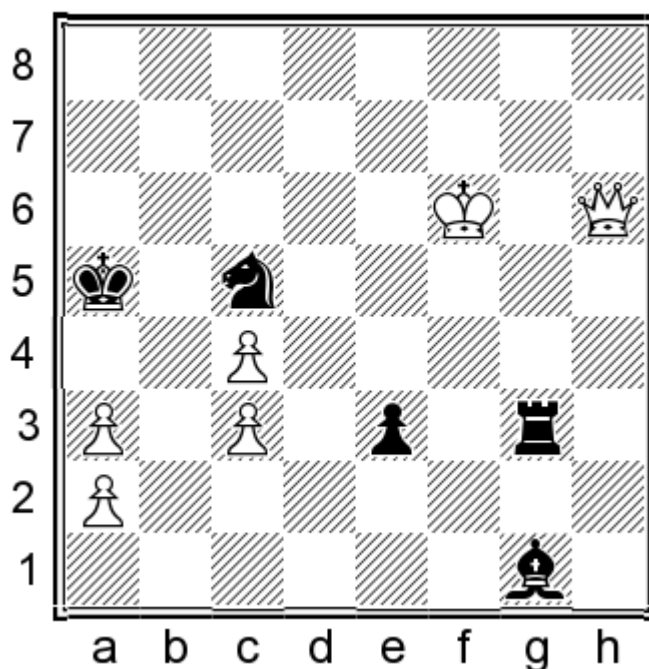
White to play and draw (incorrect)

The intended solution runs as follows:

1.Nf6+ Kg6 2.Ne8 Kxf7 3.Nd6+ Ke7 4.Nxc8+ Kd7 5.Nxa7 Kc7 6.Ka5! Kb7 7.Nb5

And whichever way Black takes, White is stalemated.

The stalemate appears out of the blue here. In that sense, this is a nice study. However, it is not correct. Probably Fritz didn't realize that the position after White's 5th move is a case of mutual zugzwang. By losing a tempo with his king somewhere along the way, Black can win. With a revised study with the same background, constructed by myself, I will explain this.



White to play and win

One of my colleagues, to whom I showed this position, inquired if White was supposed to make a draw here. Indeed, Black's three pieces and advanced passed pawn are superior to White's queen. On the other hand, White has a trump card that is not to be underestimated: inside the crumbled pawn structure on the queenside – which the attentive reader will immediately associate with Fritz's study – the black king is caught in a mating net. First White has to clear a passage to c6 for the queen.

1. Kf5

If the white king moves to h7 to hide from the checks, Black can save himself: 1. Kf7 Rf3+ 2. Kg8 Rg3+ 3. Kh7 Rg4 4. Qc6 Rxc4 5. a4 Rh4+ 6. Kg6 Nxa4 and White will not manage to collect the black

rook with checks; for instance, 7.Qa8+ Kb5 8.Qe8++ Ka6 9.Qc8+ Ka7 and White cannot make any progress. He constantly has to watch out that Black doesn't parry a check by interposing his knight on b6.

1...Rf3+

After 1...e2 2.Qc6 Rf3+ 3.Kg4 Rg3+ 4.Kh4 Black would soon run out of moves.

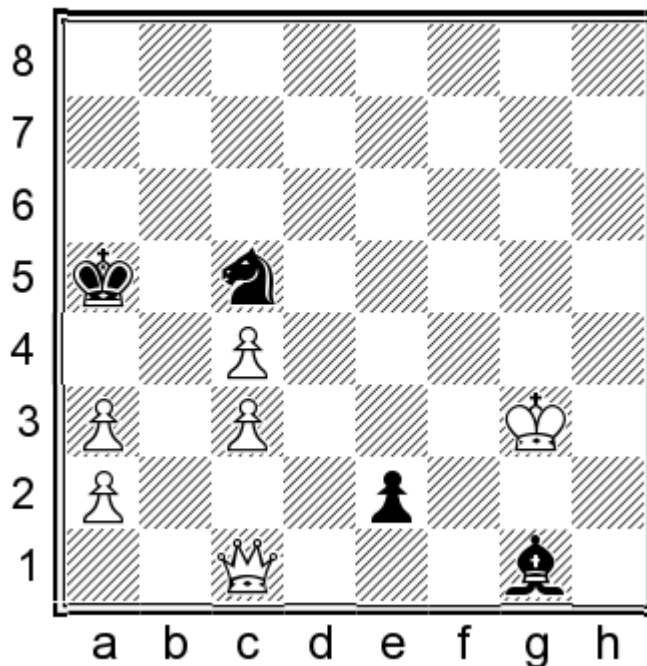
2.Kg4 Rg3+!

Black sacrifices a full rook in order to be able to promote with check.

3.Kxg3

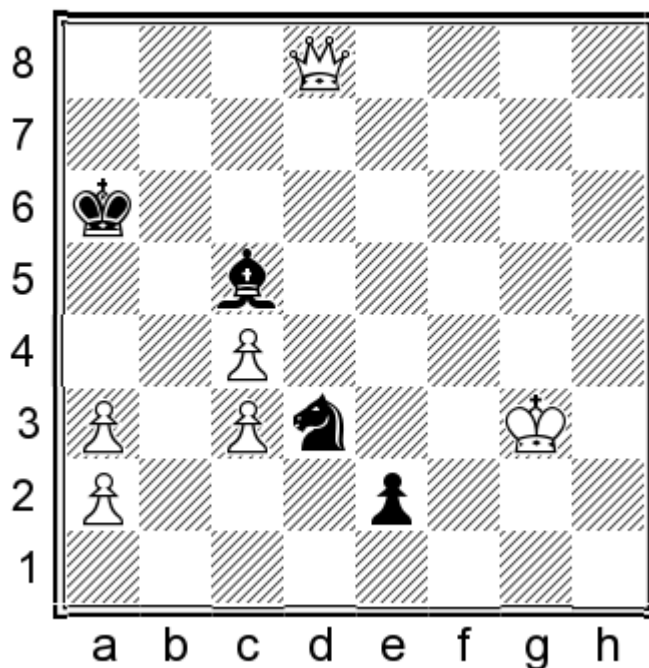
Certainly not 3.Kh4 Bf2, and Black wins by the force of his battery.

3...e2 4.Qc1



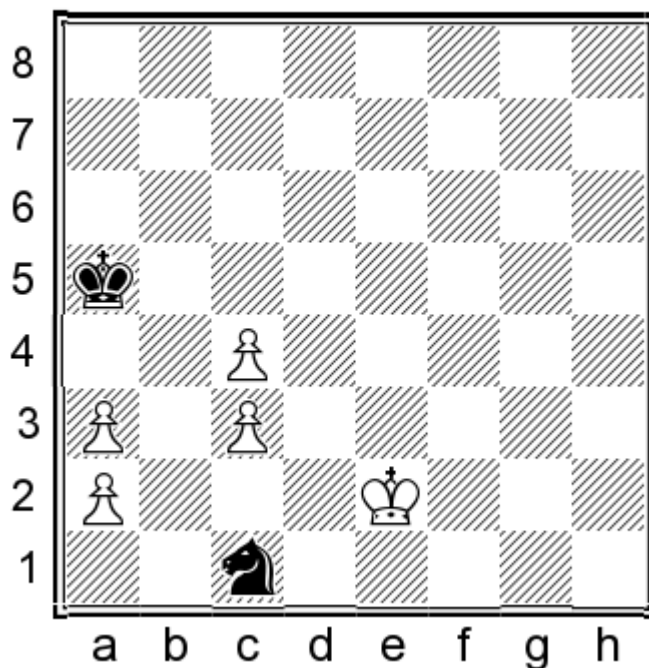
Preventing promotion. Now Black has two possibilities:

A) 4...Nd3 The most obvious move. Now White conquers the e-pawn with a series of checks: 5.Qg5+ Bc5 6.Qd8+ Ka6 Otherwise the queen will give mate on the a-file.

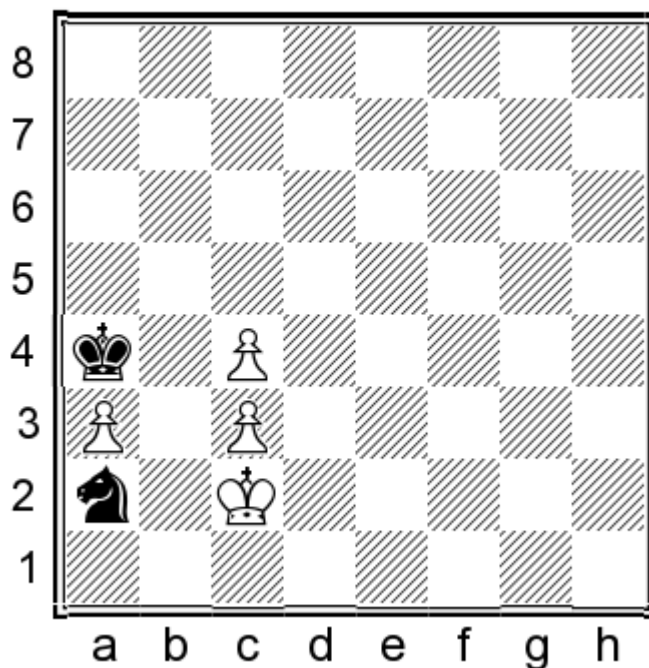


7.Qc8+! Only this check wins. After 7.Qa8+ Ba7 White would have no better than a perpetual. 7...Ka5 8.Qa8+ Kb6 9.Qb8+ Ka6 Or 9...Kc6 10.Qe8+ and wins. 10.Qb5+ Ka7 11.Qd7+ followed by a check on e6 or e8, winning the e-pawn.

B) 4...Bf2+ This is the main line. After first having sacrificed a whole rook, he now gives the bishop. White has no choice. 5.Kxf2 Nd3+ 6.Kxe2 Nxc1+



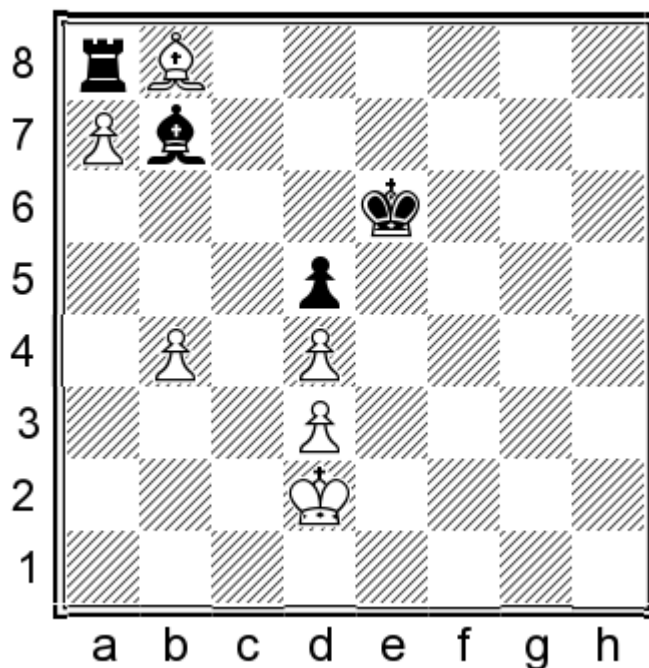
With reversed colours we have now reached the same position as in Fritz's study. However, now White decides to lose a tempo: 7.Ke3!! This is the key. The black knight remains boxed in, but White makes no haste to collect it. 7...Nxa2 8.Kd2 Ka4 After 8...Kb6 White has to be patient again, because if he goes for the knight right away, it is a draw: 9.Kc2 Kc5 10.Kb2 Kxc4 11.Kxa2 Kxc3. Winning is 9.a4 Kc5 10.a5 or 9...Ka5 10.c5. The black knight is kept under control by the white pawn on c3. 9.Kc2



Black is in zugzwang. After 9...Kxa3 10.c5 , again, the hindmost pawn keeps the knight under control, while the foremost pawn promotes.

Sometimes one side has an enormous material surplus, but he can still be put in zugzwang if he has too little space at his disposal.

Timman 1984



White to play and draw

White is a rook behind, but Black has trouble bringing his forces into play.

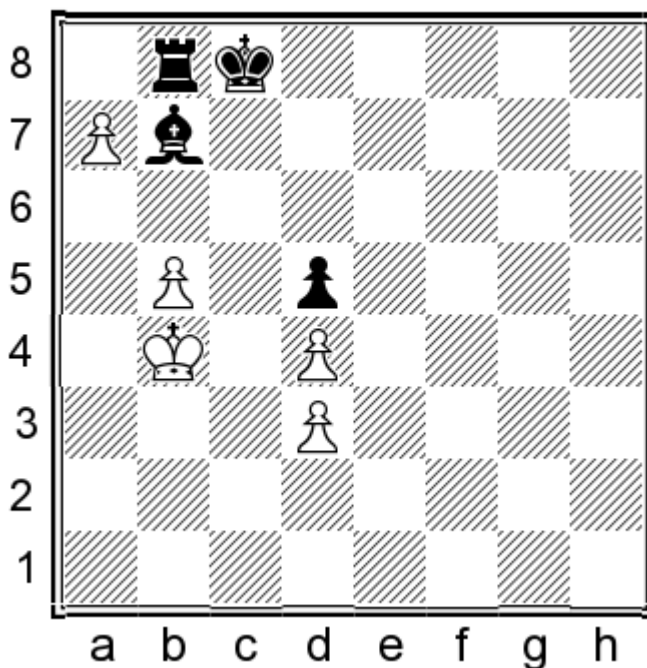
1.b5

Certainly not 1.Kc3 Ba6 and White doesn't stand a chance.

1...Kd7

Black wants to eliminate the white bishop as soon as possible.

2.Kc3 Kc8 3.Kb4 Rxb8



It looks as if Black is heading straight for a technically winning position. After 4.axb8Q+ Kxb8 5.Kc5 Kc7 6.b6+ Kd7 7.Kb5 Kd6 White will be out-tempoed. But now comes a surprise.

4.Kc5!!

Gaining an important tempo by leaving the black rook untouched.

4...Ra8

The alternative 4...Ba8 does not lead to a win either, as is shown by 5.axb8Q+ Kxb8 6.b6 Kc8 7.Kd6 Kd8 8.Ke6 and the white king cannot be driven from its active position.

5.Kb6

This is the moment of reciprocal zugzwang. Black has to give his rook.

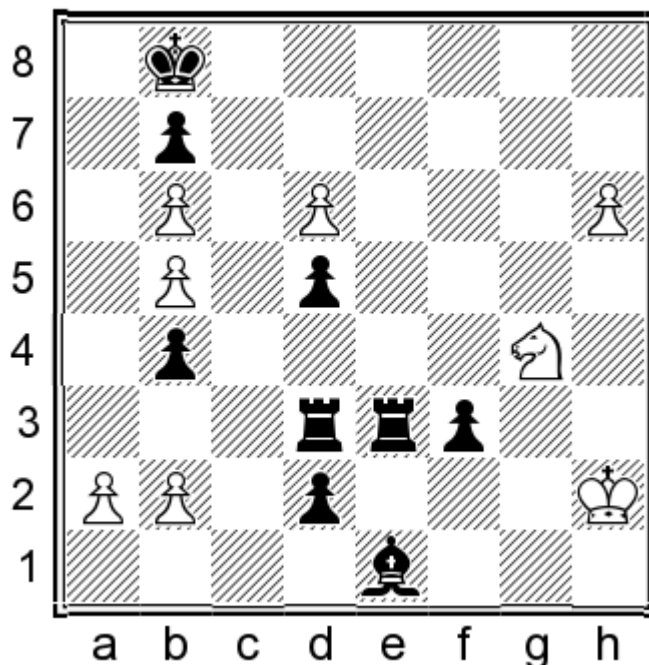
5...Rxa7 6.Kxa7 Kc7 7.b6+ Kc6 8.Kb8 Kxb6

Stalemate.

Here, at the end, it becomes clear why there had to be this seemingly useless pawn on d3. Without this pawn, Black could have aimed for a winning pawn ending with 8...Ba6 9.Ka7 Kb5.

Mutual zugzwang can suddenly appear in complicated positions.

Timman 2008



White to play and draw

Black has an enormous material surplus, but still it will be hard for him to stop the white passed pawns.

1.d7

After 1.Nxe3 d1Q 2.Nxd1 Rd2+! Black would win.

1...Re2+ 2.Nf2!

White sacrifices his knight in order to block the enemy f-pawn. After 2.Kh1 Bh4, mate would be inevitable.

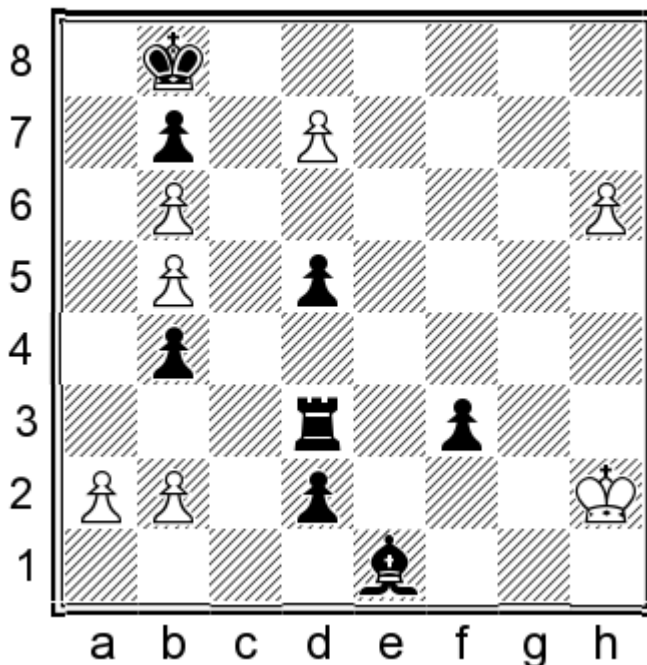
2...Rxf2+ 3.Kh3

Now Black has to sacrifice a lot of material to stop the d-pawn.

3...Rh2+

The first sacrifice. White has to accept.

4. Kxh2



4...Bg3+

The second sacrifice.

5. Kxg3

Forced, because after 5. Kh3 Bc7! 6. h7 f2+ there is no hope for White.

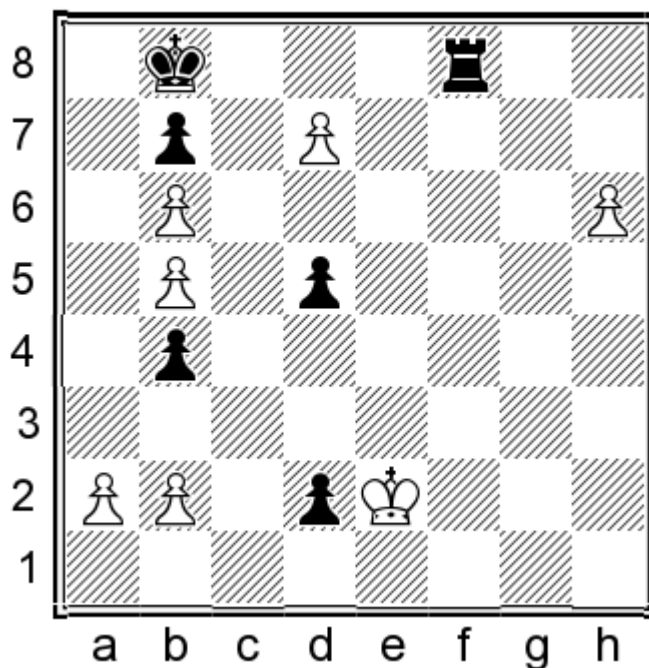
5...f2+

The f-pawn has to be sacrificed too.

6. Kxf2 Rf3+

White cannot accept this sacrifice, as Black then promotes with check.

7. Ke2 Rf8



Finally Black has managed to stop the dangerous white d-pawn. Now White has to be on his guard.

8.b3!

Only move. On any other move Black would play 8...b3. In order to understand this, it is important to realize which plan White has here. The white d- and h-pawns will inevitably be swapped for the black d-pawn. Next, White will have to try to reach the square a5 with his king, and then push his a- and b-pawns. We know this stalemate construction from Chapter 5. If the black pawn were on b3, the white king would need an extra tempo to reach the square a5, as he would first have to capture that pawn.

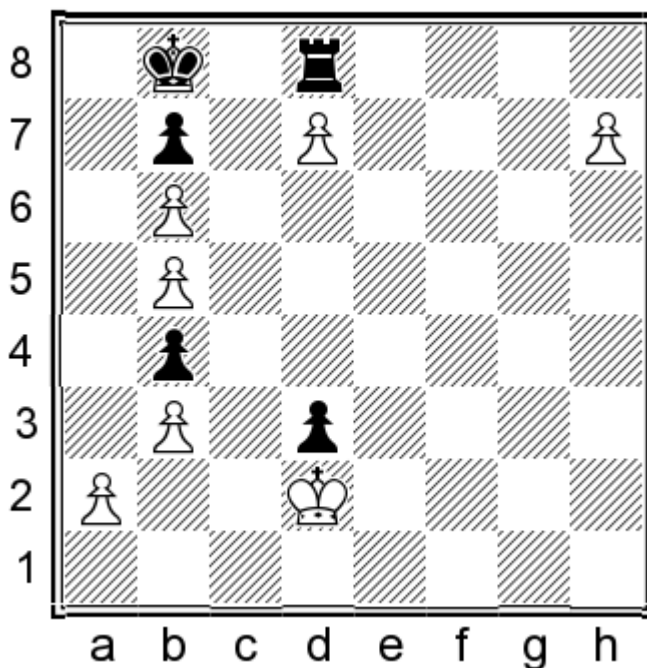
8...Rd8 9.h7 d4

Again White must choose his move carefully.

10.Kd1!

Paradoxically, White must lose a tempo in the heat of the battle. Only after the trade of pawns will speed become important again. I will explain later why the alternative 10.Kxd2 loses.

10...d3 11.Kxd2



Mutual zugzwang. If White had played 10.Kxd2, it would now be his move. Then the play would continue as follows: 10...d3 11.h8Q Rxh8 12.Kxd3 Rd8 13.Kc4 Rxd7 14.Kxb4 Rd8 15.Ka5 Kc8! 16.a4 Kd7, and 17.b4 fails to 17...Ra8 mate. Now that it is Black's move, everything is different. Black cannot move his rook.

11...Ka8

There is nothing else. Now White does have success with his plan.

12.h8Q

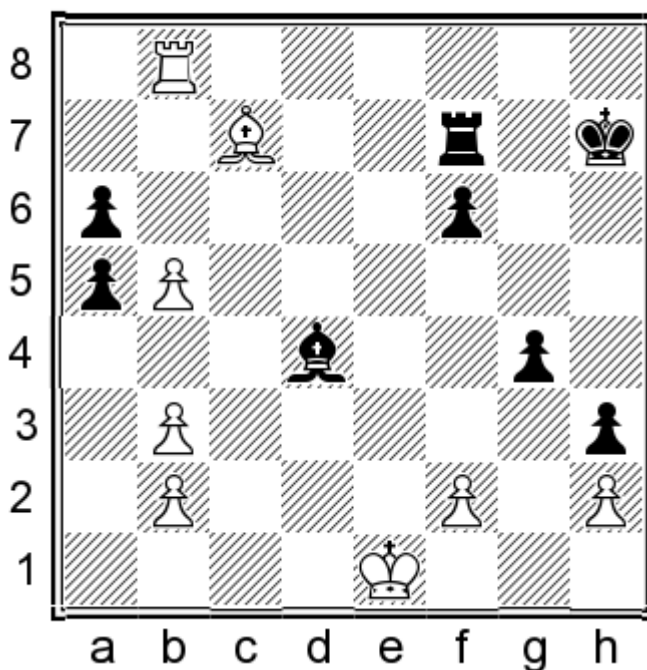
Not 12.Kxd3 in view of 12...Rxd7+ 13.Kc4 Rd8! and again Black is in time to give mate on a8 with his rook. He does not have to collect the white h-pawn.

12...Rxh8 13.Kxd3 Rd8 14.Kc4 Rxd7 15.Kxb4 Rd6 16.Ka5

With a draw. Black cannot prevent White continuing with 17.a4 and 18.b4.

In the following study, White aims for an ending of bishop versus boxed-in rook. This ending is highly similar to a pawn ending, where the motif of mutual zugzwang fits in nicely.

Timman 2010



White to play and win

The first move is obvious:

1.b6

Not only protecting the bishop, but also creating a strong passed pawn.

1...Be5

An important alternative was 1...Re7+. Then White has to pursue a different winning plan than in the main line. Play continues as follows: 2.Kf1 Be5 3.Rc8! Kg7 4.b7! Rxc7 5.b8Q Rc1+ 6.Rxc1 Bxb8 7.Kg1 Bd6 8.Rc6 and White has a technically winning

position. In this variation it is important that White can protect the h-pawn with his king, which is a consequence of the black rook check.

2.Bxe5

In these circumstances, 2.Rc8 was just insufficient for the win. Black has the strong reply 2...Kg6!. He does not have to fear rook endings, since after 3.Kf1 (threatening 4.b7) 3...Bxc7 4.Rxc7 Rf8 5.b7 Rb8, he will hold. After the text move, Black cannot enter the rook ending with 2...fxe5 on account of 3.b7, after which Black cannot prevent White from giving a rook check and promoting his b-pawn.

2...Re7!

The chief aim of this little move is to put the rook behind the white passed pawn. For example, after 3.Kd2 Rxe5 4.b7 Rb5 White would have no winning chances. So White has to try something else.

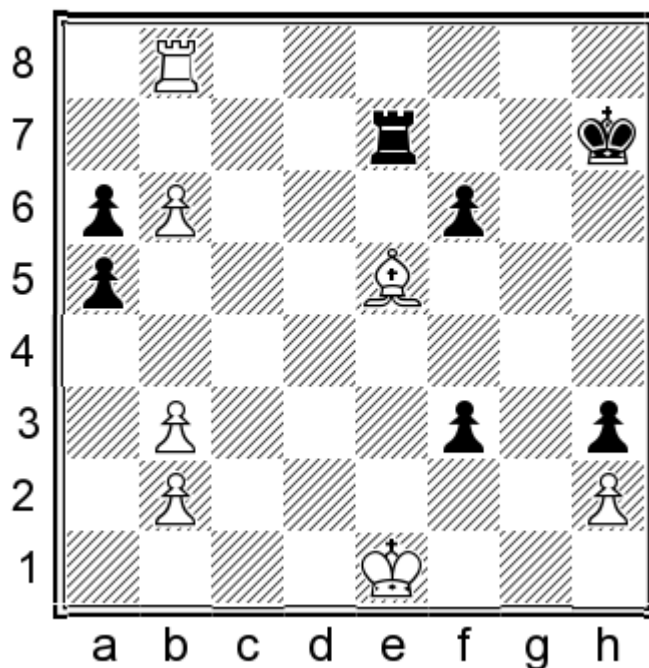
3.f4!

The introduction to a pretty combination. The intention of this move is to let Black take en passant, after which his kingside pawn structure is weakened.

3...gxf3

The alternatives were:

- A) 3...fxe5 4.b7 exf4+ 5.Kd2 and wins;
- B) 3...g3 4.b7 gxf3 5.Rh8+ Kxh8 6.b8Q+ Kg7 7.Qa8! fxe5 8.Qe4 and wins.



4.Rb7!!

This rook sacrifice is the point of the previous move.

4...Rxb7 5.Bc7

The bishop cuts off the black rook from further play, so that there is now virtually a pawn ending on the board.

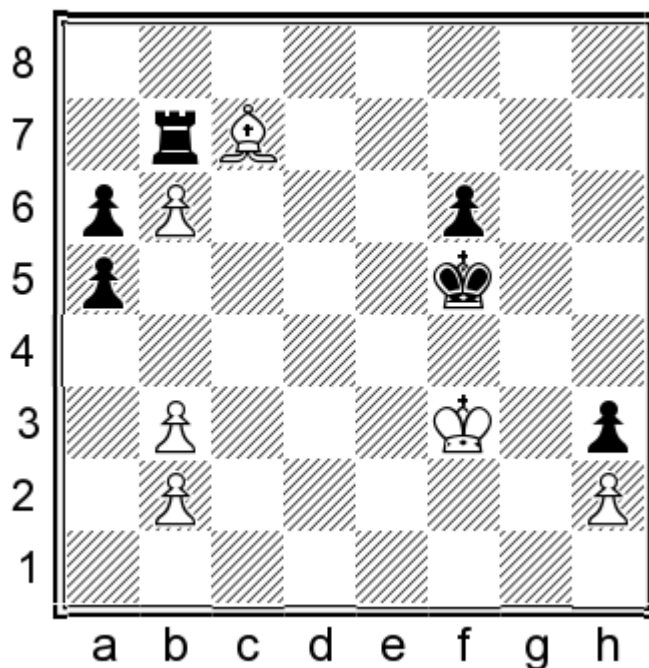
5...Kg6 6.Kf2 Kg5

Now White has to be careful. After 7.Kxf3 Kf5 he would be in zugzwang, e.g. 8.Kg3 Ke4 9.Kxh3 Kf3! and Black has nothing to fear.

7.Kg3!

Anticipating the mutual zugzwang.

7...Kf5 8.Kxf3



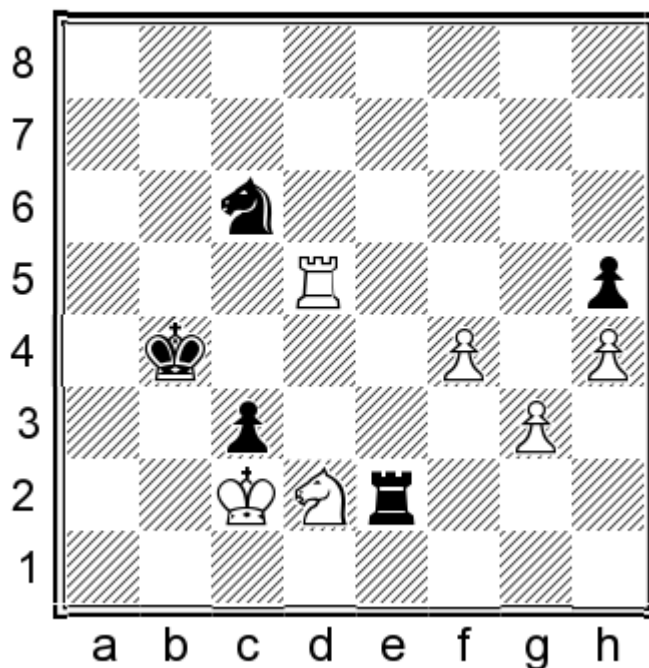
Black is in zugzwang now. He cannot prevent the white king reaching the important centre square e4, after which the winning process is automatic.

Shortly after finishing this chapter, I played a small open tournament in Torre delle Stelle, a spa in the south of Sardinia. Asphalted sand tracks, a bungalow at sea and Sardinian red wine were ingredients for a quite special time. In the fourth round the following endgame was on the board:

Timman

Shytaj

Torre delle Stelle 2011



Position after 65...c3

It is clear that White is going to lose a piece. Where do his best chances of salvation lie? White can try 66.f5, but after 66...Rf2 67.f6 cxd2 68.Rxd2 Rxf6 69.Rd5 Rh6 there is no immediate draw.

Fortunately, I had enough time on the clock. After fifteen minutes' thought I discovered a hidden mutual zugzwang.

66.Kd1! Rxd2+ 67.Rxd2 cxd2 68.Kxd2 Kc4

Black brings his king closer. It looks as if he will manage to block the white pawns.

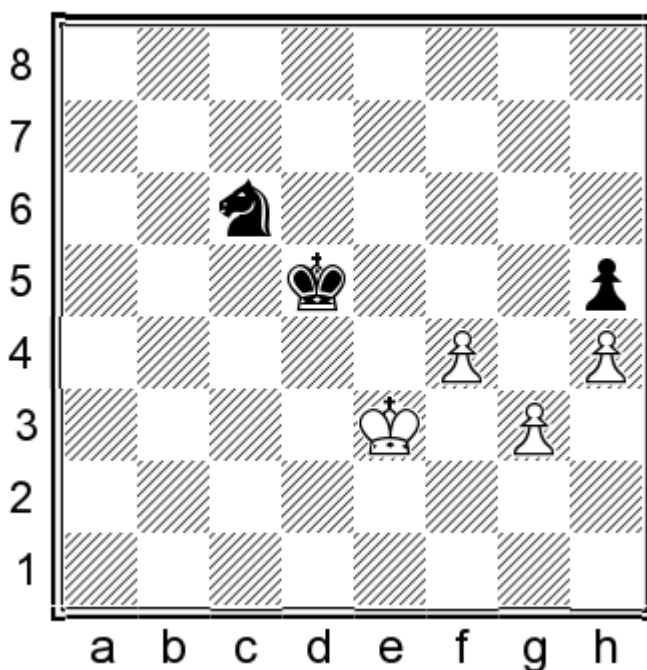
69.Ke2!!

The only move.

69...Kd5

69...Kd4 would be met by 70.Kf3, with an immediate draw.

70.Ke3



The mutual zugzwang has been established.

70...Nd4

Now White can force the draw by advancing his f-pawn. The best winning try was 70...Ke6. After 71.Ke4 Kf6 72.f5 Ne5 Black would manage to block the white pawns after all. However, here the problem is that another mutual zugzwang situation has arisen; for example, 73.Kf4 Ng4 74.Ke4 Nh6 75.Kf4. With a knight you cannot win (or lose) a tempo.

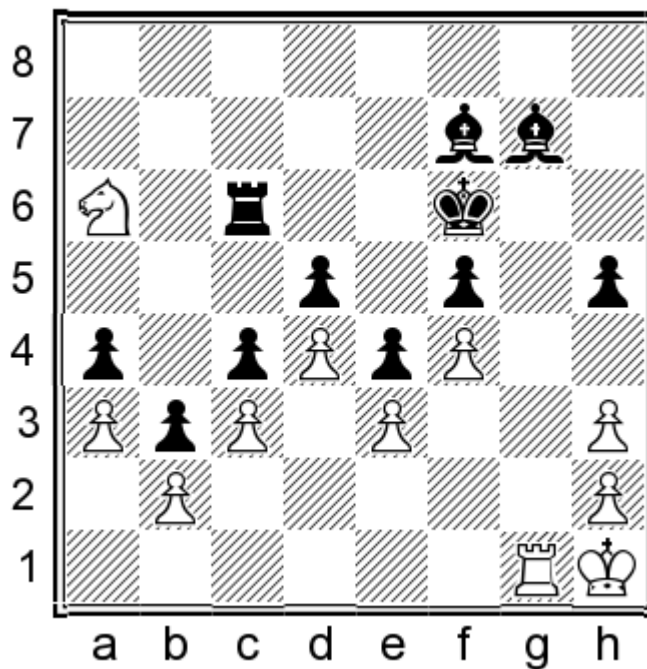
71.f5! Ke5 72.f6 Ne6 73.f7 ½-½

Chapter 10

Building a fortress

When Smyslov was 83, he created the following study.

Smyslov 2005



White to play and draw

In view of the closed structure of the position, it is clear that Black will have great problems converting his material advantage.

Yet, White will have to tread very carefully in order to actually build a fortress.

1.Nb8

Insufficient was 1.Nc5 on account of 1...Bh8! and Black keeps all his trumps.

1...Rd6

Black tries to dominate the knight with the rook.

2.Nd7+!

Anyway! The aim of this knight sacrifice is to lure the black rook away from the 6th rank.

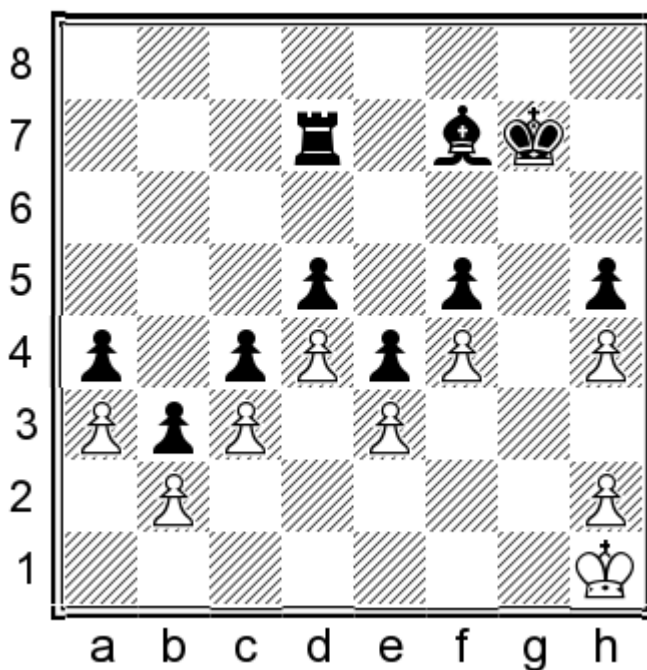
2...Rxd7 3.Rxg7!

With this exchange sacrifice White builds up his fortress further.

3...Kxg7

Black could play 3...h4 here, to maintain perspectives for his bishop. It wouldn't have yielded him any winning chances: White just places his rook on g5 and waits. After the inevitable rook swap he has nothing to fear.

4.h4



An unbelievable situation. Black is a rook and a bishop to the good, but the position is so closed that the only try he has left is to penetrate with his rook.

4...Rd6

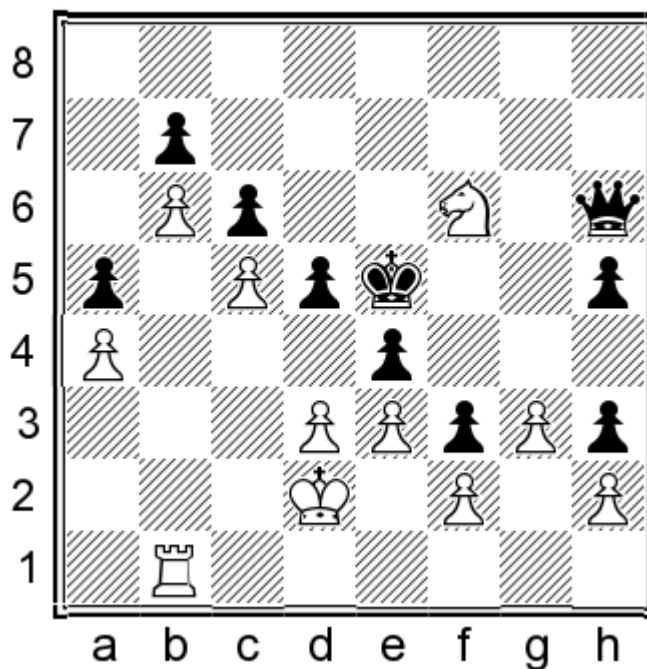
Black is going to bring his rook to the g-file, hoping to penetrate the white position. However, a surprise awaits him.

5.Kg2 Rg6+ 6.Kh3!

And the black rook has to leave the g-file again in order to prevent stalemate.

This principle of making a line inaccessible to an enemy piece can also be realized on a diagonal.

Hasek, 'Narodni Listy' 1951



White to play and draw

Both sides still have all their pawns. In order to avoid a breaking move with the black h-pawn, White sacrifices his knight.

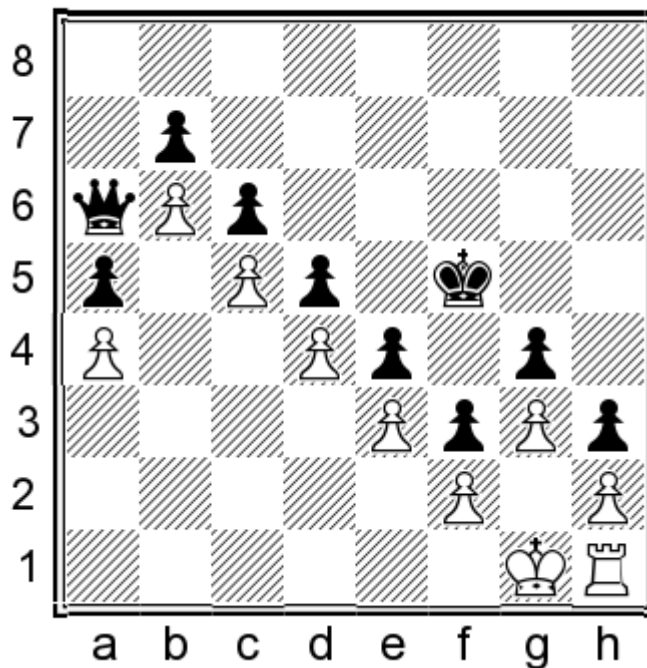
1.Ng4+ hxg4

Now how can White meet the threat of a penetration by the queen?

2.d4+ Kf5 3.Rh1!

This mysterious rook move provides the answer to the above question. White is weaving a stalemate construction into the position.

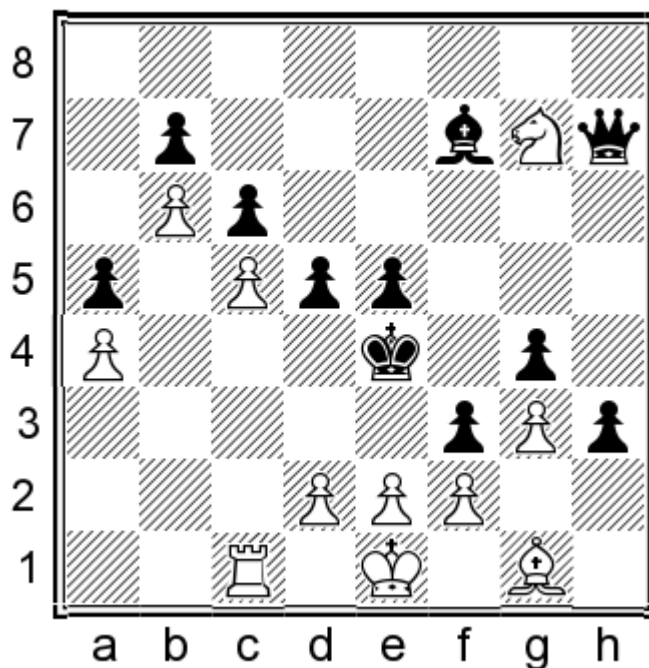
3...Qf8 4.Ke1 Qa8 5.Kf1 Qa6+ 6.Kg1



A curious situation. In view of stalemate, the black queen cannot infiltrate along the f1-a6 diagonal.

Hasek's study looked to me like an invitation to new adaptations. I made two new versions.

Timman 2010



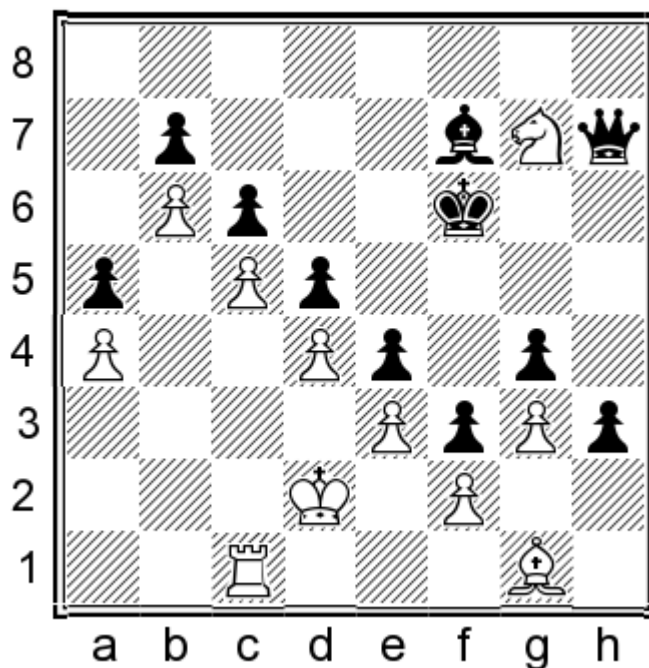
White to play and draw (after Hasek)

First of all White must concentrate on closing the position.

1.d3+ Kd4 2.Kd2

Threatening mate in one, so Black is forced to allow the closure of the position.

2...e4 3.e3+ Ke5 4.d4+ Kf6



Now the position is almost completely closed. Just as in the two previous studies, White must now sacrifice a knight, though for a different reason this time.

5.Ne8+!

With this knight sacrifice White closes off the back rank for the black queen, thus winning a tempo.

5...Bxe8 6.Bh2!

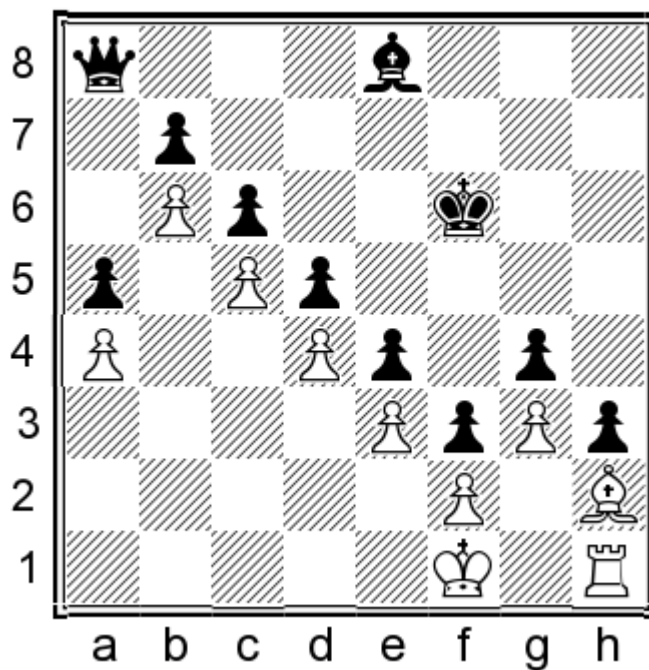
Otherwise Black would play ...h3-h2.

6...Qd7 7.Rh1!

The self-enclosing process is in full swing.

7...Qc8 8.Ke1 Qa8 9.Kf1

Just in time.



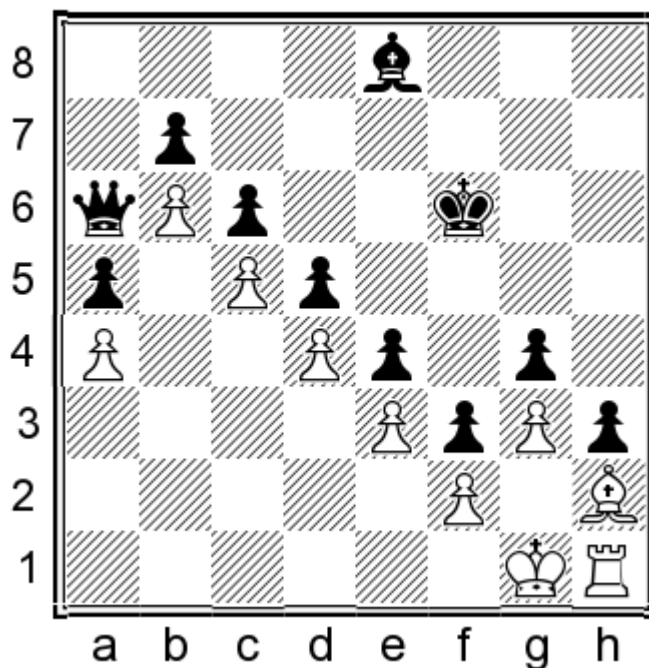
9...Ke7

Before Black plays his queen to a6, he first improves the position of his king.

10.Kg1 Kd7 11.Kf1 Qa6+

It makes no sense to wait any longer.

12.Kg1



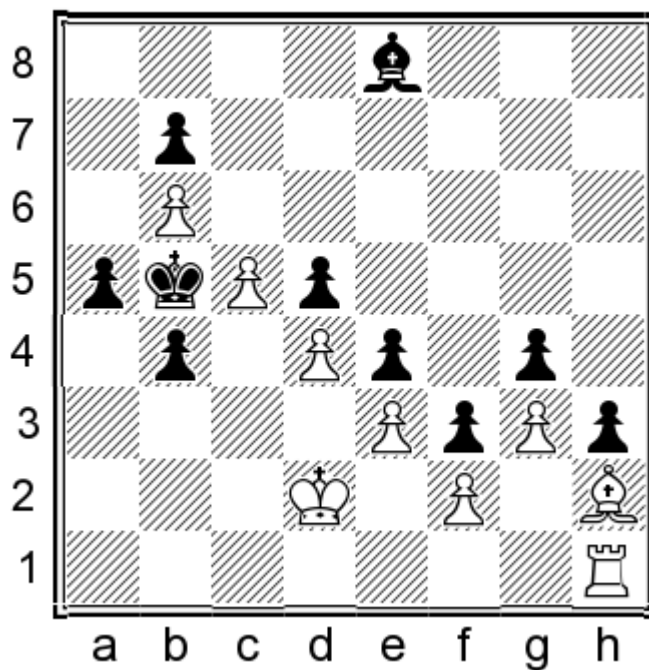
12...Qb5

This was the intention of the king march. Although White remains a rook up after accepting the queen sacrifice, he must play precisely in order to reach the safe haven of a draw.

13.axb5 cxb5 14.Kf1

The king hurries back to the threatened wing.

14...Kc6 15.Ke1 b4 16.Kd2 Kb5



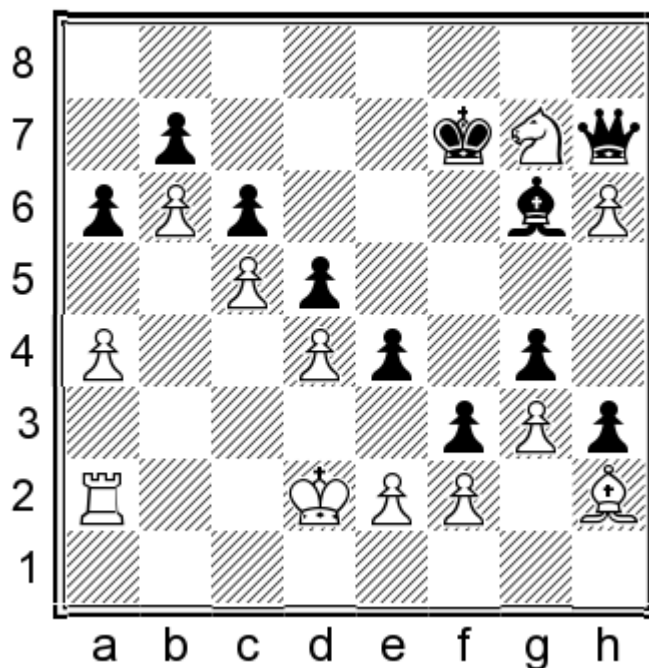
17.Rc1!

An accurate little move.

17...Bc6 18.Kc2

And there is no way for Black to make any real progress.
My second adaptation contains a new element.

Timman 2010



White to play and draw (after Hasek)

Again, first of all White has to try to close the position as much as possible.

1.e3

Otherwise Black would play 1...e3+.

1...a5!

Vacating the a6-square for the queen.

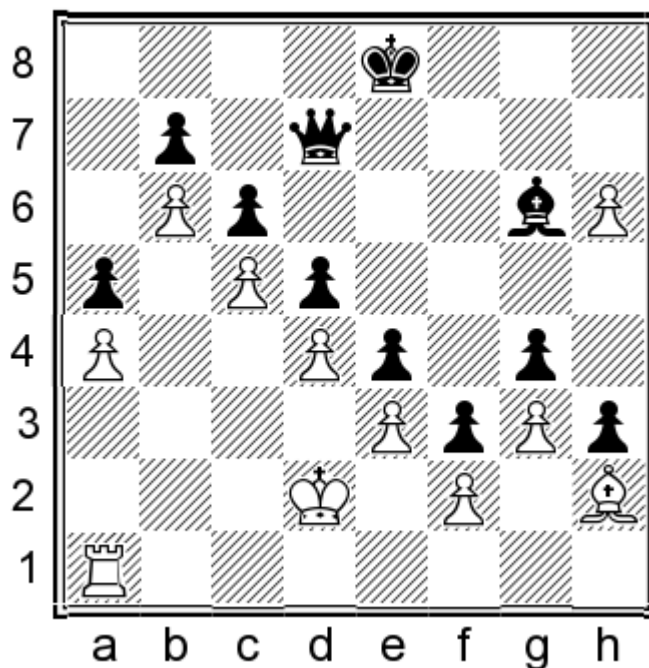
2.Ne8!

This knight sacrifice is familiar by now. Black has to accept.

2...Kxe8 3.Ra1!

Heading for the other corner.

3...Qd7



A crucial moment. If White thoughtlessly continues to build up his self-stalemate construction, he is lost; 4.Rh1? is met by 4...Bh7!. Black can then evade the stalemate trap by leaving the square h7 with the bishop at the right moment; for example, 5.Ke1 Qc8 6.Kf1 Qa8 7.Kg1 Ke7 8.Kf1 Qa6+ 9.Kg1 Bg6 10.h7 Qe2 with mate.

4.h7!

In view of the above, White has to sacrifice the pawn right away.

4...Bxh7 5.Rh1 Qc8 6.Ke1 Qa8 7.Kf1

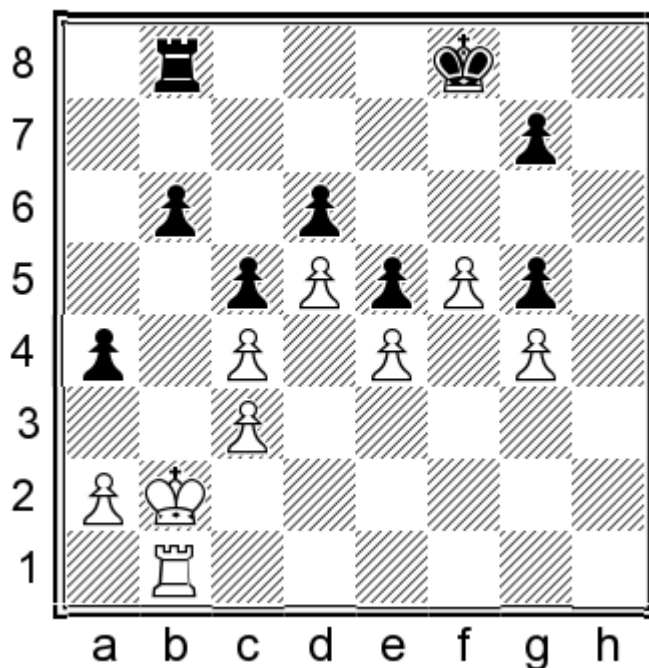
With a draw, as in the previous study.

It can happen that certain strong grandmasters are not familiar with the notion of a fortress.

Larsen

Ivkov

Manila 1973



Position after 52.Kb2

In those days, the time control was after the 56th move. Doubtlessly, Ivkov was in blood-curdling time-trouble here, a shortcoming which seemed to be an addiction for him. The rook ending is easily tenable, as long as Black realizes that he has a fortress.

However, he produced the horrible 52...g6?, destroying his fortress with his own hands. After this, Larsen had no trouble winning the endgame: 53.fxg6 a3+ 54.Kb3 Kg7 55.Ka4 Kxg6 56.Kb5 Rf8 57.Kc6 Rf2 58.Rxb6 Rxa2 59.Kxd6 Rb2 60.Ra6 1-0.

As Hans Bouwmeester showed in Schaakbulletin, Black could safely have given his b-pawn and protected his a-pawn from a7 with his rook, also keeping the 7th rank under control; for instance, 52...Ra8 53.Ka3 Ra7 54.Rxb6 Ke7 55.Rb8 Kf7 56.Rh8 Ke7 57.Rh5 Kf6, and White cannot make progress. The black king can always

protect all the weak pawns, while the white king cannot penetrate anywhere.

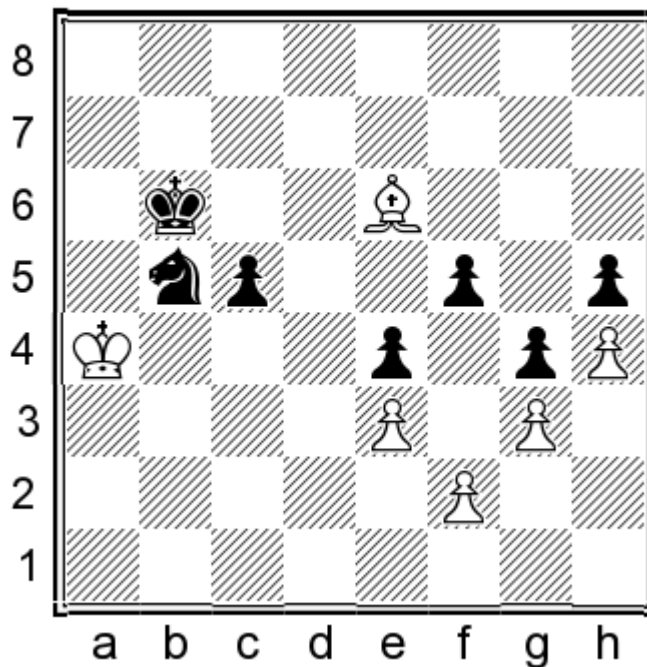
So far I have shown only positions with fixed pawn structures.

There are also fortresses possible in positions where the structure is not fixed. And then it can happen that even a World Champion in his comments does not spot the fortress.

Taimanov

Bronstein

Riga 1958

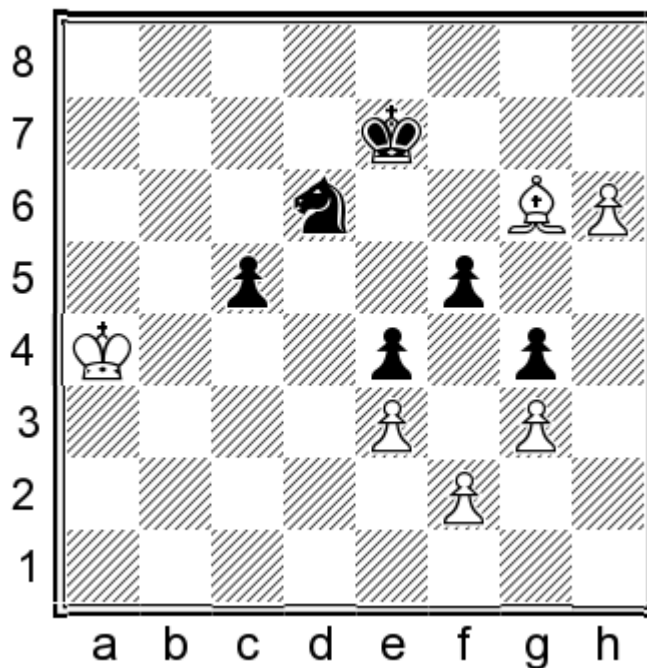


Position after 69...Nd6xb5

Here, Taimanov continued 70.Bxf5, after which Black saved himself with the manoeuvre 70...Nc3+ 71.Kb3 Nd5!. After 72.Bxe4 Nf6 73.Bg6 Kc6 74.Kc4 Kd6 75.Kd3 Ke6 76.Ke2 c4 77.Kd2 Ke5 78.Kc3 Ne4+ 79.Kxc4 Nxf2 80.Bxh5 Ne4 81.Bxg4 Nxg3 82.Kd3 Nf1 83.h5 Nxe3 84.h6 Kf6 the game was drawn.

In his book *Hogeschool van het eindspel* ('Endgame University') Max Euwe indicates that 70.Bf7 would have been 'much more convincing'. He considers this position winning for White, substantiating this with the following variation: 70...Nc3+ 71.Kb3 Nd1 72.Bxh5 Nxf2 73.Bg6 f4 74.exf4 e3 75.Kc2 e2 76.Kd2 and White wins.

However, Black has a much stronger defence: 70...Nd6!. The knight does not go out on a pawn hunt, but restricts itself to a purely defensive task. After 71.Bxh5 Kc6 72.Bg6 Kd7 the black king is in the square of the white h-pawn. White does not have a better plan than to push his passed pawn. After 73.h5 Ke7 74.h6 Black has to watch out.



He cannot play 74...Kf6? in view of 75.Bh5! and Black is in zugzwang. However, 74...Kf8 is sufficient, after which the black king calmly awaits the proceedings. The range of the knight is remarkable. On the one hand, it has a defensive function on the kingside by protecting f5. On the other hand it keeps the white king at bay on the queenside. The passed pawn on c5 is of crucial importance here: it deprives the white king of the squares b4 and d4.

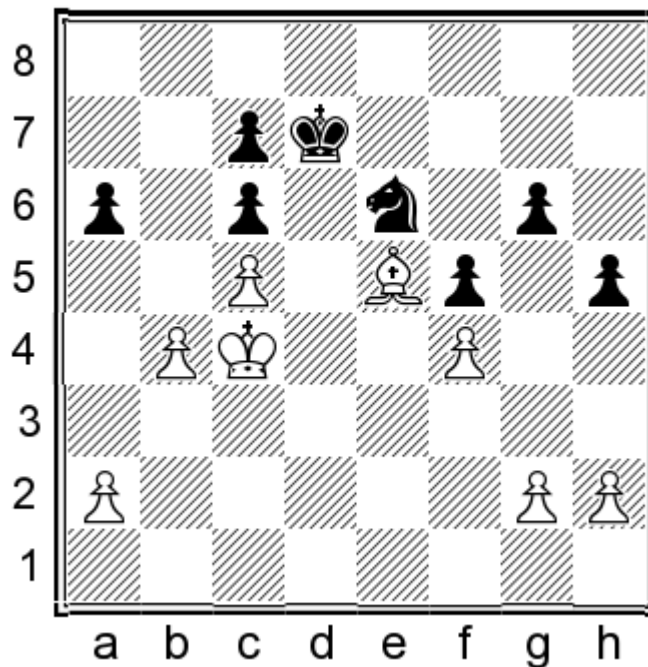
There is no way for the white king to penetrate. If it goes to b6, then the black c-pawn marches on.

A little further on in *Hogeschool van het eindspel*, Euwe once again misses the concept of a fortress which can be built on the B+N cooperation.

Krylov

Runza

Prague 1951



Position after Black's 36th move

Euwe investigates this endgame under the theme 'The king penetrates'.

The game continued as follows:

37.a4 Kc8 38.b5 axb5+ 39.axb5 Kb7

After this move Euwe remarks: ‘White has carried through the breakthrough on the queenside, and Black has positioned himself accordingly.’

40.h4

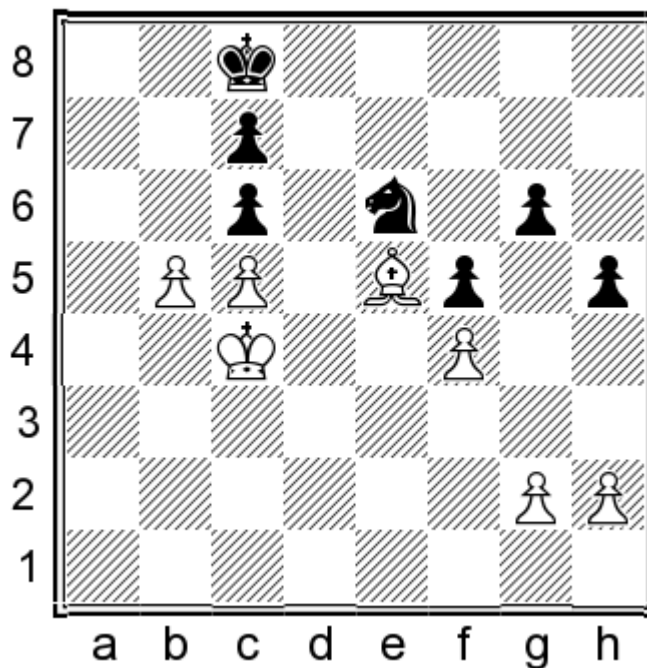
Euwe gives this move an exclamation mark, and rightly so. The position is indefensible for Black and White won after a few more moves.

This looks like an instructive example of a bishop outside the pawn chain becoming tremendously strong. Nevertheless, the diagram position is not at all winning for White. What’s more, he isn’t even better here! To understand this, we will return to the position after White’s breakthrough on the queenside.

Krylov

Runza

Prague 1951

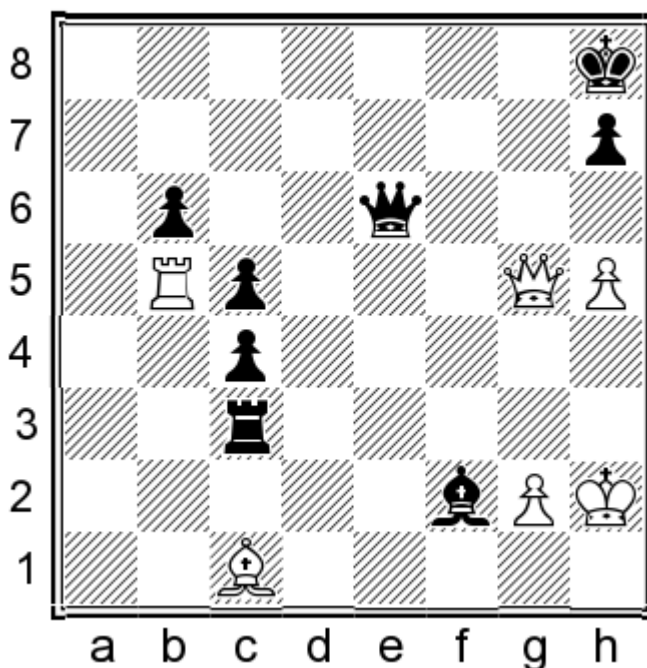


Position after 39.axb5

Here Runza made a terrible mistake by decentralizing his king. Instead of 39...Kb7?? he should have preferred 39...Kd7! since Black doesn't have to fear the further advance of the b-pawn. After 40.b6 cxb6 41.cxb6 Kc8 42.Kb4 Kb7 43.Ka5 Nc5 Black can look to the future with confidence. If White does not push his b-pawn, Black plays 40...cxb5+ and after 41.Kxb5 c6+ he has a comfortable fortress.

Fortresses can also be built with heavily reduced material. As an illustration I give a study where White just barely manages to prevent the building of a fortress.

Timman 2010



White to play and win

Actually, this is a middlegame position where White must play for an attack.

1.Bf4

Insufficient for the win was 1.Bb2 on account of 1...Bd4. White wins an exchange, but loses his attacking chances. After the text move White threatens to administer a devastating check on e5.

1...Bd4

Controlling the long diagonal. White has to find new attacking ideas.

2.h6

Threatening 3.Qd8+ Qg8 4.Qxd4+! cxd4 5.Be5+, winning.

2...Bf6

The only defence. At first sight it is unclear how White can breathe new life into his attack.

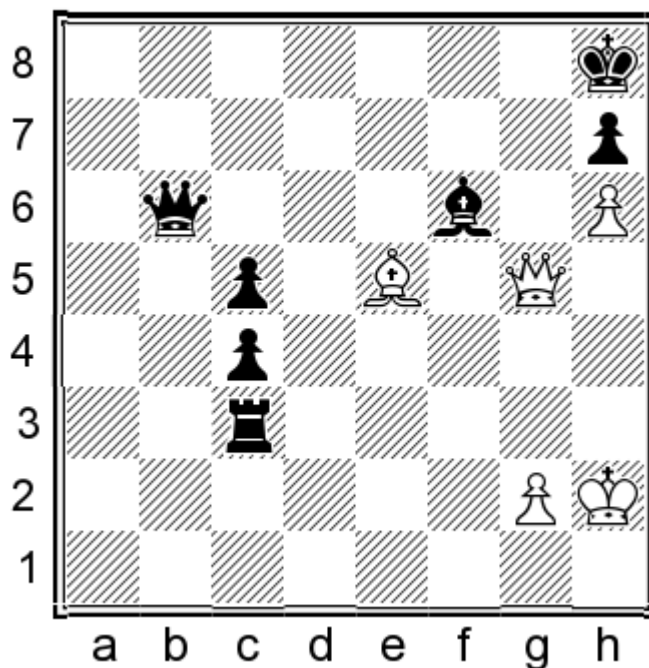
3.Rxb6!

A rook sacrifice which serves to give the bishop control of the square e5.

3...Qxb6

Black could not take the queen, as after 3...Bxg5 4.Rb8+ Qg8 5.Be5+ he would get mated.

4.Be5



What can Black think of now?

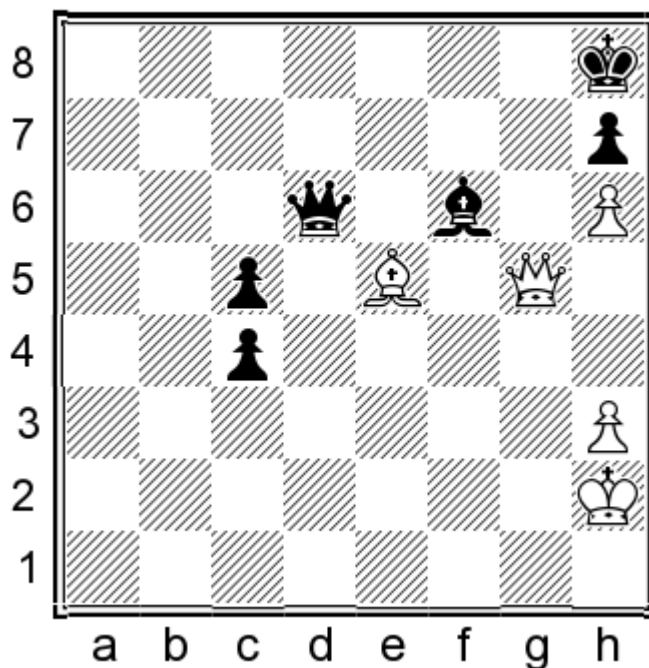
4...Rh3+!

Black also sacrifices a rook. The point of the sacrifice is that Black tries to build a fortress.

5.gxh3

White could not capture with the king on account of a queen check on e6. Now Black is going to try to exploit the doubling of White's pawns on the h-file.

5...Qd6!



This was the plan. The white bishop is pinned, and White does not seem to have anything better than 6.Qxf6+. However, that leads to an ending he cannot win, due to the presence of the pawn on h6. White cannot make progress because there are constantly stalemates in the position. So he will have to find a method to breach the fortress.

6.Qg7+!!

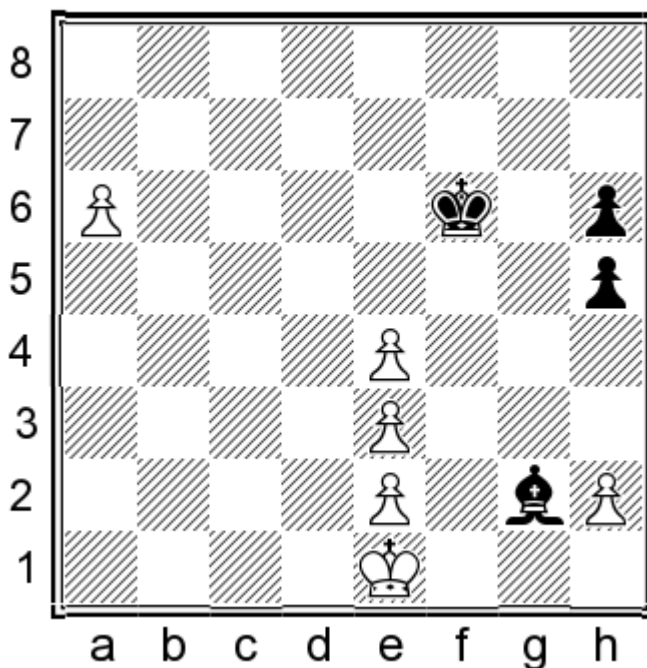
White sacrifices his foremost h-pawn, after which the endgame is winning after all.

6...Bg7 7.hxg7+ Kg8 8.Bxd6

And wins.

If, in the final position, Black had a far advanced a-pawn instead of his worthless c-pawns, he would have been able to build a fortress after all. This is shown in the following study.

Timman 2011



White to play and draw

In principle, the white pawns are not strong enough to hope for a draw. For example, after 1.Kf2 Bxe4 2.Kg3 Kg5 Black would be winning.

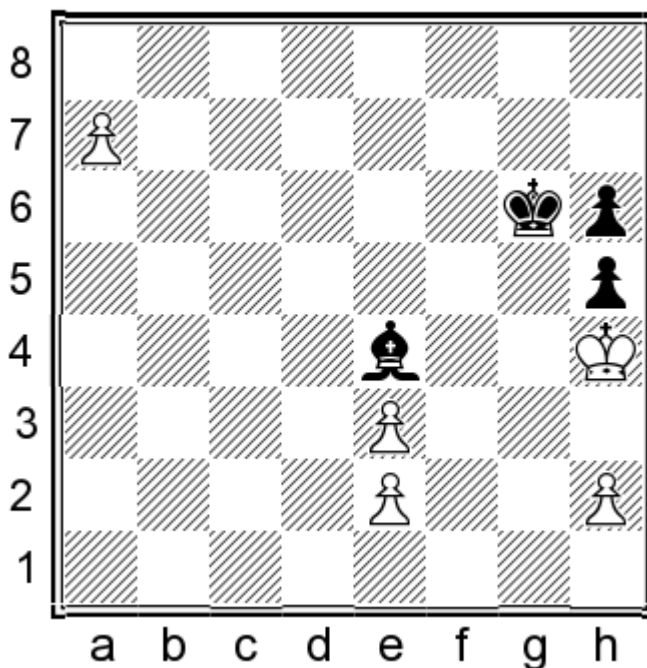
1.e5+!

White sacrifices a pawn in order to drive the black king to a worse square.

1...Kxe5 2.Kf2 Be4 3.Kg3 Kf5

Keeping the white king from f4.

4.Kh4 Kg6 5.a7



Mutual zugzwang. If White were to move, he would be driven back. For a good understanding of the position, you have to realize that White would have a fortress without the e-pawns. Then he would move his king to and fro on g3 and h3, from where it cannot be driven away. If Black puts his king on g5 and pushes his pawn to h4, then White promotes, with stalemate as a result. With a pawn on e2 or e3 there is no stalemate and, consequently, no fortress.

5...Bb7 6.e4!

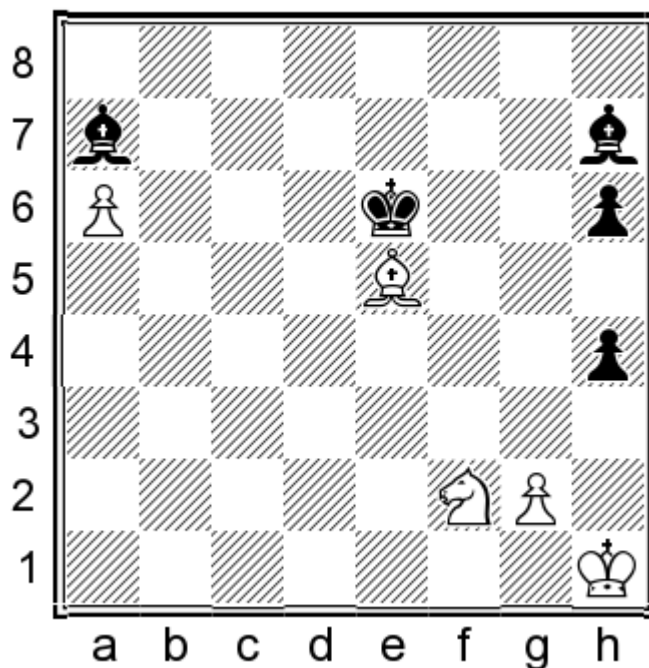
Sacrificing the second e-pawn.

6...Bxe4 7.e3

And again, mutual zugzwang has arisen. White will also sacrifice his third e-pawn, after which he has completed his fortress.

We have seen that there is no win if White has the queen's bishop, and if there is a white pawn on h6 and a black one on h7. In that case White cannot achieve anything, even with a king's bishop. And if we move the pawns one file to the left, the result remains the same: neither of the two bishops can breach the fortress.

Timman 1989



White to play and draw

Material is equal, but due to the double attack White cannot avoid losing material. What he has to do is give the piece in the most favourable circumstances.

1.Ng4 Bf5

Otherwise White will easily hold the draw, as both 1...Kf5 and 1...h5 are met by 2.Nf6, attacking the queen's bishop.

2.Nxh6

Not 2.Bh2 in view of 2...Bxg4 3.Bg1 Bxg1 4.Kxg1 Bf5, and Black will stop the a-pawn.

2...Be4!

The point of the previous move. Obviously Black does not take the bishop, as then White will exchange on f5, after which there is no

winning potential left. Now Black has the nasty double threat of 3...Ke5 and 3...h3.

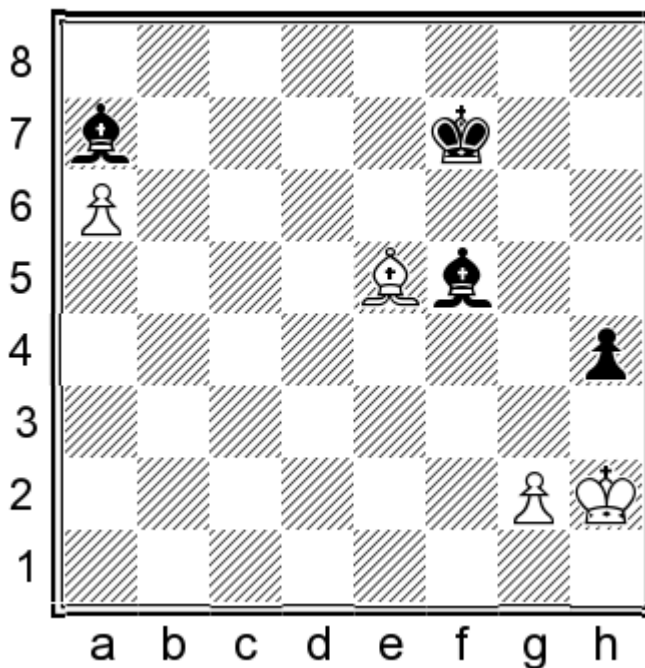
3.Nf7!

A deflecting sacrifice. Since 3...h3 fails to 4.Ng5+ Kxe5 5.Nxe4, Black has to take the knight.

3...Kxf7 4.Kh2

Threatening 5.g3 with an immediate draw.

4...Bf5



The situation looks awkward for White. Black threatens to support the h-pawn with his king, after which the win will only be a matter of time.

5.Bg3!!

An extraordinary way to attack the black h-pawn.

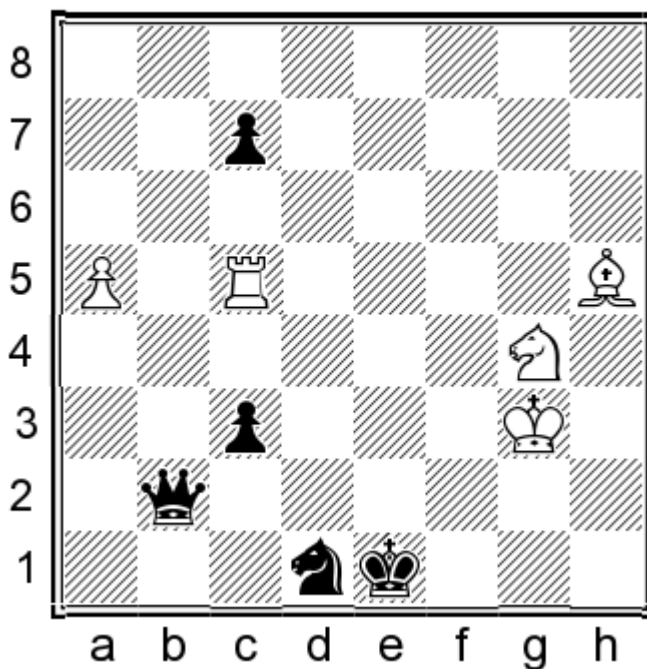
5...hxg3+ 6.Kh1

An incredible situation. Black is a full bishop pair ahead, but he cannot win. To avoid stalemate he will have to sacrifice one of his

bishops. After 6...Bh3 7.gxh3 Kg6 8.Kg2 he cannot maintain his g-pawn, while after 6...Bg1 White takes the king's bishop and obtains a fortress.

In Chapter 8 I gave a study with which I won second prize in the Nona 2010 tourney. First prize in this tourney went to the following study:

Zakharov 2010



White to play and draw

If the black c-pawn advances further, it will soon be over. With tactical tricks White remains on his feet for a while:

1.Re5+

Not 1.Bg6 on account of 1...Ne3! 2.Nxe3 Qf2+, followed by 3...Qxe3+, when White is helpless.

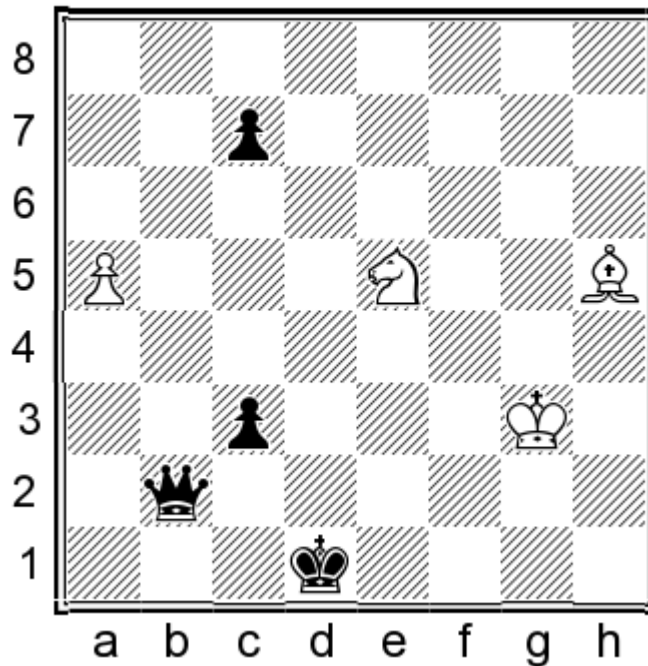
1...Kd2 2.Rd5+ Kc1

The black king has walked out of the checks. But White has another trump card up his sleeve.

3.Rxd1+

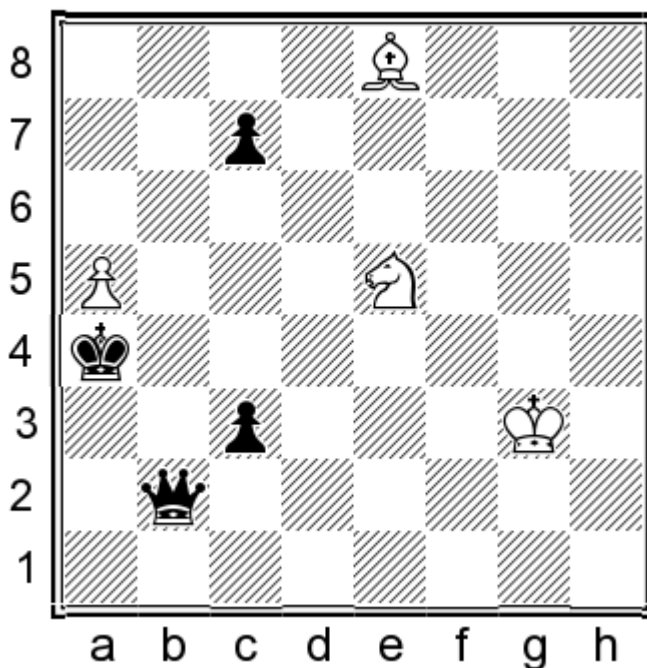
With this exchange sacrifice White realizes optimum cooperation between his bishop and knight.

3...Kxd1 4.Ne5+



This discovered check makes things difficult for Black. He has no direct win, since 4...Ke1 5.Nd3+ Kd2 6.Nxb2 c2 is met by 7.Nd3, and Black cannot promote. His next king moves are intended to rule out this trick.

4...Kc2 5.Bg6+ Kb3 6.Bf7+ Ka4 7.Be8+



It looks as if the black king cannot escape. However, he still has one little move to keep the struggle going.

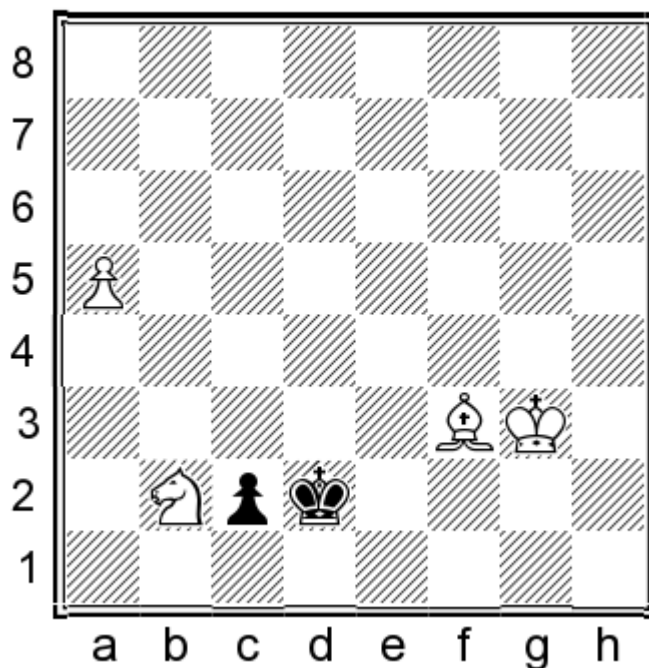
7...c6!

This pawn sacrifice wrongfoots the white bishop.

8.Bxc6+ Kb3 9.Bd5+ Kc2 10.Be4+ Kd1 11.Bf3+ Ke1

Now he can. White cannot prevent the c-pawn's promotion after he has captured the black queen.

12.Nd3+ Kd2 13.Nxb2 c2



From here on, White's play is focused on building a fortress.

14.Nc4+ Kc3

Not 14...Kd3 in view of 15.Be4+! Kxe4 16.Nd2+, followed by 17.Nb3, after which the c-pawn is stopped after all.

15.Nd6

On its way to the central square e4.

15...c1Q 16.Ne4+ Kb4 17.Bg2

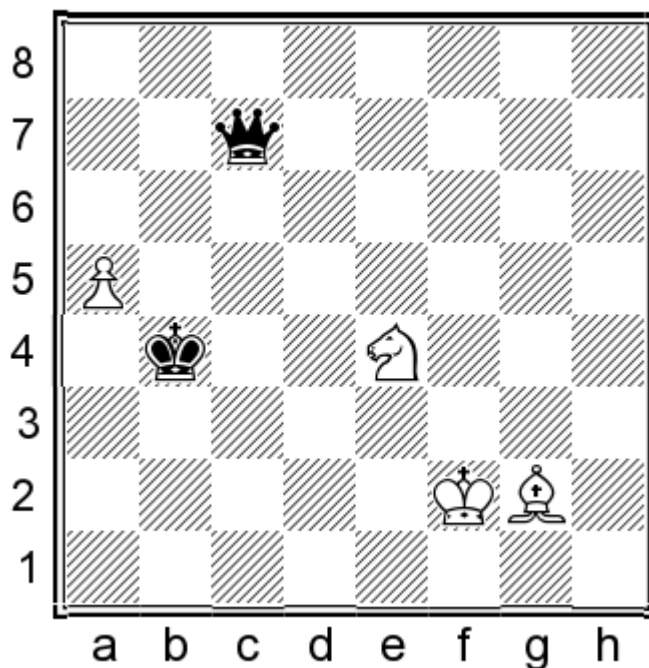
Protecting the knight, and aiming for a type of drawn position which was discovered by Max Karstedt in 1903.

17...Qc7+

Preventing 18.Kh2. If the white king reaches that square, then Karstedt's fortress is realized.

18.Kf2!

Certainly not 18.Kh3?, since after 18...Kxa5 there is no fortress.



18...Qa7+ 19.Kg3

Again, White has to choose the square for his king with care. If Black now takes the pawn, White brings his king to h2.

19...Qg1

A last try. Without the a-pawn this position would be lost for White.

20.a6 Kb5 21.a7!

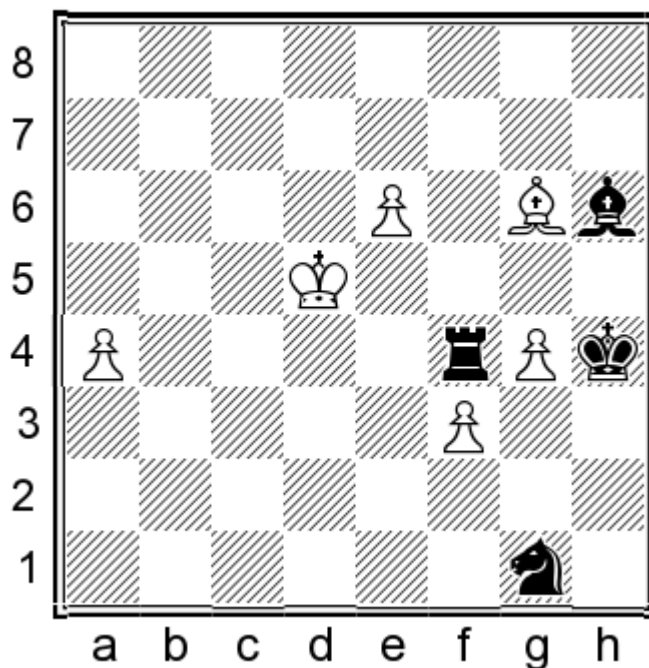
Forcing the queen to leave her post.

21...Qxa7 22.Kh2

Draw.

This study inspired me to make an adaptation where White has to prevent the building of a fortress.

Timman 2010



White to play and win

Black has a great material advantage, but he will have to give his rook for the e-pawn. And then White still has a strong passed a-pawn.

1.e7 Rf8

Now the trouble starts. After 2.exf8Q Bxf8 3.a5 Bh6 the black bishop stops the a-pawn.

2.g5!

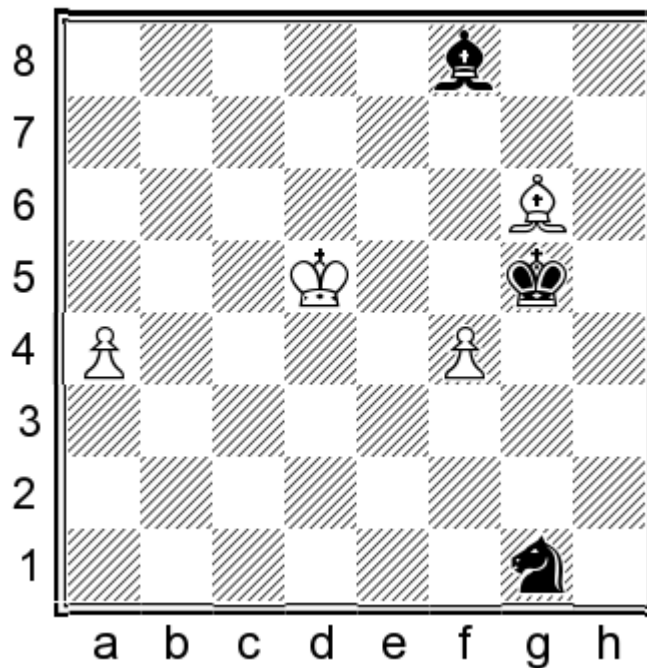
White sacrifices the g-pawn in order to block the c1-h6 diagonal for the bishop.

2...Kxg5 3.f4+!

In order to understand this second pawn sacrifice it is necessary to analyse what would happen if White took on f8. After 3.exf8Q Bxf8 White has the following options:

A) 4.a5 Nxf3 5.a6 Kxg6 6.a7 Bg7 7.a8Q Kh7! and White cannot prevent the knight reaching the crucial square e5, when Black has built Karstedt's fortress;

B) With the pawn check 4.f4+ White tries to disturb the coordination in the black camp. But now comes a tremendous surprise:



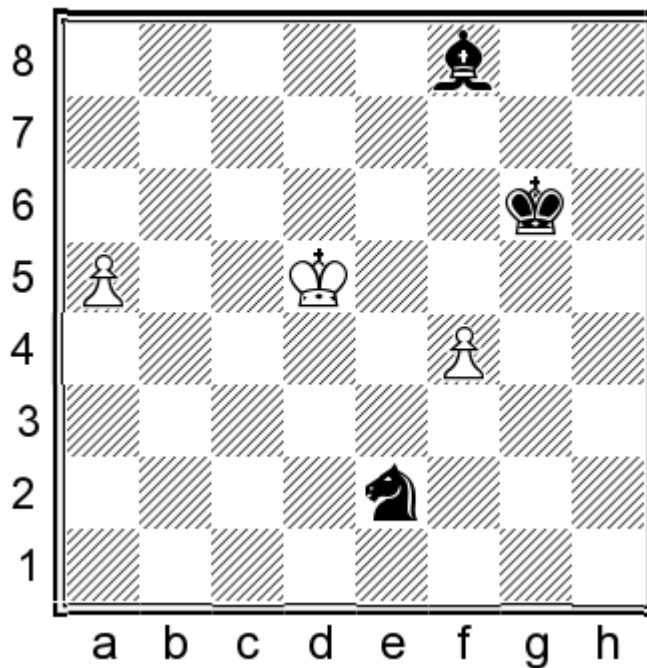
4...Kh6!! The point of this king move is that Black wants to capture the white bishop with the knight. It is striking how little weight the white bishop carries.

5.a5 Ne2 6.a6 (otherwise the knight can stop the pawn) 6...Nxf4+ 7.Kc6 Nxc6, and again Black is in time to build Karstedt's fortress. The intention of the text move is to force the black king to go to another square than h6. Curiously, first the black king was forced to block the bishop's diagonal, and now the bishop blocks a square for the king.

3...Kxg6 4.exf8Q Bxf8 5.a5

Again the a-pawn has a free passage. But Black can try to build Karstedt's fortress.

5...Ne2



6.f5+!

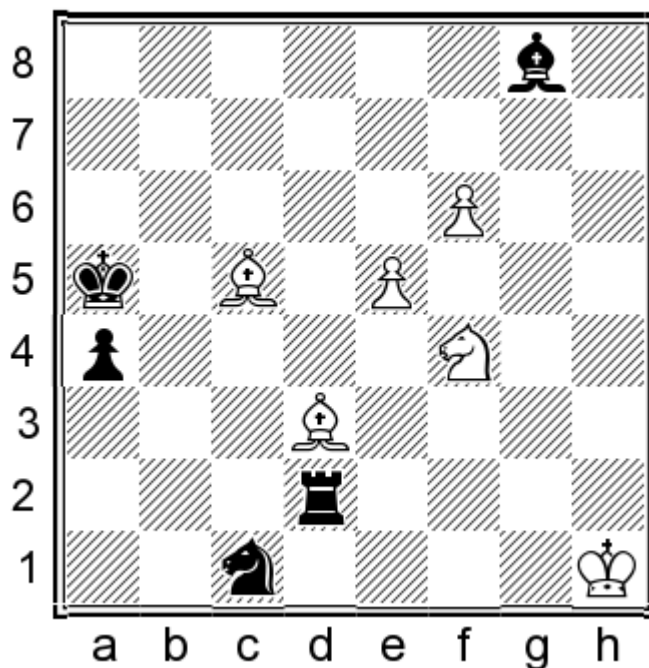
The third pawn sacrifice, which is intended to drive the black king to a worse square.

6...Kxf5 7.a6 Nf4+ 8.Kc6

And wins. The a-pawn will reach the promotion square unhindered, whereas Black just misses the decisive tempo that is needed for building the fortress.

With an extra pawn there are more chances for bishop + knight versus queen. At the end of the following study, White must choose the right square for his king in order to prevent the construction of a fortress.

Timman 2011



White to play and win

White has two powerful passed pawns, but Black is not without counterplay. It is vital for White to try and promote his pawn.

1.Bh7!

A bishop sacrifice, in order to be able to march on with the f-pawn.

1...Bxh7

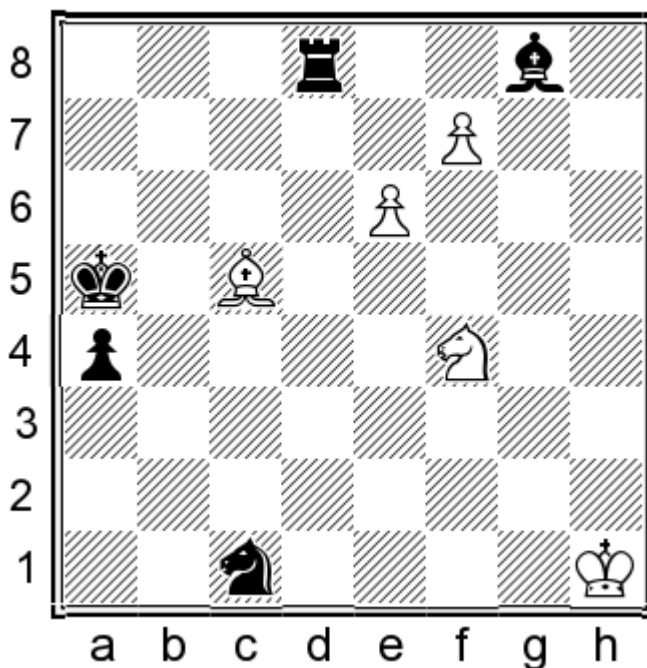
An important alternative is 1...Bc4. Now White has to play very accurately in order to secure the win: 2.e6 Rd1+ 3.Kh2 Rd2+ 4.Kg3 Ne2+ 5.Kf3! Nxf4 6.e7 Bf7 7.Kxf4 Re2 8.Bf5! and White's passed pawns decide the battle.

2.f7 Rd8 3.e6

It seems impossible to stop the white passed pawns. However, Black has a clever defence:

3...Bg8!

On 4.e7 Black has 4...Rd1+. Therefore White must close off the d-file for the rook with a combination.



4.Bb6+!!

A second bishop sacrifice. Black has to accept.

4...Kxb6 5.Nd5+

The point of the previous move. The knight check closes the d-file for the black rook, after which the e-pawn can march on. But that still doesn't decide the argument.

5...Kc5

The best square for the king.

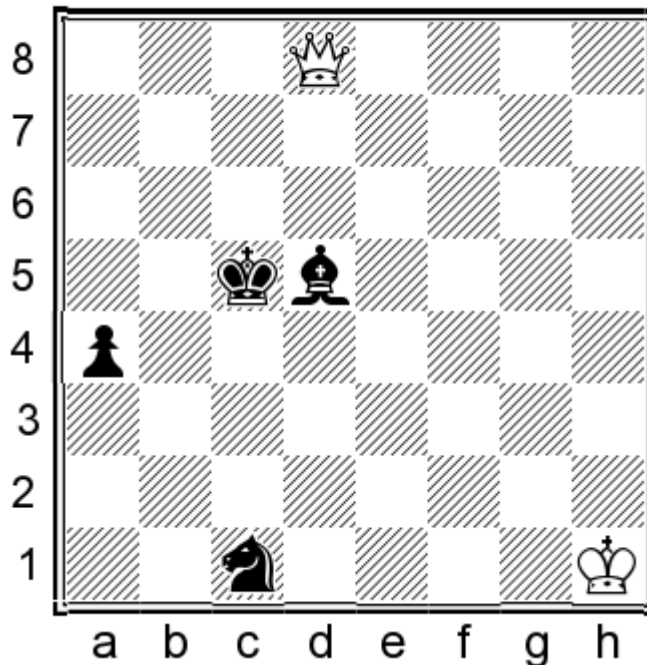
6.e7

Nadareishvili's field of tension has appeared on the board, only now with a black rook instead of a queen.

6...Bxf7

The only defence. Black has to allow promotion, and tries to get as much material for the queen as possible.

7.exd8Q Bxd5+



Which square should White choose for the king?

8.Kh2!

The alternative 8.Ke3 was insufficient for the win, since Black replies 8...Ne2+ and then brings his knight to c3. Even then the draw requires a delicate touch, as after 9.Kf2 Nc3 the fortress is not entirely realized yet. White can try the following moves:

- A) 10.Ke3 Nb5! 11.Qa5 Bb3, and the white king is held off;
- B) 10.Qa5+ Kd4! and Black has taken up a new fortress. Here also, the white king is kept at a distance. Insufficient was 10...Kc4? in view of 11.Ke3!, after which there is no fortress.

8...Nb3

In these circumstances the knight could not reach the square c3, since 8...Na2 fails to 9.Qa5+, winning the a-pawn. That is why Black tries to build a different fortress.

9.Kg3

Not the only move; six queen checks would also eventually achieve the aim. Yet, we cannot speak of real duals here. The tablebases indicate that the text move leads to mate in 64 moves, whereas with the strongest queen check, 9.Qe7+, it would take 6 more moves. It is important to bring the white king to the battle scene as soon as possible.

9...Bc4

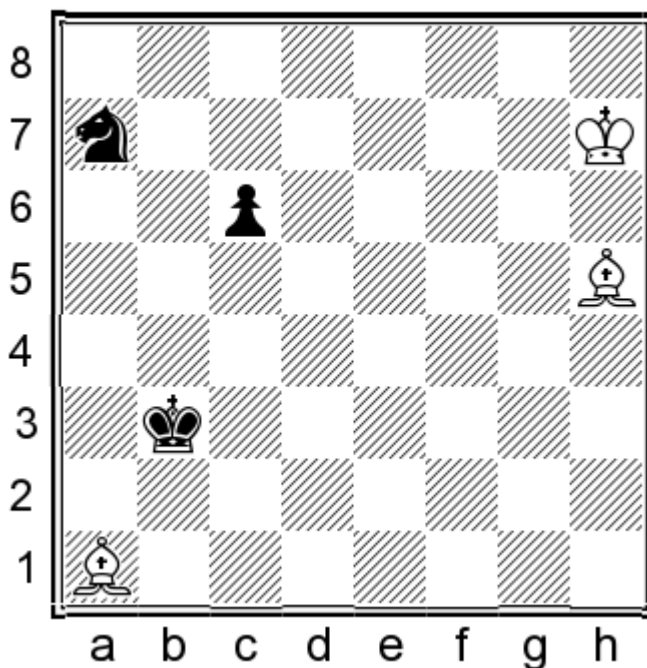
Now White has to pay attention. After 10.Qe7+ Kb5 11.Kf4, Black would be able to build a fortress after all with 11...Na5!, followed by 12...Nc6.

10.Kf4

Only move. Black has no time to bring his knight to c6. The white king will penetrate, causing death and destruction.

In 1984 it was established that two bishops win against a knight. The situation where Black has an additional pawn is interesting. Sometimes he can use this to realize promotion, if the white king is far off. It is also possible to use the pawn to build a fortress.

Timman 2010



White to play and win

Black threatens to bring his king to b7, after which he would build an impregnable fortress. White has to play very precisely in order to prevent this plan. The tablebases indicate that it takes 99 moves to give mate.

1.Bd4

Driving the knight forward.

1...Nb5 2.Bc5!

The only way. To 2.Bf6 Black would react with 2...c5!. Then the black c-pawn cannot well be stopped, as the white king is too far away.

2...Kc4 3.Bf8!

Not 3.Be7? on account of 3...Nc3! and the knight will reach the central square d5 with tempo.

3...Nd4

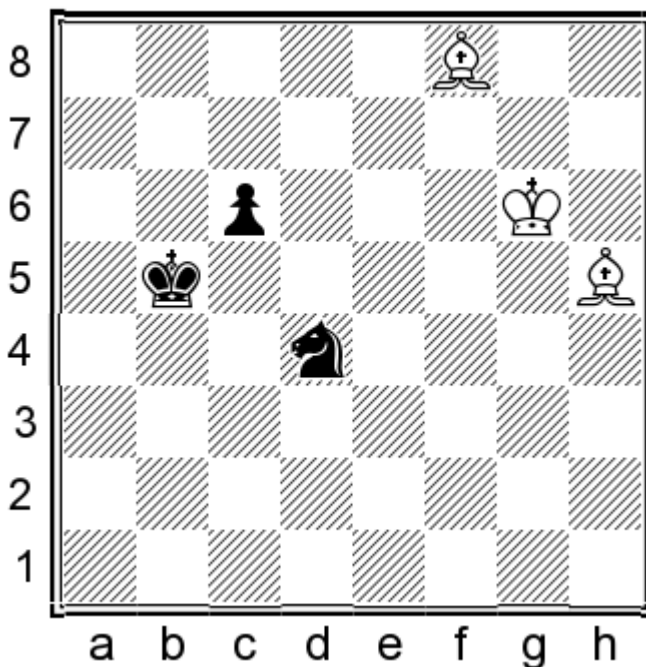
Vacating the b5-square for the king. It is important to understand what Black's fortress is going to look like exactly. When he has brought his king to b7, his knight should be either on a7 or b5. Then White cannot make progress, even if his king is close by on d7. The black king can oscillate between b6, b7 and b8, and thus will not end up in zugzwang.

So after the text move Black threatens 4... Kb5, followed by 5... Kb6 and 6... Nb5, after which he will be safe. After the alternative 3...Nc3, both 4.Kg8 and 4.Kg6 are winning, as White can meet 4...Kb5 with 5.Bg7!. Only not 4.Kg7?, since then White cannot prevent the construction of a fortress after 4...Kb5.

4.Kg6

The moment has come to bring the king one step closer.

4...Kb5



5.Bg7!

Preventing the knight reaching the b5-square.

5...Ne6

Threatening to give check on f4.

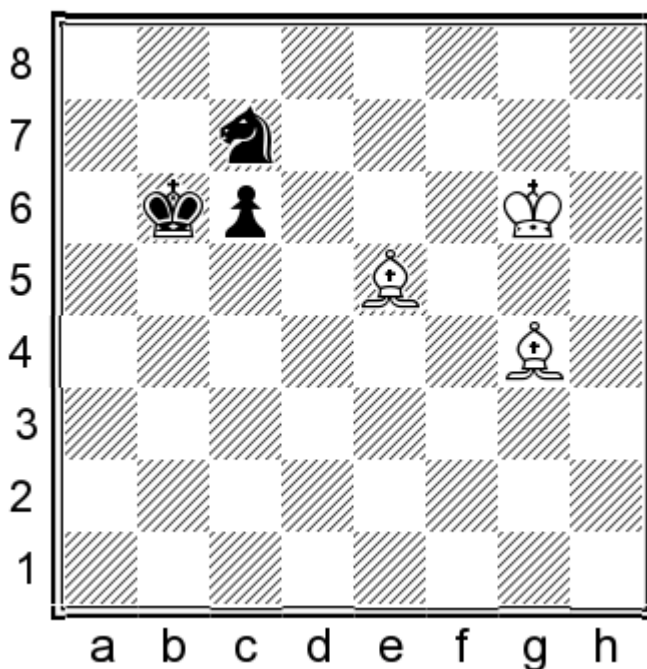
6.Be5 Kb6

The black king has almost reached the safe haven. The white bishop pair has to frantically continue manoeuvring in order to prevent the construction of a fortress.

7.Bg4

The king's bishop also comes into action.

7...Nc7



8.Bc8!

Keeping the black king from b7.

8...Nb5 9.Bg3

9.Bh2 was also possible. However, 9.Bf4 was insufficient for the win. The reason will not become apparent until much later.

9...Na7

Black does all he can to drive the king's bishop from its dominant position.

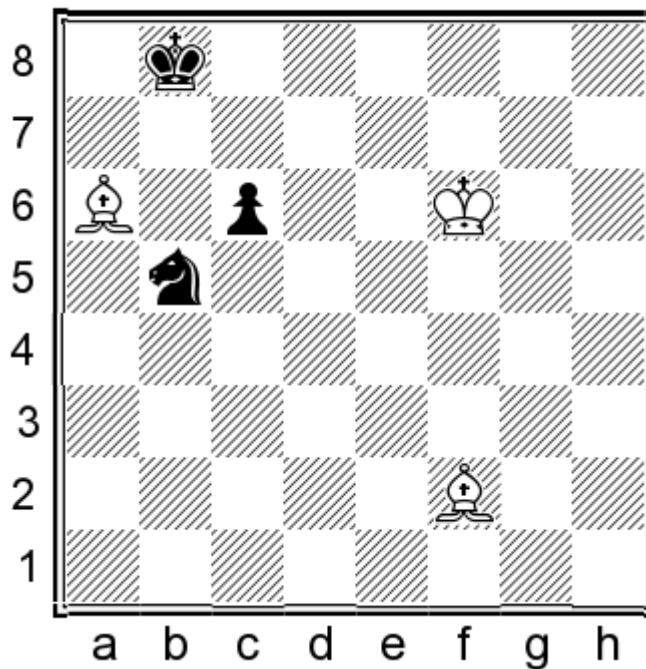
10.Bf2+ Kc7 11.Ba6!

Still keeping the black king from b7.

11...Nb5 12.Kf6

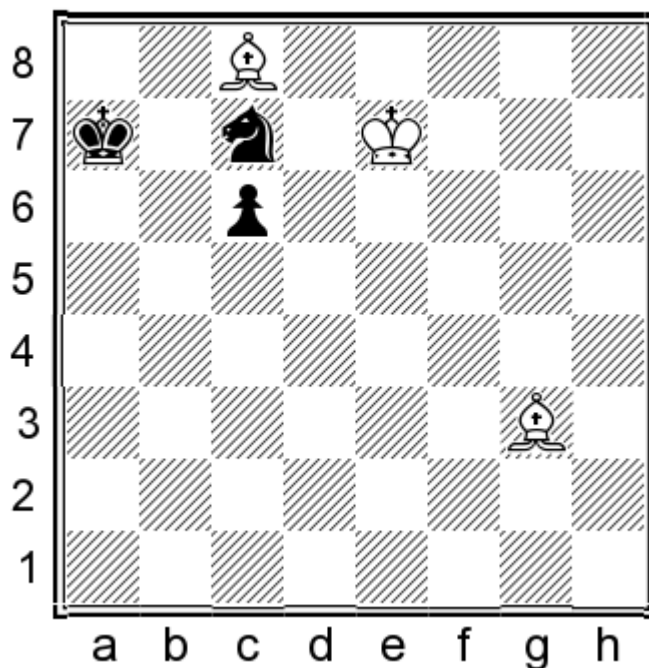
Finally White has time to bring his king closer. 12.Kf7 was also good.

12...Kb8



Threatening 13...Nc7, when the king will finally reach the square b7. The white king is just close enough to frustrate this plan.

13.Bg3+ Nc7 14.Ke7 Ka7 15.Bc8!



Now it becomes clear why 9.Bf4 was not good. In that case Black would have a check on d5 here. After the text move Black runs out of options, since after

15...Kb8

White can protect the king's bishop with his king:

16.Kd8

White wins.

Chapter 11

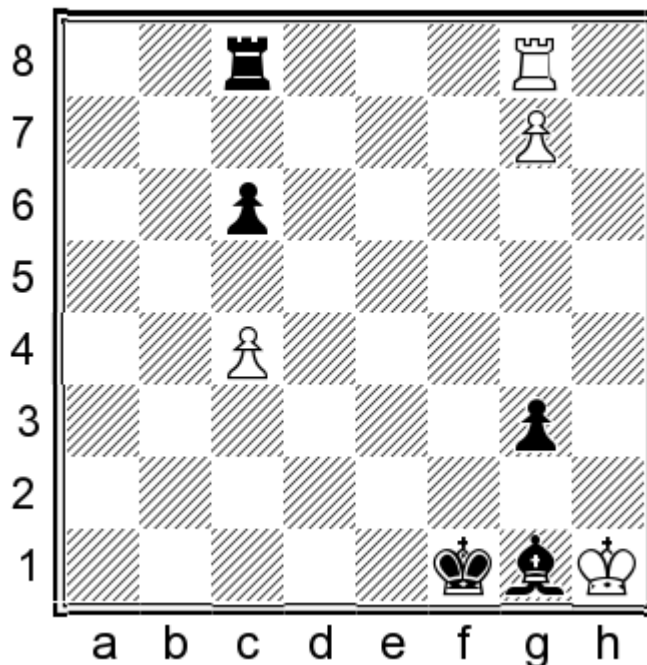
Systematic manoeuvres

One of the characteristics of a systematic manoeuvre is the lack of captures.

The pieces on both sides play moves that adhere to a certain pattern, which is repeated. Only at moments where the manoeuvres are interrupted, in between events, a pawn can be snatched away.

One possible aim of a systematic manoeuvre can be stalemate.

Kotov/Mitrofanov 1976



White to play and draw

Black threatens mate in one, which is why White does not have time to take the rook on c8.

1.Rf8+ Bf2

Renewing the mate threat, but now White can promote his pawn.

2.g8Q Rxf8

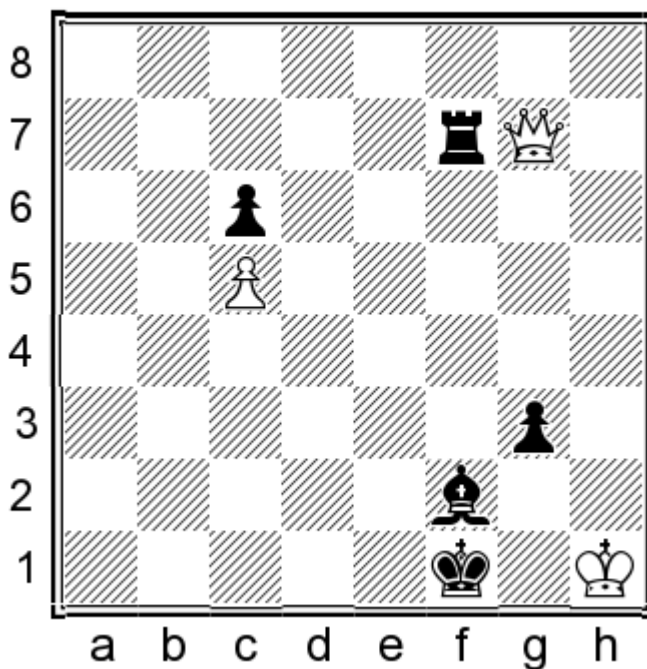
The situation remains critical for White, as mate is threatened from both sides. If White removes the queen, a deadly check on h8 follows.

3.c5!

Mutual zugzwang as a precursor of the systematic manoeuvre. Black has to move his rook.

3...Rf7 4.Qg7!

And the queen keeps pursuing it.



4...Rf6 5.Qg6!

The pattern becomes clear.

5...Rf5 6.Qg5! Rf4 7.Qg4! Rxf4

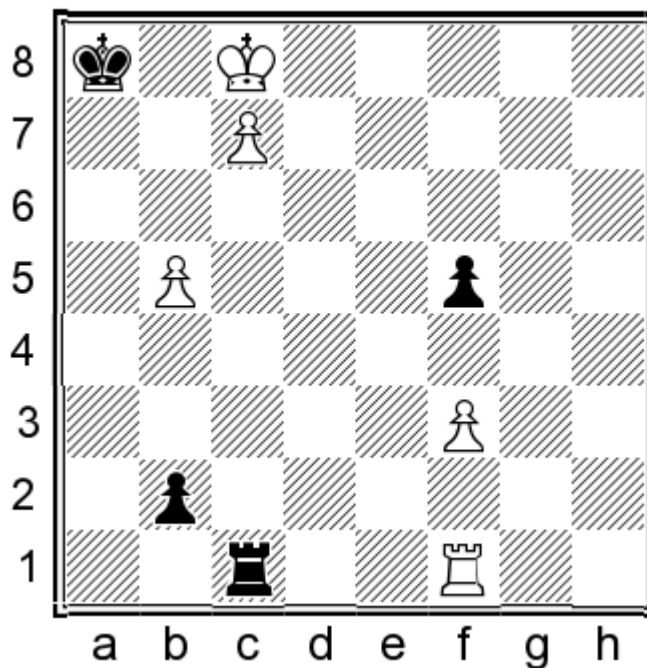
Black resigns himself to the inevitable: stalemate.

For this study Kotov and Mitrofanov received first prize in the 'Leninska Smena' tourney.

Leopold Mitrofanov was a brilliant Russian endgame study composer. The systematic manoeuvre was one of his many specialties. Alexander Kotov – not to be confused with the grandmaster of the same name – specializes in studies containing systematic manoeuvres.

In the following study, the rook is successful in the fight against the queen.

Kotov, 'Vecherny Peterburg' 1995



White to play and win

The pawn promotion cannot stop White; he's going to play for mate.

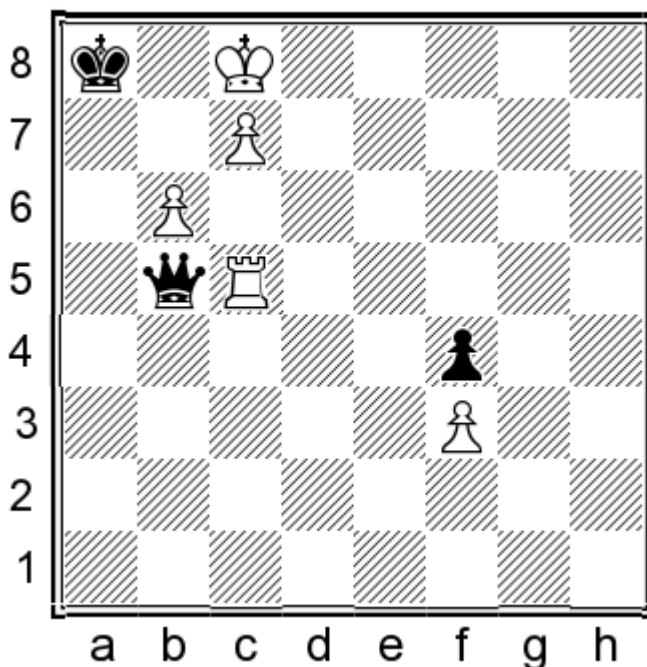
1.b6 b1Q

Defending against the mate threat.

2.Rxc1 f4

And this time it is Black who plays for stalemate. Rook and queen are dribbling upwards together.

3.Rc2 Qb2 4.Rc3 Qb3 5.Rc4 Qb4 6.Rc5 Qb5



There are no more squares. But White has another string to his bow.

7.b7+!

With the white rook on the 5th rank, this pawn sacrifice is decisive. Black has to take with the queen.

7...Qxb7+ 8.Kd8

The pawn on c7 is much stronger than the bishop in Mitrofanov's study. Black has to pin the pawn.

8...Qb6 9.Kd7!

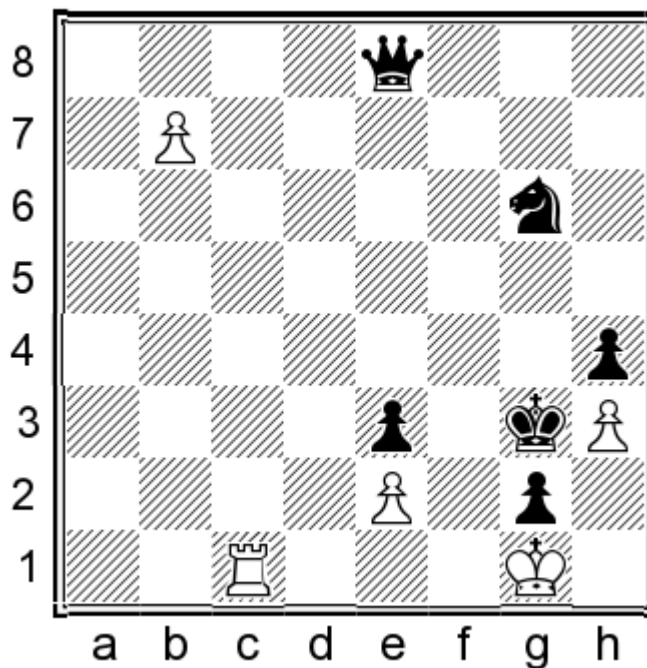
White doesn't have to bother about the rook.

9...Qxc5 10.c8Q+ Qxc8+ 11.Kxc8

And White wins the pawn ending.

In the two studies I have presented, the systematic manoeuvres occurred on lines. Major pieces can also pursue each other along adjacent diagonals, but only queens can do this. The studies with this theme are spectacular.

Bondarenko/Kakovin, 'Shakhmaty' 1954



White to play and draw

White has to force the pawn promotion as quickly as possible, but that does not put an end to his problems.

1.Rc8 Nf4

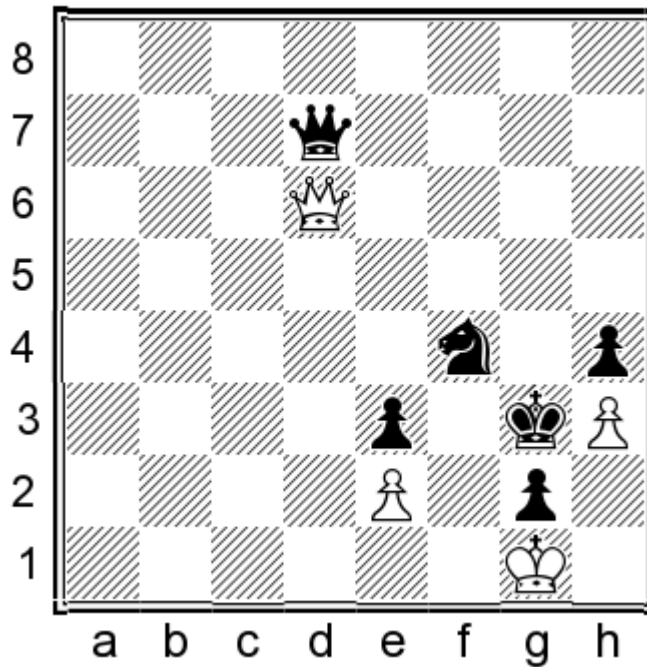
Threatening mate.

2.b8Q Qxc8 3.Qc7!

Keeping the knight pinned, and preventing the passage of the black queen to c1.

3...Qd7 4.Qd6!

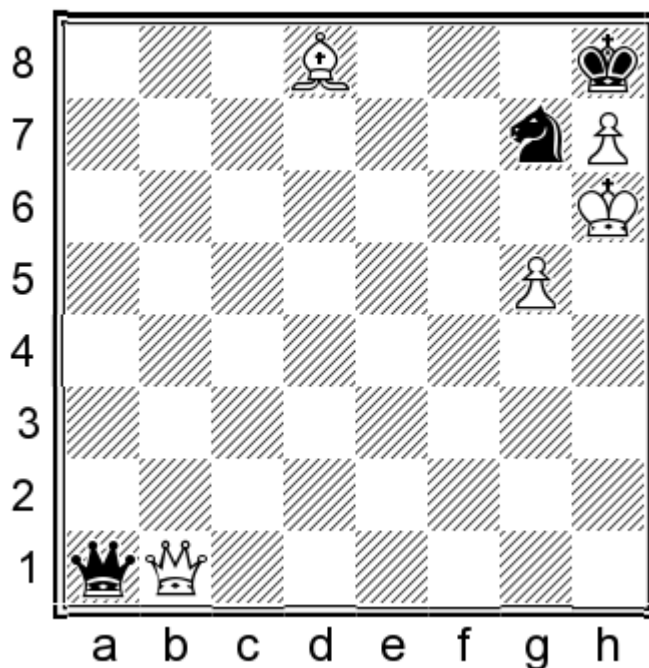
The pattern repeats itself.



4...Qe6 5.Qe5! Qxe5 stalemate.

Kotov used this study as a basis for adaptations with a record number of queen sacrifices on both sides.

Kotov, 'Shakhmaty v SSSR' 1977



White to play and win

White cannot capture the queen on account of stalemate, in this situation.

1.Bf6

Threatening mate on b8. Black has to screen off the b-file.

1...Qb2!

The start of a fascinating dance of the queens. Black is threatening check on g2.

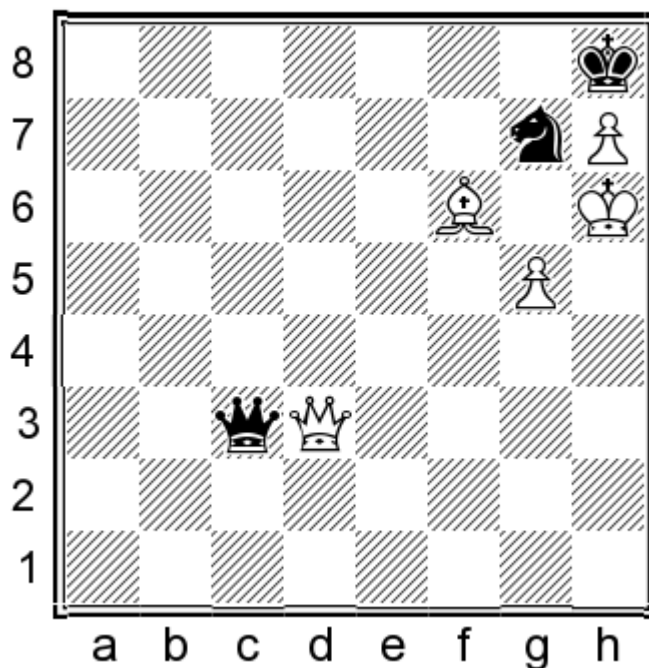
2.Qc2!

The queen screens off the second rank.

2...Qc3!

Black has to follow suit, and so the ritual is continued.

3.Qd3!



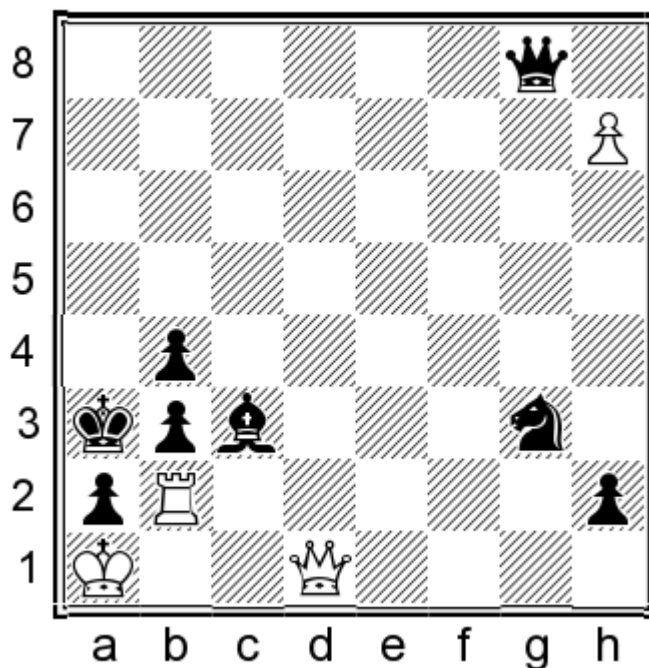
While the black queen is screening off the files, the white queen is doing the same with the ranks.

3...Qd4! 4.Qe4! Qe5 5.Qa8+

And mate.

Kotov increased the number of queen sacrifices in a follow-up study. Here also, the kings are condemned to hold each other in check.

Kotov, 'Shakhmaty v SSSR' 1977



White to play and draw

In order to prevent direct mate, White has to promote his pawn.

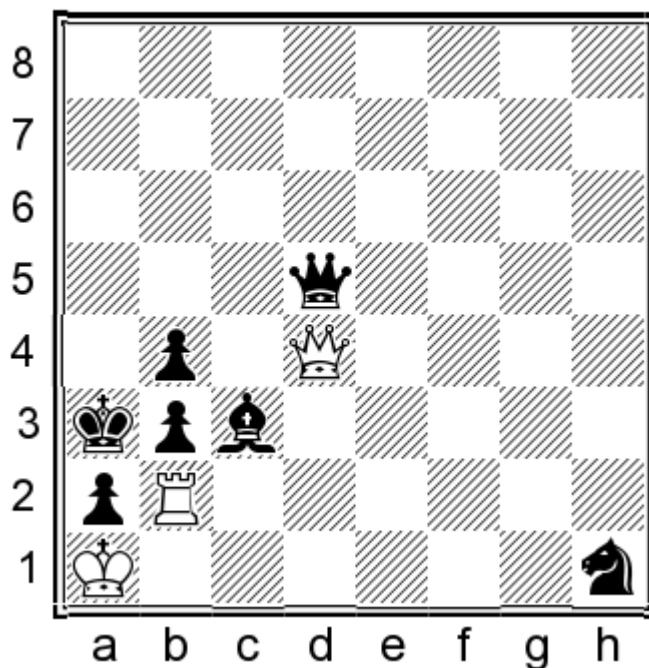
1.h8Q h1Q!

Black also promotes. 1...Bxh8 would have been met by 2.Qxb3+ with stalemate.

2.Qdxh1 Nxb1 3.Qg7!

The systematic manoeuvres start.

3...Qf7! 4.Qf6! Qe6! 5.Qe5! Qd5! 6.Qd4!



Herein lies the difference with the previous study. As the h1-square is blocked by the knight, Black does not have a winning check.

6...Qc5

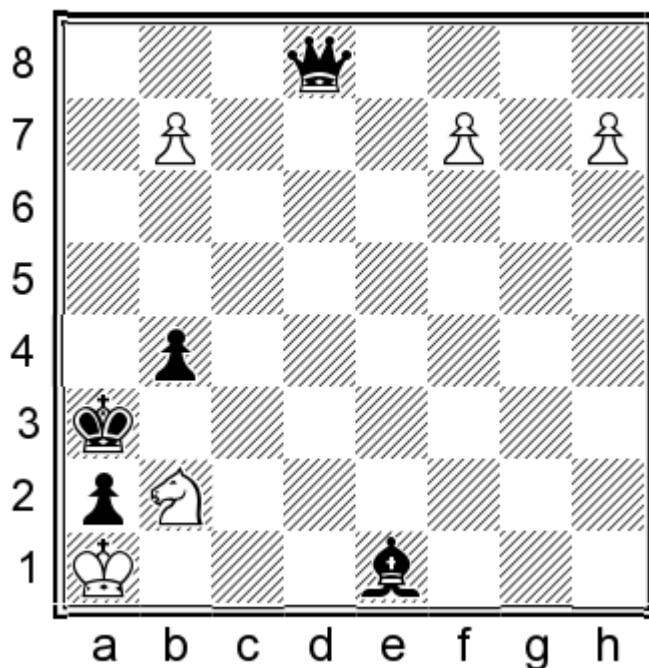
Preventing the check on a7. However, White has another way out:

7.Qxb4+ Bxb4 8.Rxa2+ bxa2

Stalemate.

Later that year, the Russian endgame study composer Leonard Katsnelson made a new adaptation.

Katsnelson 1977



White to play and draw

No immediate mate is threatened, so White has a little time to give material; in this study he will have to play for stalemate, too.

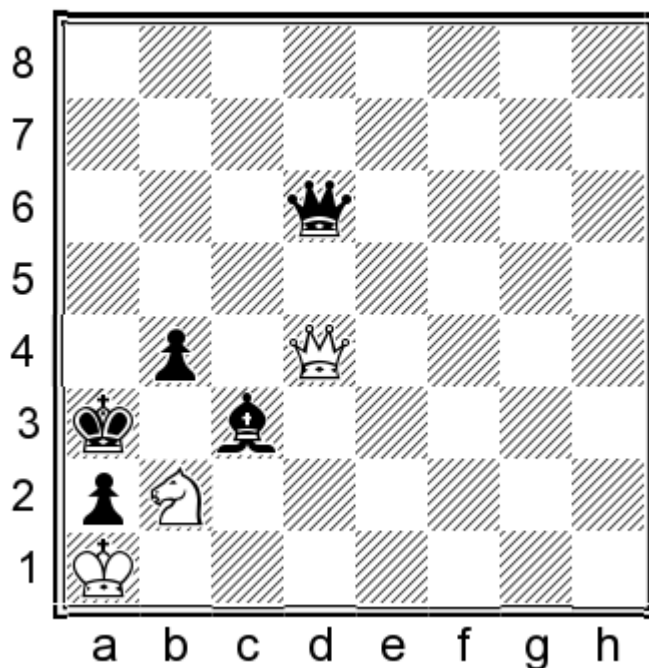
1.b8Q

Threatening to give an annoying check on the a-file, which is why Black has to take the queen.

1...Qxb8 2.f8Q Qxf8 3.h8Q

This promoted queen cannot be captured. Since there is no check on the a-file, Black has time to bring his bishop into position.

3...Bc3 4.Qf6! Qd6! 5.Qd4!



White seems to be safe, but now the systematic manoeuvres are shifted to another diagonal.

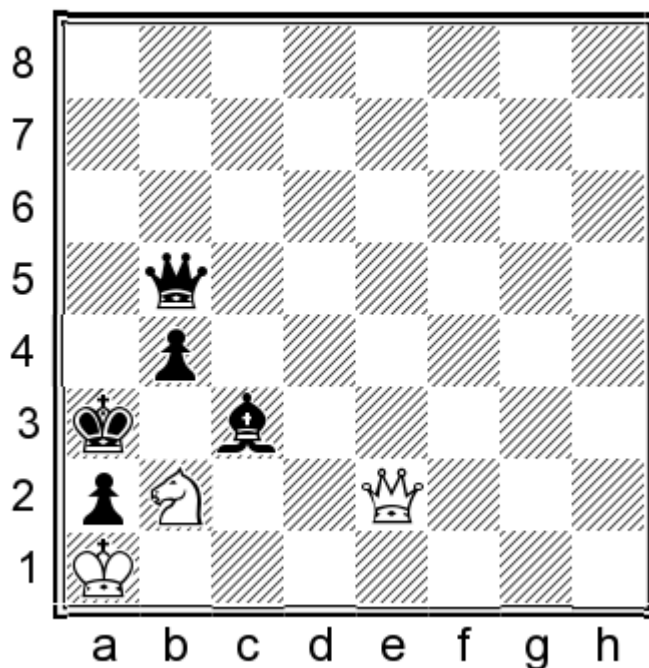
5...Qa6!

Suddenly threatening a devastating check on f1. White can only just save himself by pinning the bishop:

6.Qd3! Qb5!

The queen sacrifices continue.

7.Qe2!



Protecting the knight. The white queen always has two squares available on the f1-a6 diagonal.

7...Qc4 8.Qd3 draw.

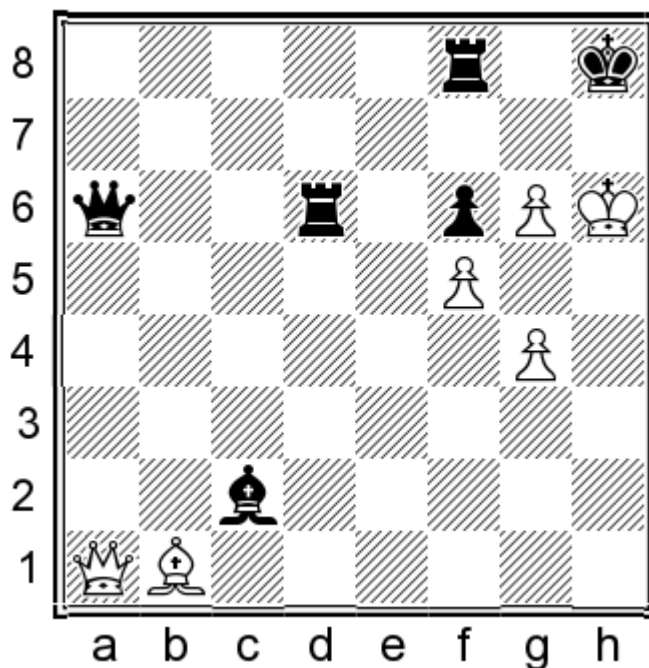
For this study Katsnelson received second prize in the ‘All Union Team Championship’. It’s hard to imagine a better study on this theme.

In 1980, Katsnelson published an article in EG entitled ‘Both sides sacrifice queens – development of an idea’. After presenting the studies by Kotov and himself he concluded:

‘A general shortcoming can be seen in static initial positions where the Royal prisons are already prepared and the introductory play is forced.’

This is indeed a blot that is not easy to avoid. I succeeded in constructing a version where both kings move, although this is restricted to a single move.

Timman 2011



White to play and win

By moving the construction one file to the left, I have created some space for a modest introductory play. The shift has yet another point which will be revealed later on.

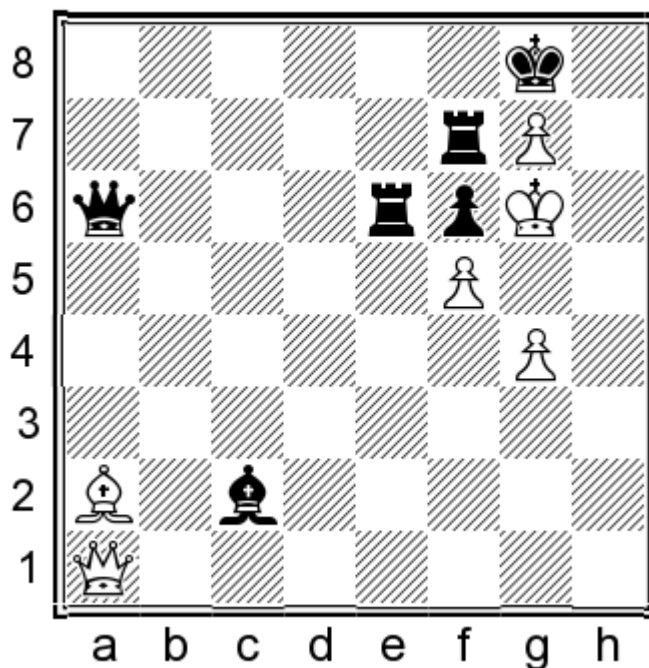
1.g7+ Kg8 2.Ba2+

Forcing the rook to step into a pin.

2...Rf7 3.Kg6

On the kingside everything is ready for systematic manoeuvring.

3...Re6



Black puts his second rook on the a2-g8 diagonal as well. After the alternative 3...Rd5 White would quickly give mate by 4.Bxd5 Bxf5+ 5.gxf5 Qa2 6.Qh1!. There are no stalemate traps.

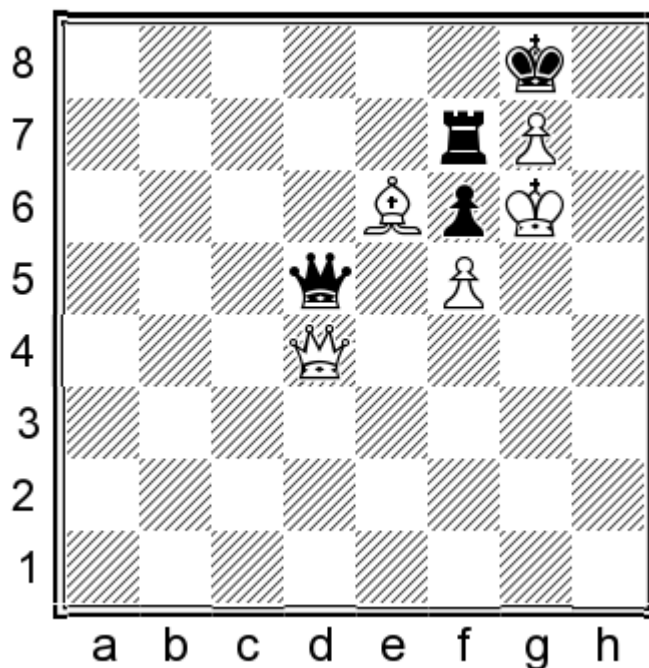
4.Bxe6 Bxf5+

Black also has to sacrifice his bishop in order to play for stalemate.

5.gxf5 Qa2!

The systematic manoeuvres start.

6.Qb2! Qb3! 7.Qc3! Qc4! 8.Qd4! Qd5!



Here the difference with Kotov's first study becomes clear. Because the construction has been shifted one file to the left, White has no immediate mate. In Kotov's second study this mate wasn't available either, as the corner square was occupied by a knight.

In the diagrammed position, two further queen sacrifices are necessary to give mate with the bishop in the end.

9.Qe4! Qa2 10.Qa8+!

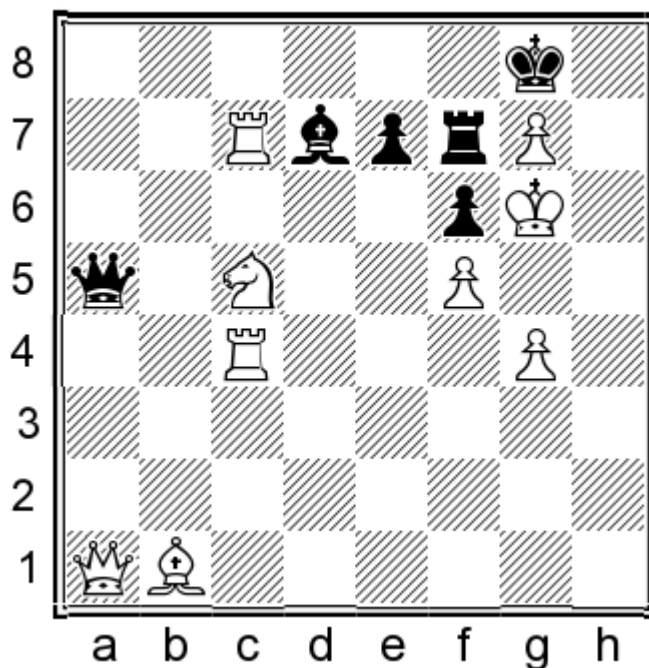
The final queen sacrifice.

10...Qxa8 11.Bxf7

Mate.

Earlier on, I had already made a version where White first makes a double rook sacrifice.

Timman, 'New In Chess' 2008



White to play and win

For the time being it is mainly the white king that is in danger. Mate in three is threatened, starting with 1... Rxc7+. A nice detail is that both queens are hanging, but this does not play a role during the first moves of the study. The battle scene is elsewhere.

1.Rc8+! Bxc8 2.Ne6

Protecting the g-pawn.

2...Bxe6 3.Rc8+!

The second rook sacrifice serves to open up the a2-g8 diagonal for the king's bishop.

3...Bxc8 4.Ba2

Finally Black's threats have been neutralized.

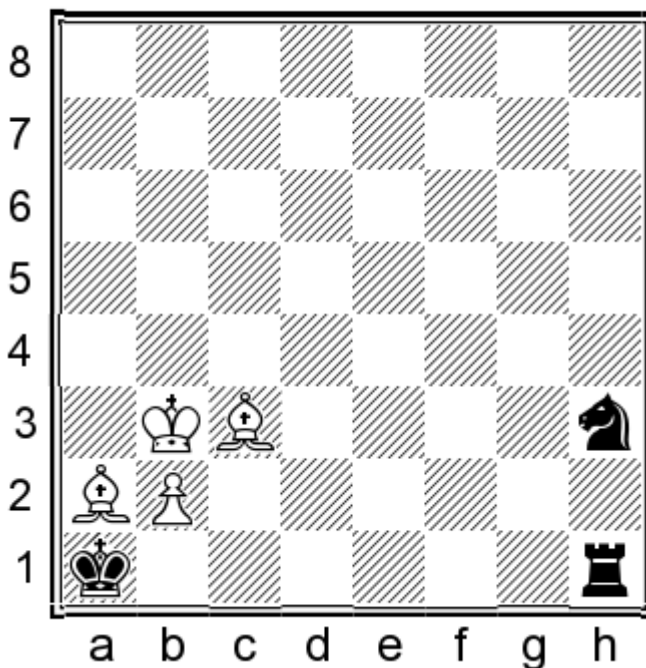
4...Bxf5+

The only chance. Black is playing for stalemate.

5.gxf5 e6 6.Bxe6 Qa2!

And the queen dance starts. White wins in the same way as before. So far I have only given studies where the systematic manoeuvres were carried out by major pieces. The fight between rook and bishop is also interesting. In the following study the white bishop is strutting step-by-step up the long diagonal to escape from the attacks by the enemy rook.

Liburkin, '64' 1940



White to play and win

The black king is caught in a mating net. To close the net, White must first move aside with his king.

1.Ka3 Rc1

The only defence against the threats of 2.b3/b4 mate.

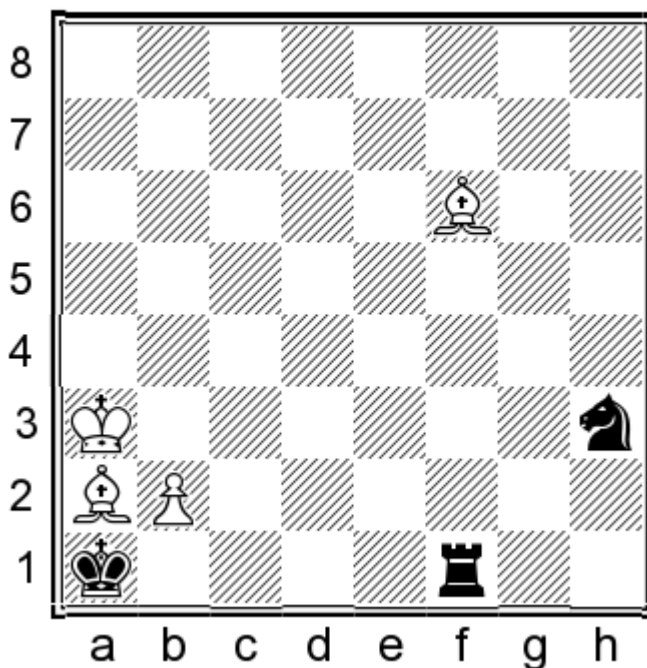
2.Bd4!

Preventing a side attack by the rook. After 2.Be5? Rc5 there would be no win.

2...Rd1 3.Be5!

The same principle.

3...Re1 4.Bf6! Rf1



5.Bg7!

Patiently, White keeps moving the bishop one square at a time.

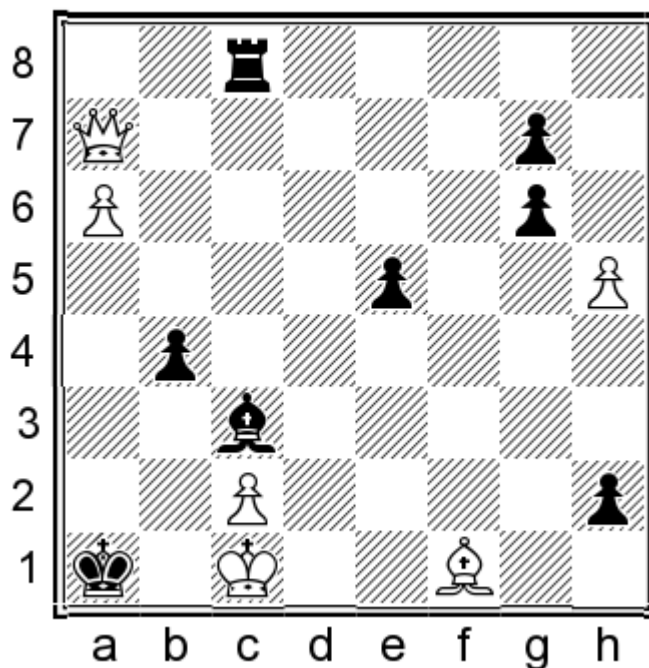
5...Rg1 6.Bh8

The corner square is reached, and since the black knight obstructs the h-file, no further rook attacks are possible.

6...Rg3+ 7.b3+ with mate next move.

The duel between rook and bishop can also revolve around the theme of line control.

Korolkov, 'Shakhmaty v SSSR' 1934



White to play and win

The first move is obvious.

1.Qb7

Stopping the dangerous h-pawn and making way for the a-pawn.

1...e4

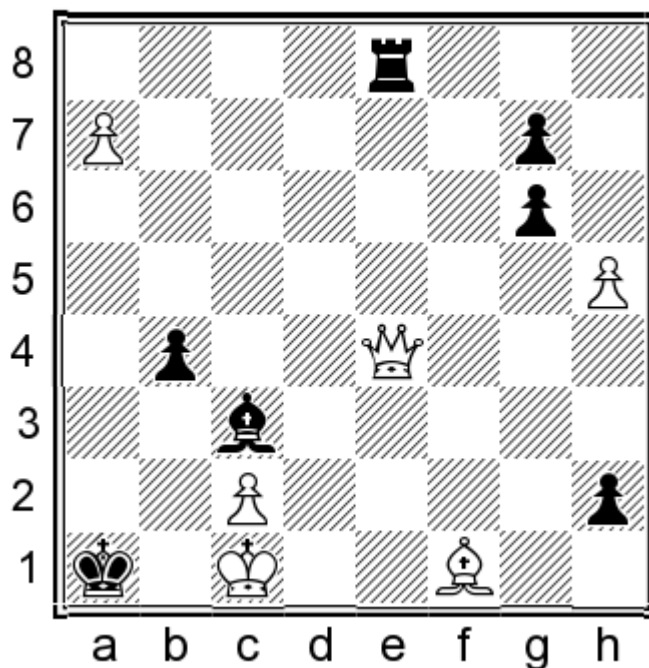
A pawn sacrifice to open the e-file. After 1...Rd8 2.Bd3, Black would have no chance.

2.Qxe4 Re8

Play becomes sharp.

3.a7!

Both sides strive for promotion.



3...h1Q! 4.a8Q+!

The appropriate reply. Now both promoted queens will be eliminated.

4...Rxa8 5.Qxh1 Re8

The start of the systematic manoeuvres. Black threatens to give check on e1.

6.Be2

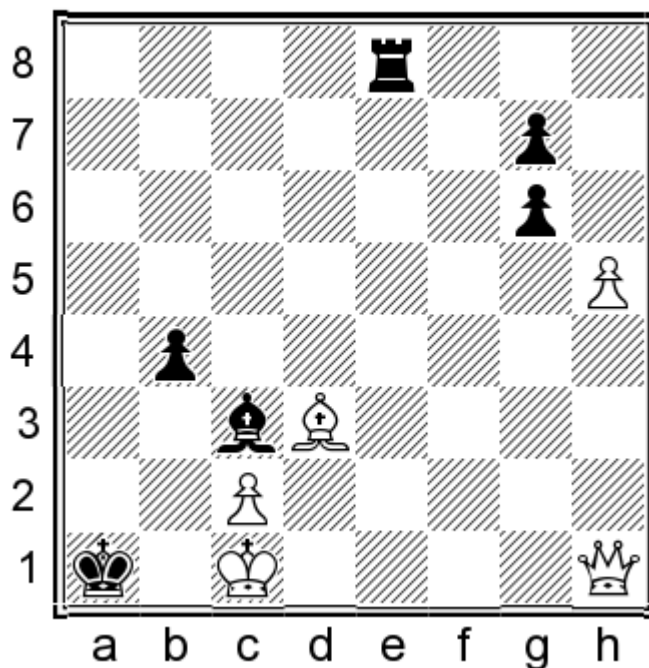
Screening off the e-file.

6...Rd8

A new danger: Black threatens to give mate in one.

7.Bd3 Re8

Now the bishop finds its way upwards in zigzag fashion, screening off the d- and the e-file in turn:



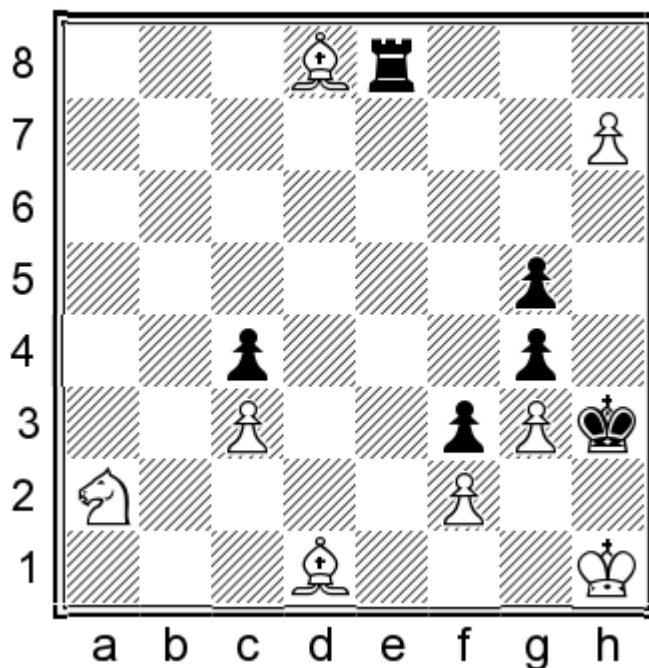
8.Be4! Rd8 9.Bd5! Re8 10.Be6! Rd8 11.Bd7

Completing the ladder manoeuvre. The black rook is now dominated.

Vladimir Korolkov was one of the great Russian endgame study composers. For this study he received shared first/second prize in the Shakhmaty v SSSR tourney.

One year later Kasparian made an adaptation of this theme. Only, in this study, the bishop zigzags downwards.

Kasparian, 'Shakhmaty v SSSR' 1935



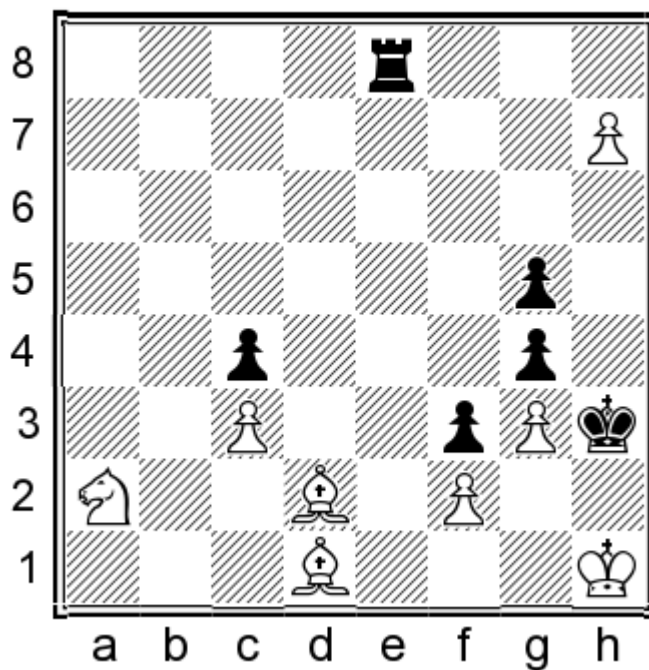
White to play and win

Both kings are imprisoned. White must prevent Black from getting a rampant rook.

1.Be7 Rd8

Now danger looms on d1.

2.Bd6 Re8 3.Be5 Rd8 4.Bd4 Re8 5.Be3 Rd8 6.Bd2 Re8



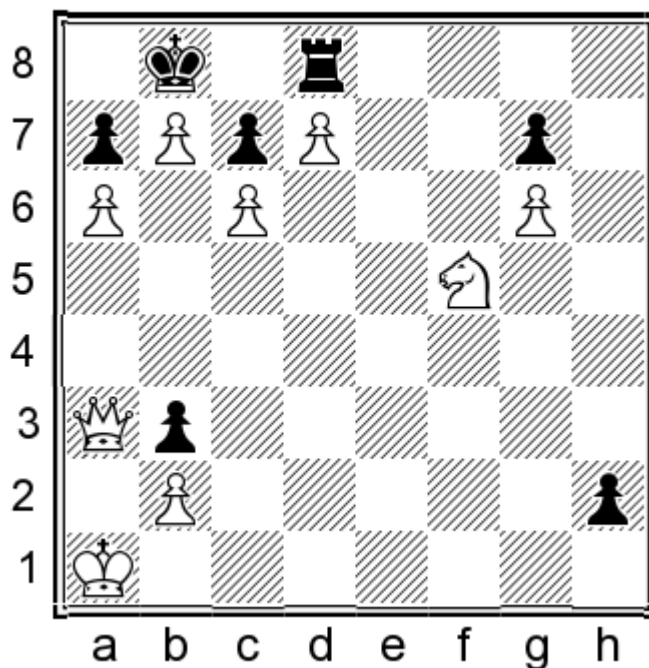
7.Be2!

Other moves don't suffice.

7...fxe2 8.Be1 Rh8 9.Nc1 Rxh7 10.Nxe2 Re7 11.Ng1 mate.

A knight can dominate an enemy rook in similar fashion.

Gorgiev, 'Schackvarlden' 1937



White to play and win

In Gorgiev's book *Izbrannyye etudy* this study can be found in a chapter called 'Geometric manoeuvres'. This is a nice alternative term.

White has an enormous material advantage, but as both kings are boxed in, the motif of the rampant rook plays a role.

1.Ng3

The h-pawn has to be stopped.

1...h1Q+!

The only chance. After 1...Rh8 2.Nh1 the black rook would not have a single file at its disposal.

2.Nxh1 Rh8

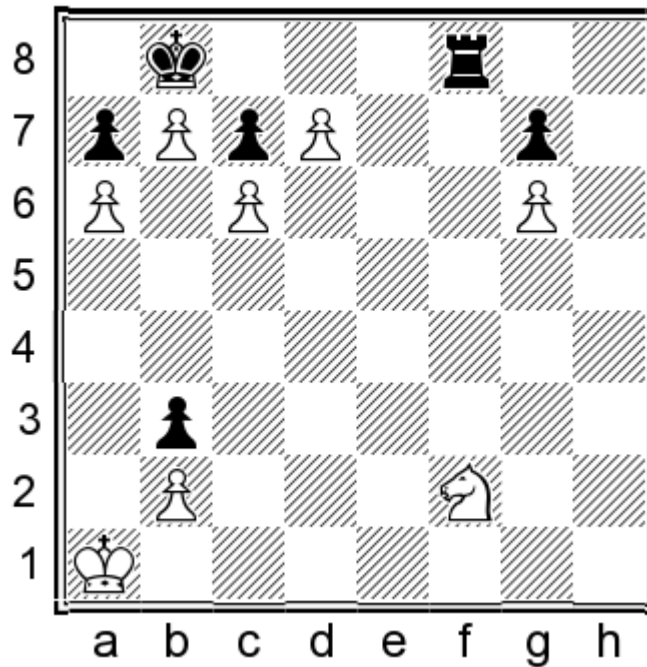
Now, if the knight budes, Black sacrifices his rook on h1.

3.Qf8+!!

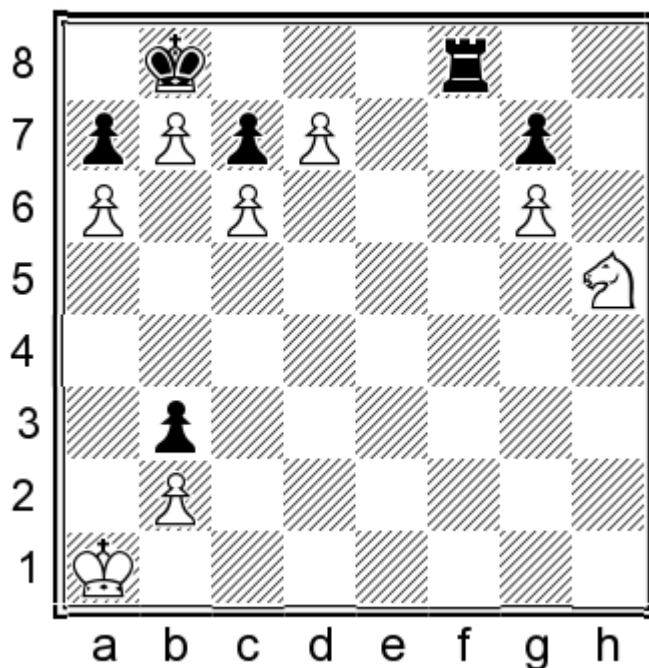
White sacrifices his queen in order to win a tempo.

3...Rxf8 4.Nf2

This is the start of the systematic manoeuvres. The knight will screen off the f- and the h-file in turn.



4...Rh8 5.Nh3 Rf8 6.Nf4 Rh8 7.Nh5 Rf8



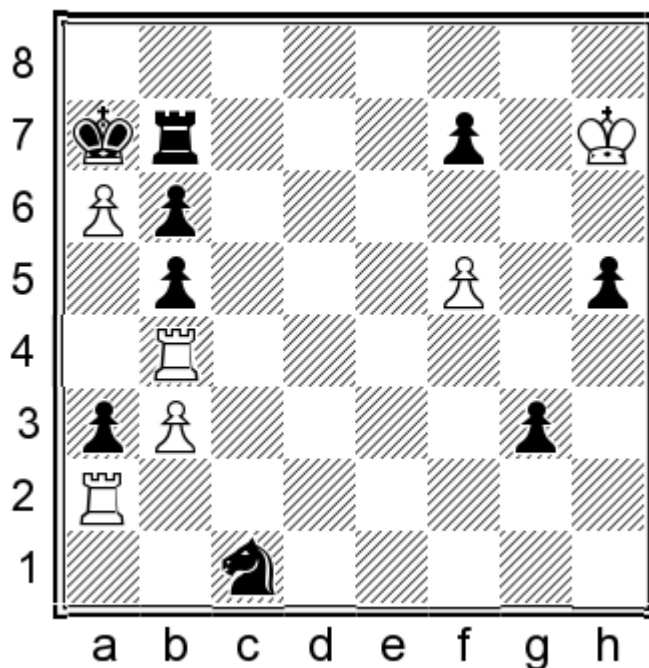
8.Nf6!

Now, 8...gxf6 will be met by 9.g7 Rg8 10.Kb1, after which White calmly brings his king into play and collects the f-pawn, then the b-pawn, and then pushes his own pawn to b6 and wins. The black rook does not have enough freedom of movement.

8...Rh8 9.d8Q+ Rxd8 10.Nd7+ 1-0

Almost half a century later, at the age of 75, Korolkov worked on a very long study, where two rooks eventually manage to triumph over an enemy knight.

Mitrofanov/Korolkov/Dolgov 1983



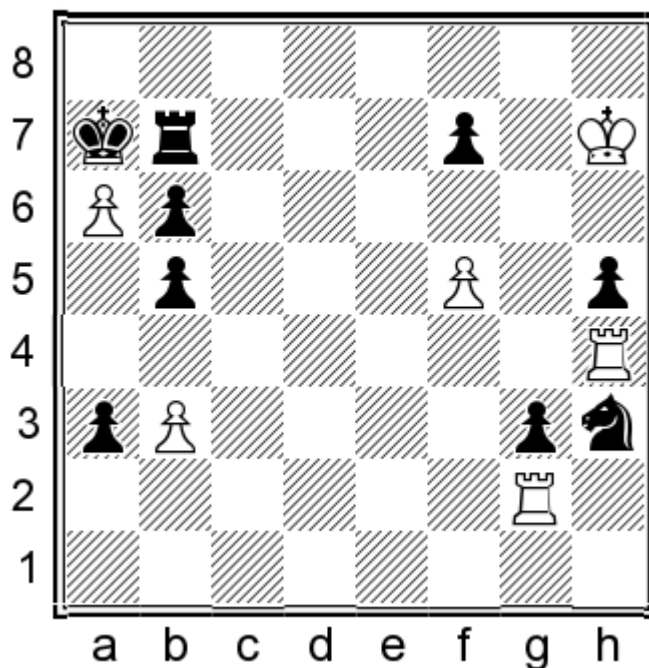
White to play and win

Korolkov and Mitrofanov had worked on this theme before. This is the final version.

1.Rc2 Nd3 2.Rd4 Ne1

The scheme becomes clear. On each move, the knight attacks one of the rooks, who are at a knight jump's distance from each other.

3.Re2 Nf3 4.Rf4 Ng1 5.Rg2 Nh3 6.Rh4

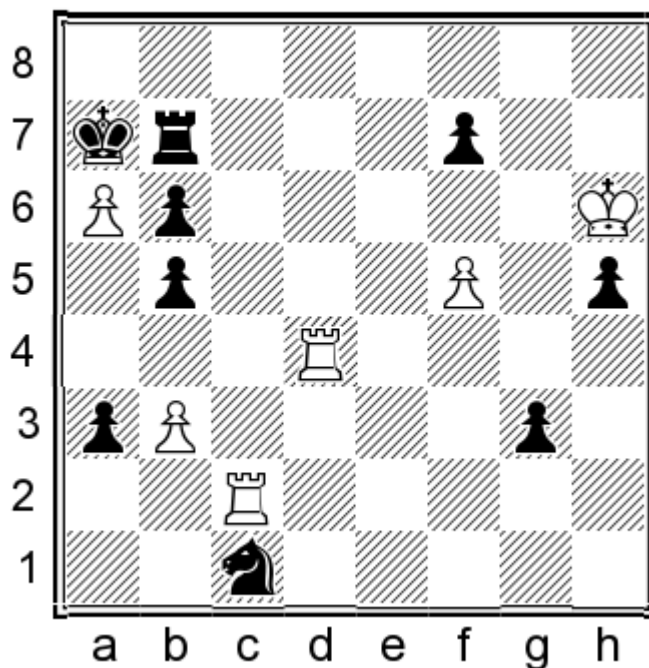


The end of the first phase. The black knight has to give check, and then it will harass the white rooks from the other side.

6...Ng5+ 7.Kh6!

The only time that the king attacks the knight.

7...Nf3 8.Rf4 Ne1 9.Re2 Nd3 10.Rd4 Nc1 11.Rc2



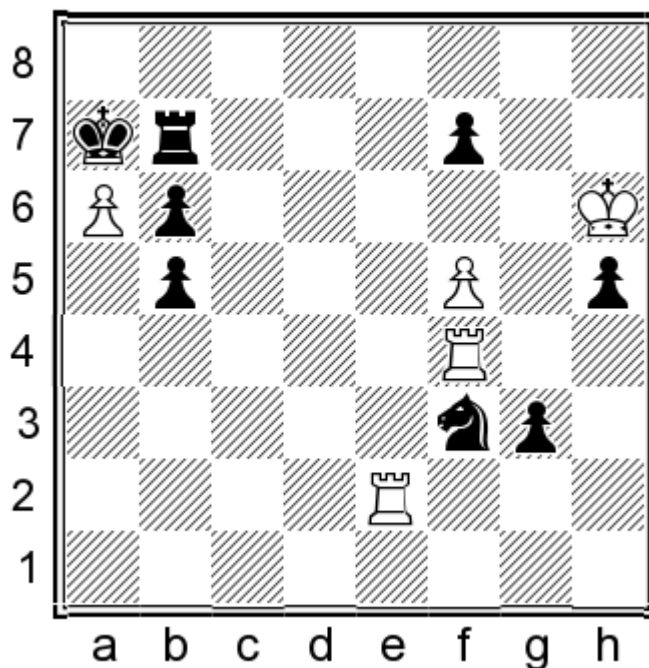
11...Nxb3

The first capture. A few skirmishes follow, and then the third phase starts: the knight is driven towards the kingside again.

12.Rb4 a2

With this pawn sacrifice Black again safeguards the c1-square for the knight.

13.Rxa2 Nc1 14.Rc2 Nd3 15.Rd4 Ne1 16.Re2 Nf3 17.Rf4



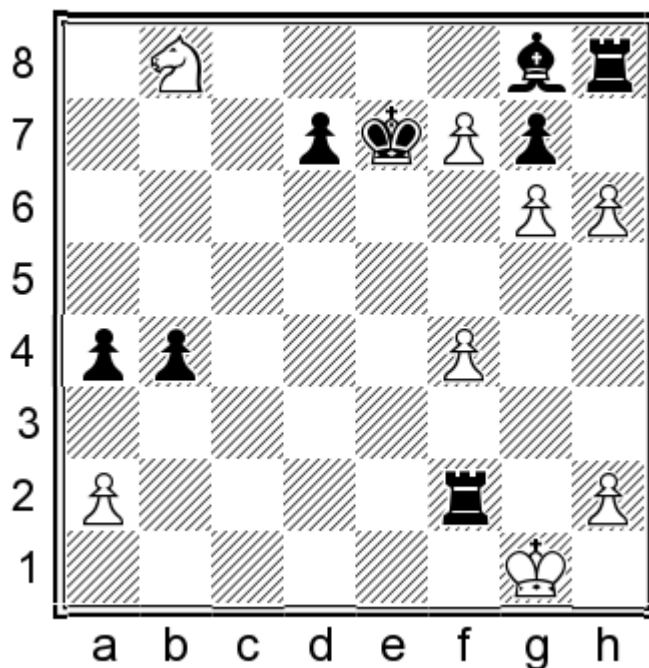
The end of the third phase. Black must give his g-pawn to gain control of the square e1 for the knight. And then the knight will travel all the way back to the queenside for the last time.

17...g2 18.Rxg2 Ne1 19.Re2 Nd3 20.Rd4 Nc1 21.Rc2 Nb3 22.Rb4
And wins.

This study was awarded the special prize of the 'Friendship Tournay'.

So far I have exclusively dealt with studies where both kings largely refused to take part in the battle. Only the last study, the long one, contained a king move. In the others, the kings were on squares where they could be mated or stalemated. Play becomes more lively when one of the kings is involved in the systematic manoeuvres.

Gurgenidze, 'Shakhmaty v SSSR' 1974



White to play and win

In his book *Chess Curiosities*, Tim Krabbé categorizes this study under the heading ‘Prokes Manoeuvre’. He had good reasons for this, but it seems to me that this is also a striking example of systematic manoeuvring.

1.hxg7

Now Black has to try to sacrifice his rook on h8. This can only be done by first offering the other rook as a gift.

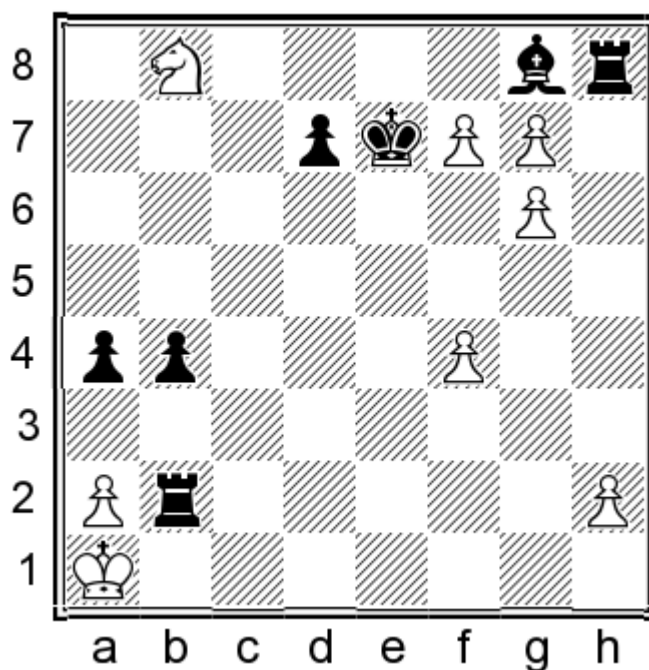
1...Rg2+ 2.Kf1!

White does not accept the rook sacrifice. Only at the end of the study will we see why.

2...Rf2+ 3.Ke1

The king continues its march to the queenside.

3...Re2+ 4.Kd1 Rd2+ 5.Kc1 Rc2+ 6.Kb1 Rb2+ 7.Ka1

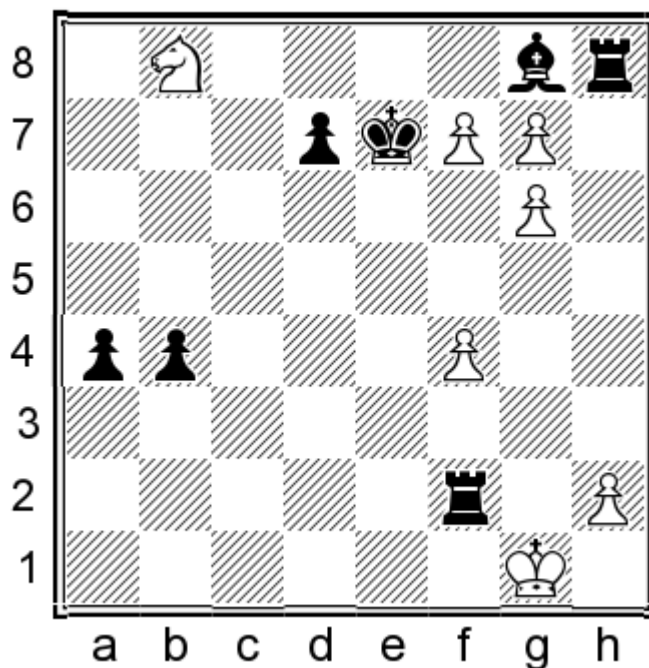


The corner square is reached. Black has to take the a-pawn.

7...Rxa2+ 8.Kb1

And now – back to the kingside again.

8...Rb2+ 9.Kc1 Rc2+ 10.Kd1 Rd2+ 11.Ke1 Re2+ 12.Kf1 Rf2+ 13.Kg1



The same position is reached as after White's first move, but now without the white a-pawn.

13...Rg2+ 14.Kxg2!

Now he can.

14...Rxh2+

Finally Black can sacrifice his 'Prokes rook'.

15.Kxh2 Bxf7 16.gxf7 Kxf7 17.Nxd7

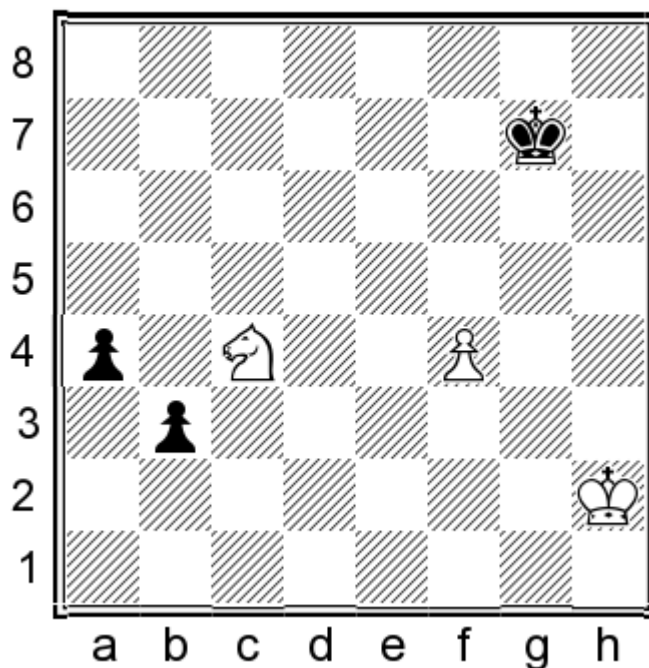
The tension rises. Can the knight stop the enemy passed pawns?

17...b3

In the event of 17...a3, White blocks the pawns by 18.Nc5 a2 19.Nb3.

18.Ne5+ Kxg7 19.Nc4

Only now does the sense of White's long king manoeuvre become clear.

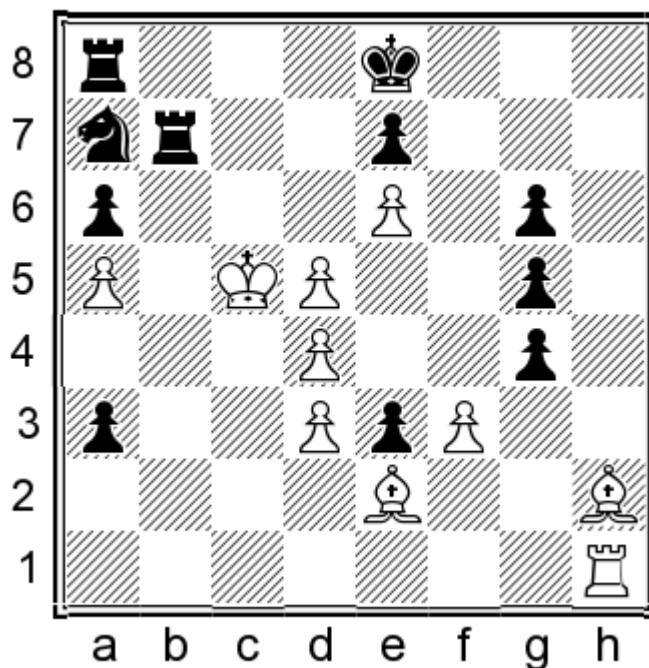


If the white pawn were still on a2, then Black would capture on a2 here and win. By sacrificing the pawn, White has ultimately succeeded in blocking the black passed pawns. Amazingly, White would even have lost if he had played 2.Kxg2?.

19...b2 20.Na3 and White wins.

In the following study, the white king eventually captures the rook for another reason.

Timman 2011



White to play and win

Black is threatening to castle queenside.

1.Bb8!!

The only way to prevent this.

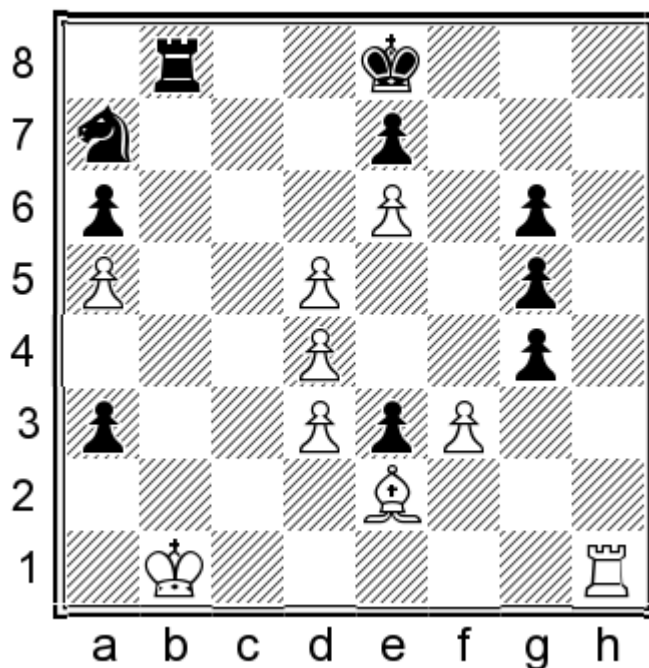
1...Rb5+ 2.Kc4 Rb4+ 3.Kc3!

The time still isn't right to capture the rook.

3...Rb3+ 4.Kc2! Rb2+ 5.Kc1 Rb1+ 6.Kxb1

Only now.

6...Rxb8+



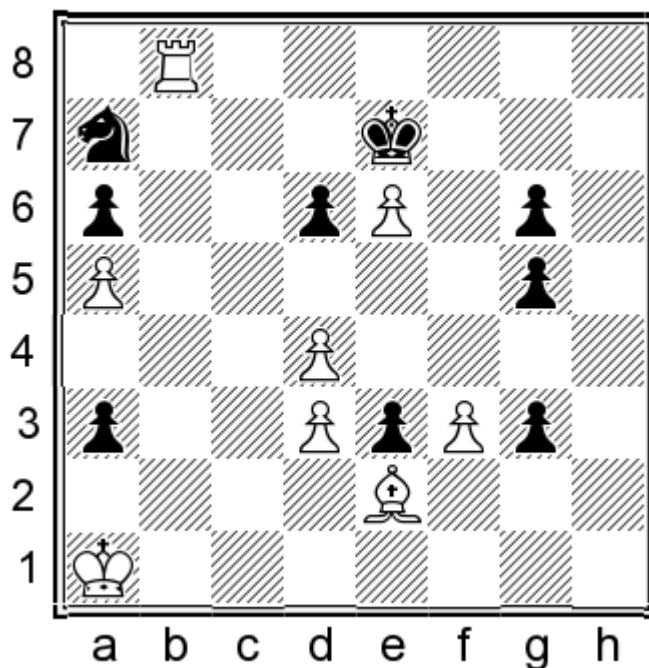
7.Ka1!

The king has to go to the corner square. The reason for this will become clear later.

7...Kd8 8.d6!

Thus White wins a rook. But that does not mean the game is over.

8...exd6 9.Rh8+ Ke7 10.Rxb8 g3



Black's passed pawns are dangerous. White has to play extremely accurately to safeguard the win.

11.d5!

Creating a dangerous passed pawn for himself. Now it becomes clear why the white king has to be on a1. If White had played 7.Ka2, there would have followed 11...g2 12.Rb1 Nb5 here. Because of the possibility of a check on c3 Black would have sufficient counterplay.

11...Nb5 12.Rb7+ Kf8

After 12...Kf6 13.d4! the black king would land up in a mating net.

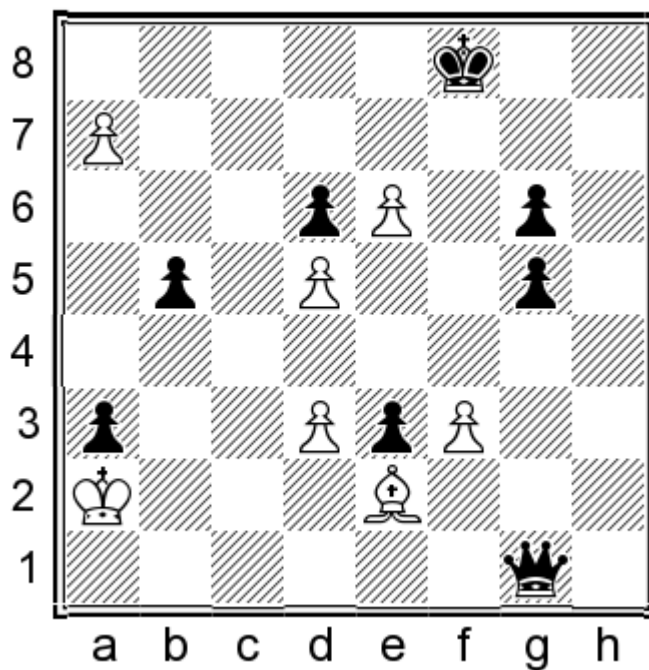
13.Rxb5!

The a-pawn will decide the issue.

13...axb5 14.Ka2

Obviously, White could also push the a-pawn first.

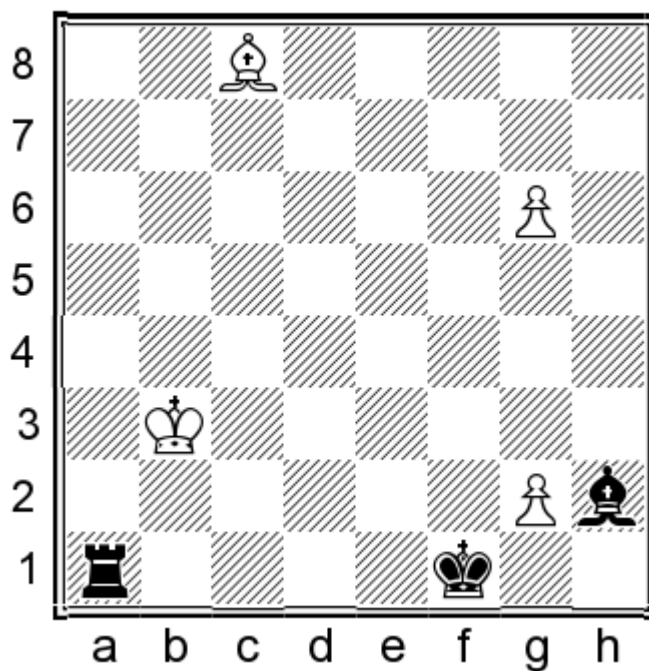
14...g2 15.a6 g1Q 16.a7



The promotion cannot be prevented. White wins.

The battle between king and rook can also take place from a distance, as we can see in the following study.

Dolgov, 'Shakhmaty v SSSR' 1966



White to play and win

The pivotal question in this miniature is whether the black rook will be able to stop the g-pawn.

1.g7 Rb1+ 2.Ka4!

The king has to move up. After 2.Kc2 Rb2+! 3.Kd3 Rb3+ the black rook will reach the g3-square.

2...Ra1+ 3.Kb5 Rb1+ 4.Ka6

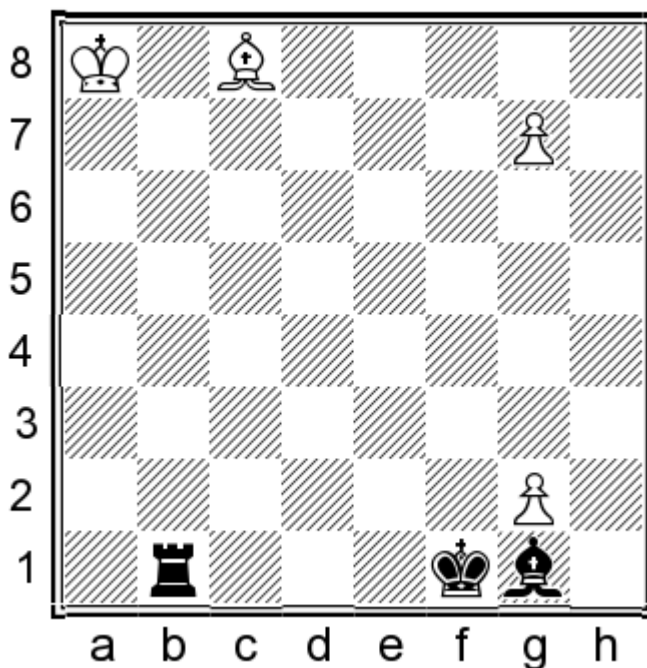
The king strolls on in zigzag fashion. For the time being, the purpose of this manoeuvre is totally unclear.

4...Ra1+ 5.Kb7 Rb1+ 6.Ka7

Suddenly the king moves to a dark square. Now, on 6...Ra1+ 7.Ba6+ wins, so the black bishop has to give check.

6...Bg1+ 7.Ka8!

The corner square is reached. Now White's plan will become clear soon.



7...Ra1+ 8.Kb8

Again forcing Black to check with the bishop.

8...Bh2+ 9.g3!!

This little move is what it was all about. The long manoeuvre with the king was necessary to make it possible. Black has to accept the pawn sacrifice.

9...Bxg3+ 10.Kb7 Rb1+ 11.Ka6

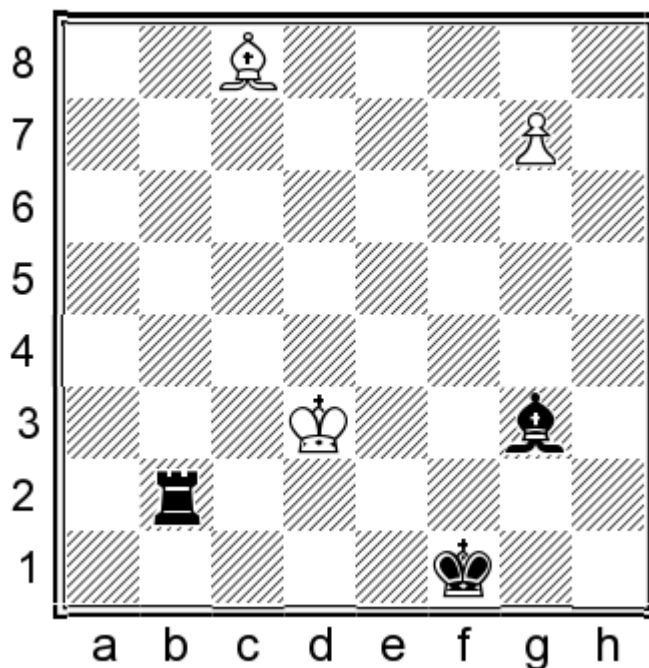
Now that the g3-square is blocked for the black rook, the king travels the long way back.

11...Ra1+ 12.Kb5 Rb1+ 13.Ka4 Ra1+ 14.Kb3

Step-by-step the king has arrived downstairs, and now it is ready to move to the kingside.

14...Rb1+ 15.Kc2 Rb2+ 16.Kd3

Now he can.

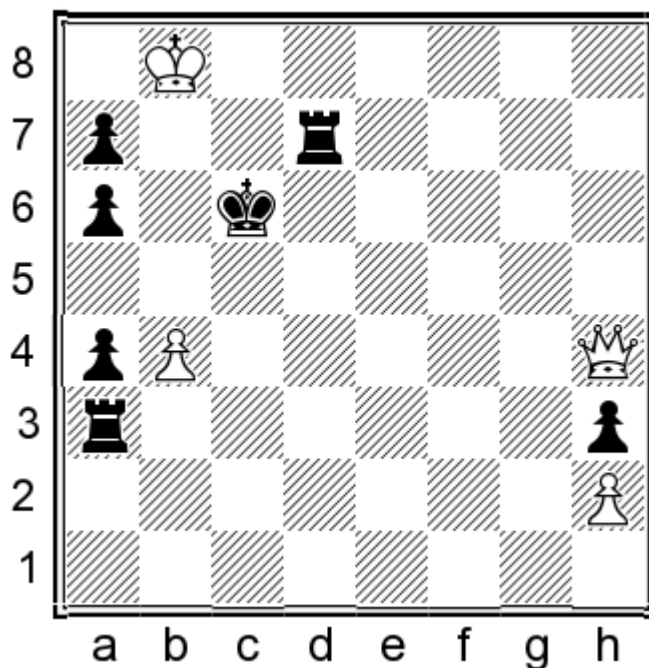


The black bishop blocks the g3-square.

16...Rb3+ 17.Ke4 Rb4+ 18.Kf5 Rb5+ 19.Kg4 and wins.

There are also studies possible where both kings are involved in the systematic manoeuvre.

Dolgov/Kuznetsov, 'Burevestnik' 1974



White to play and win

In general, two rooks are stronger than a queen. However, here White has the initiative, and he has to hold onto it.

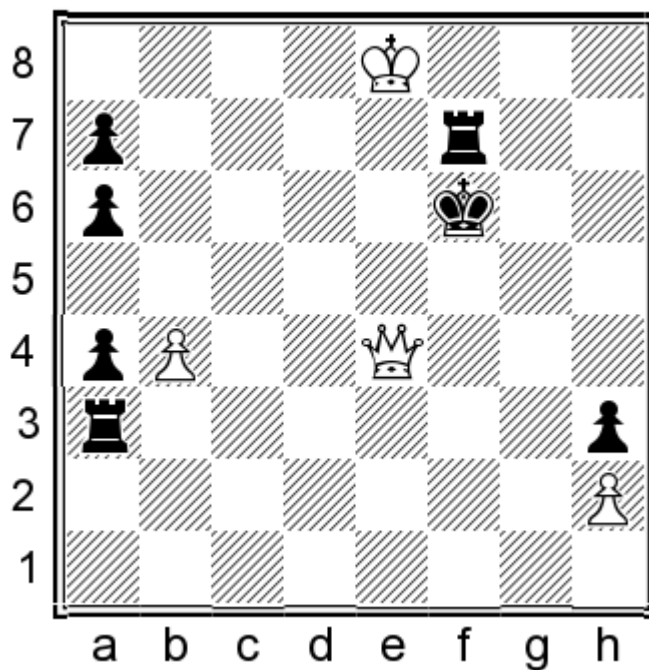
1.Qc4+ Kd6 2.Kc8

Forcing the rook to step aside.

2...Re7 3.Qd4+ Ke6 4.Kd8

The queen and king are cooperating effectively. The enemy king is driven to the kingside.

4...Rf7 5.Qe4+ Kf6 6.Ke8

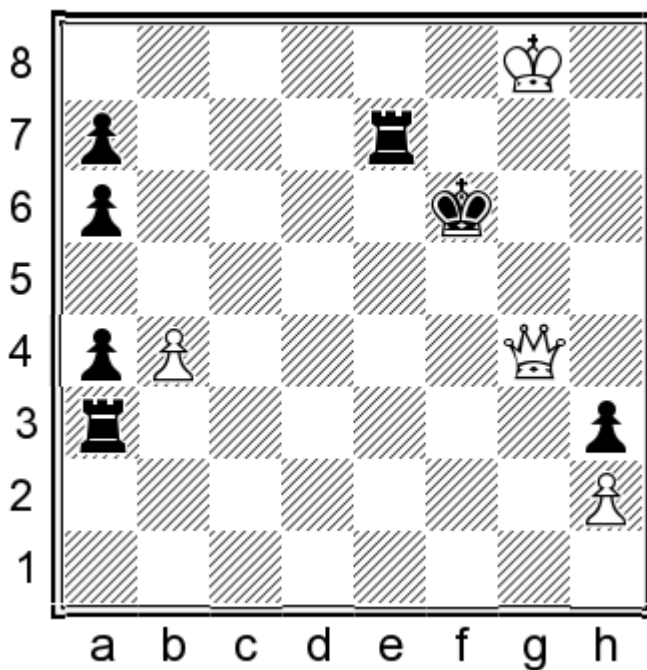


All very systematic.

6...Rg7 7.Qf4+ Kg6 8.Kf8 Rh7 9.Qg4+

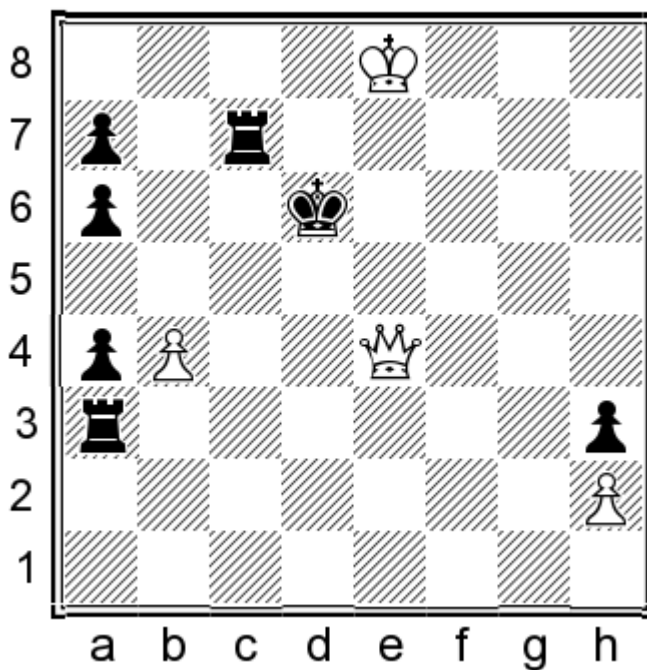
9.Qe4+ was also sufficient, but it would slow down the winning process.

9...Kf6 10.Kg8 Re7



The systematic manoeuvre now continues in the opposite direction.

11.Qf4+ Ke6 12.Kf8 Rd7 13.Qe4+ Kd6 14.Ke8 Rc7

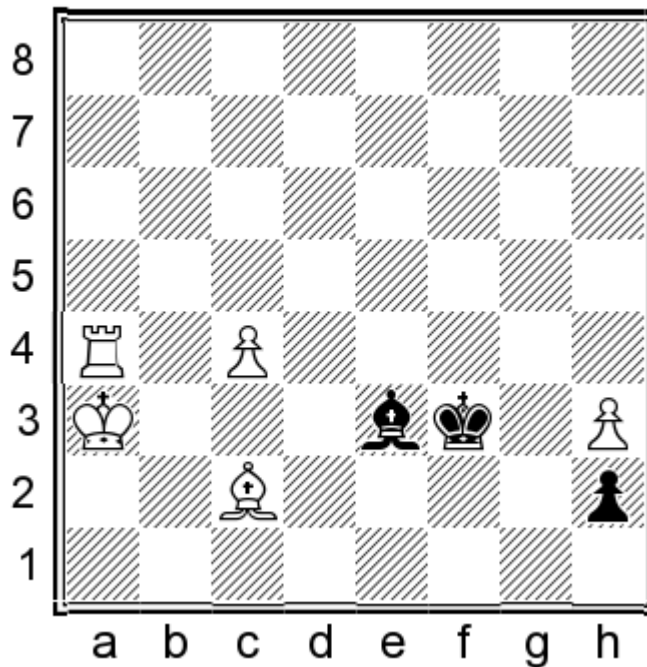


How to go on from here?

15.Qf4+! Kc6 16.Qc1+

This is what it was all about. White wins the other rook.
Especially beautiful are those studies where king, rook and bishop work together.

Korolkov, 'Shakhmaty v SSSR' 1964



White to play and win

White is a rook up, but how can he prevent the promotion of the enemy h-pawn?

1.c5

Covering e4 for the bishop.

1...Bxc5+ 2.Ka2!

The only square for the king. The square b3 must be kept free for the bishop.

2...Bd4!

A fantastic defence. 3.Rxd4 is met by 3...h1Q 4.Be4+ Ke3 5.Bxh1 Kxd4, when White is left with the wrong bishop.

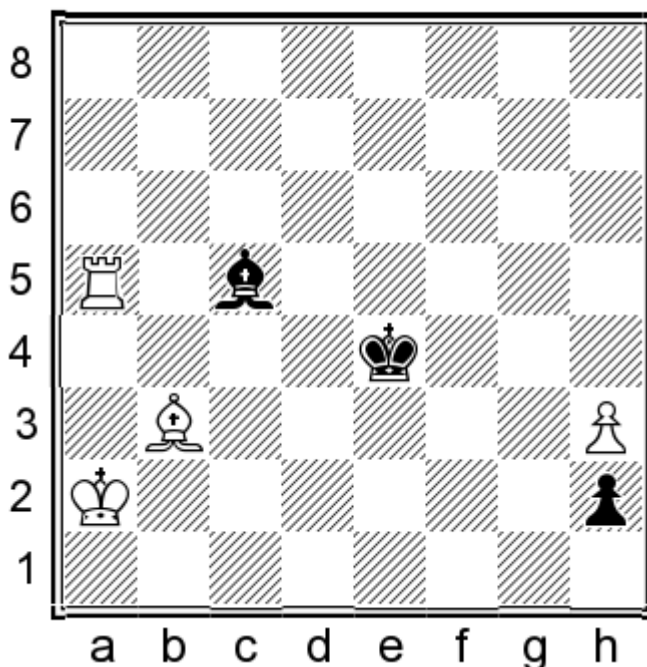
3.Bb3

The bishop is crawling up. Now Black has to protect the d5-square.

3...Ke4 4.Ra5

The rook also crawls up.

4...Bc5!



Again Black tries to lure the rook to a critical square.

5.Ba4!

White carries on with the systematic manoeuvre regardless. His bishop stills aims for a square on the long diagonal.

5...Bb6 6.Ra6!

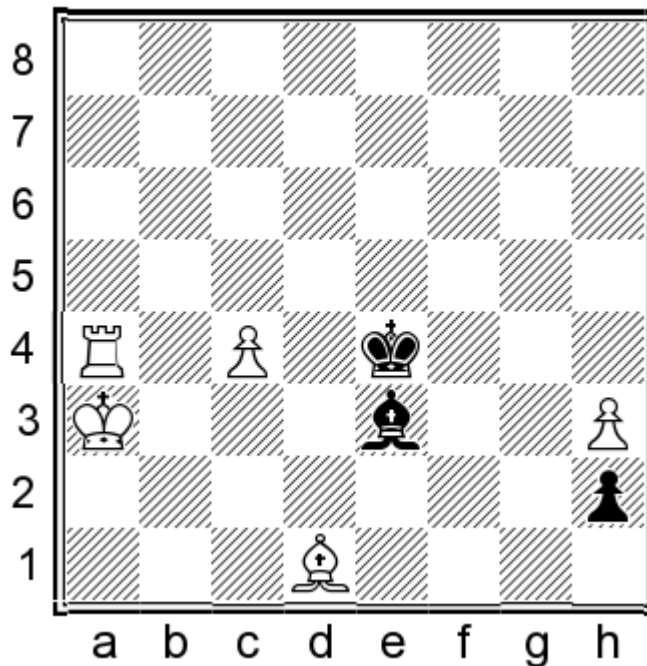
Now this is possible. The black king is drawn outside the square of the white h-pawn.

6...h1Q 7.Bc6+ Kd4 8.Bxh1 Kc5 9.h4 and wins.

Korolkov received 4th prize for this study in the tourney of the Russian chess magazine.

The study is impressive, but I felt that it could be improved.

Korolkov 1964 (version Timman 2009)



White to play and win

In this setting, too, the white bishop has to try to reach the long diagonal. However, White cannot give check, since after 1.c5+? Bd4 he cannot win.

1.Bc2+ Kf3 2.c5

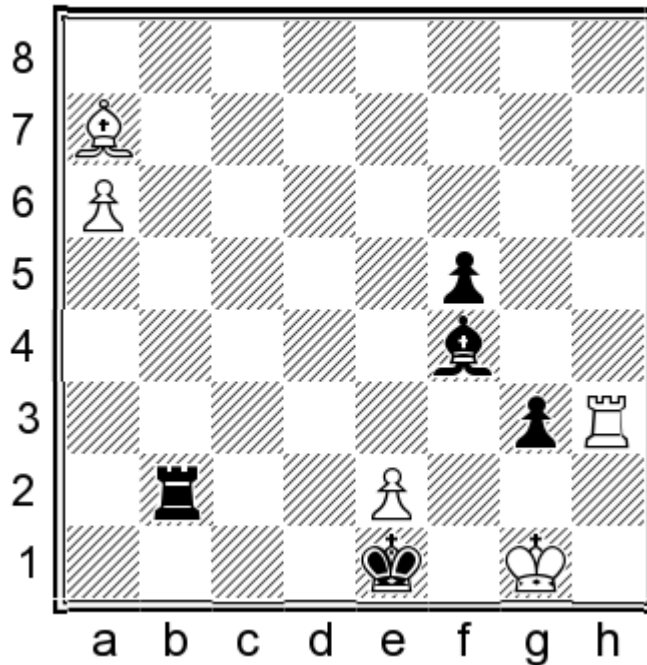
Now he can.

2...Bxc5+ 3.Ka2 Bd4 4.Bb3

And the rest is well known. In this version the white bishop travels the entire route along the short diagonal d1-a4.

There is a study by Bron that greatly impressed me. Unfortunately it turned out to be incorrect.

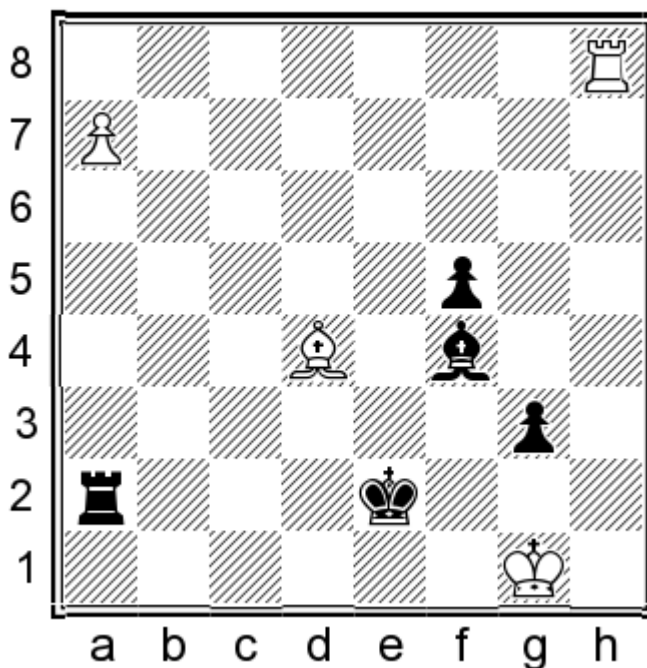
Bron, Galitzky Memorial 1964



White to play and win (incorrect)

The intended solution runs as follows:

1.Bd4 Ra2 2.a7 Kxe2 3.Rh8



3...Be5

With this move Bron starts a systematic manoeuvre. However, Black could have achieved a draw with 3...Kd3!. The point is that after 4.Bc5 Kc4 5.Rc8 he has time to improve the position of his bishop with 5...Bg5!. White can try a few things, but there is no win.

4.Re8 Kd3 5.Bc5 Bd6 6.Rd8 Kc4

So far, the systematic manoeuvre is correct. But now 7.Be3 suffices for the win.

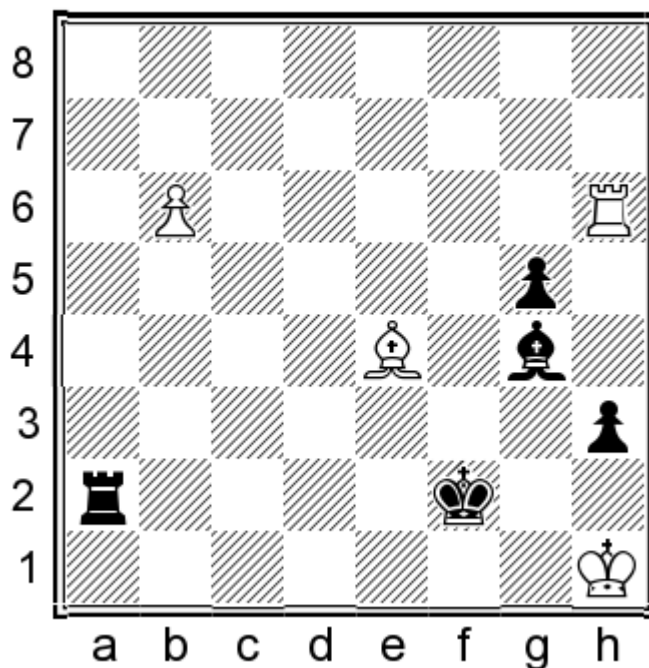
7.Bb6

This is also possible.

7...Bc7 8.Rc8 Kb5 9.Bd4 Kc4 10.Be3 Kd3 11.Bc5 Ra1+ 12.Kg2 Ra2+ 13.Kf3 Rf2+ 14.Bxf2 gxf2 15.Kg2 Ke2 16.Re8+ and wins.

Of course it is a great pity that such a study should be incorrect. I delved deeper into the matter, trying to find a way to save this fantastic systematic manoeuvre. In the end I found the solution: the structure must be shifted one file to the right.

Timman 2011



White to play and win (correction of a study by Bron)

The situation of the white king looks a little precarious. However, his passed pawn is strong enough.

1.b7 Rb2 2.Rh8

Threatening to promote the pawn. Black must attack the white bishop.

2...Bf5

Neither was 2...Ke3 sufficient. After 3.Bd5 Kd4 4.Rd8 White wins effortlessly.

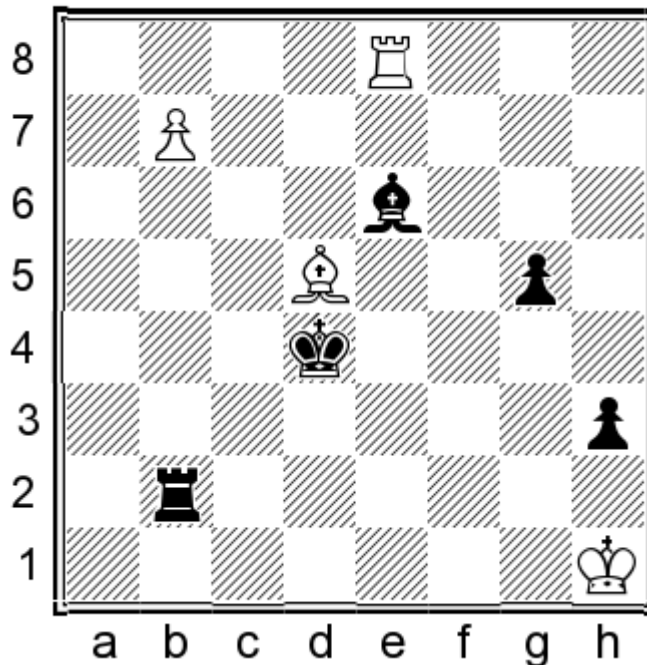
3.Rf8

Pinning the bishop, and so Black, in turn, must attack the white bishop again.

3...Ke3 4.Bd5! Be6 5.Re8!

The pattern is repeated.

5...Kd4



6.Bc6!

In these circumstances this is the only move. On 6.Bf3 Black has the saving move 6...g4.

6...Bd7 7.Rd8!

For the third time, the bishop is pinned.

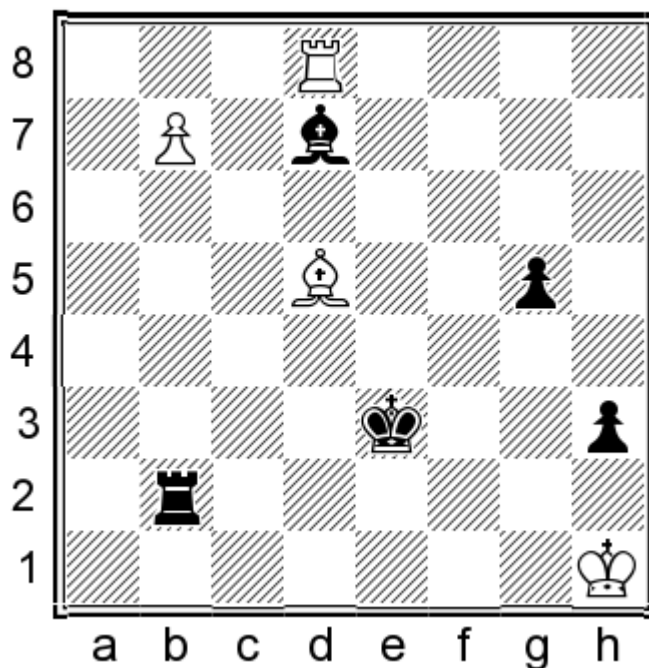
7...Kc5

And again, the counterattack.

8.Be4! Kd4

Black must attack the bishop with the king, since after 8...Bf5 9.Rd5+ he would lose immediately.

9.Bf3 Ke3 10.Bd5



Finally Black is outmanoeuvred. He can still try a bishop move.

10...Be6 11.Bc6

And now what's left is two spite checks.

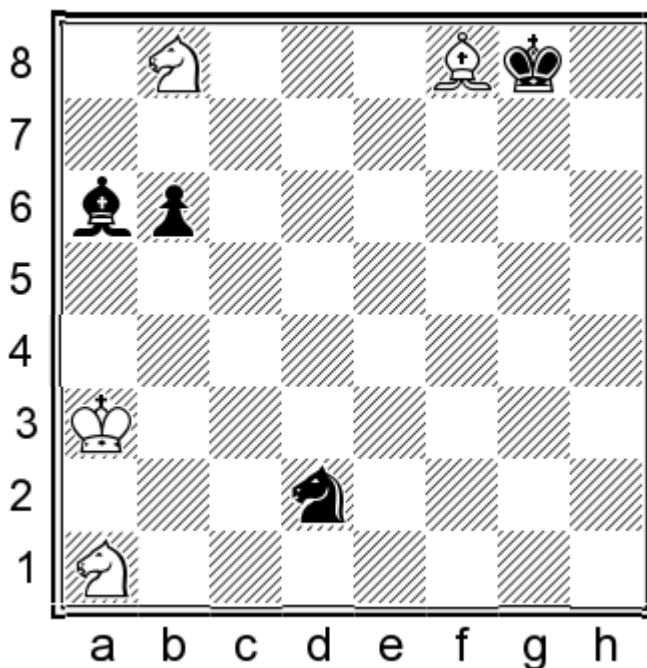
11...Rb1+ 12.Kh2 Rb2+ 13.Kg3

And wins.

When Benkö turned 80, he organized an endgame study tourney, where the condition was that no captures should be made during the first 8 moves of the main line. This study has a phase of 13 moves, where there is only manoeuvring. It seems to me that all the elements of Bron's study have been preserved.

Also interesting is the struggle between king and minor piece.

Katsnelson, Herbstman Centennial 2001



White to play and win

Both sides' bishops are hanging. White must not only preserve his bishop, but he also has to win an enemy piece – otherwise he won't have enough winning potential.

1.Bh6

Forcing Black to give check.

1...Nc4+ 2.Kb4

Now Black cannot move away his bishop, as then the knight on c4 will be lost. Therefore he has no choice but to attack the bishop with his king.

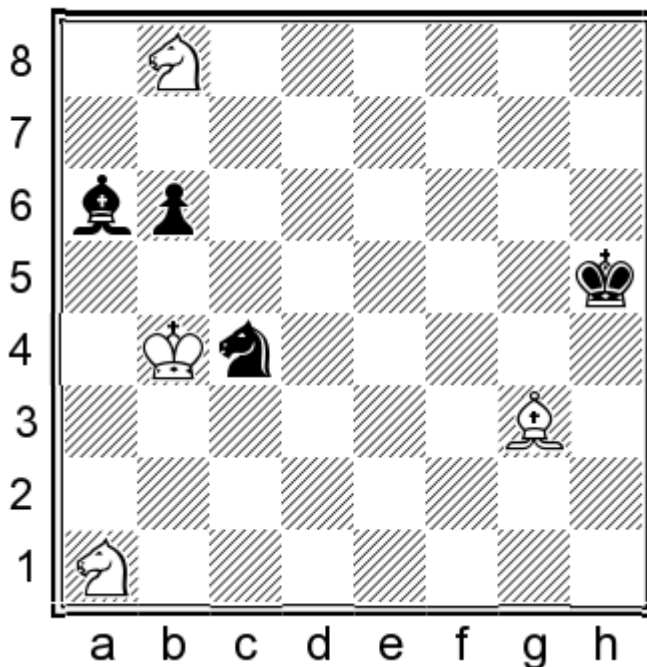
2...Kh7 3.Bg5!

The only square. 3.Bf4 would be met by 3...Nb2, whereas after 3.Bc1 Black would have a way out with 3...Ne5. The bishop must stay outside the range of knight checks.

3...Kg6 4.Bh4

The downward ladder movement.

4...Kh5 5.Bg3



The bishop will only find safe squares on the g- and h-files.

5...Kg4 6.Bh2 Kh3 7.Bg1 Kg2 8.Bd4

After the bishop has climbed down the entire ladder, it sets off for a centre square where it is relatively safe.

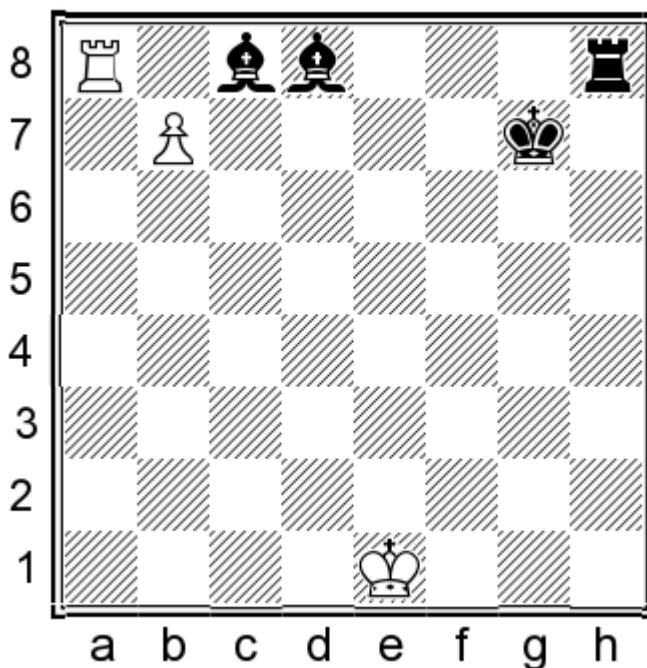
8...Na5

Another resource. After 9.Nxa6 Nc6+ 10.Kc3 Nxd4 11.Kxd4 b5! White can't win since the black b-pawn is not blocked on the right square. Then the knight pair is powerless in the fight against the king.

9.Bxb6 Nc4 10.Bd4 1-0

A struggle between king and two bishops is also possible.

Liburkin, 'Sachove Umeni' 1946



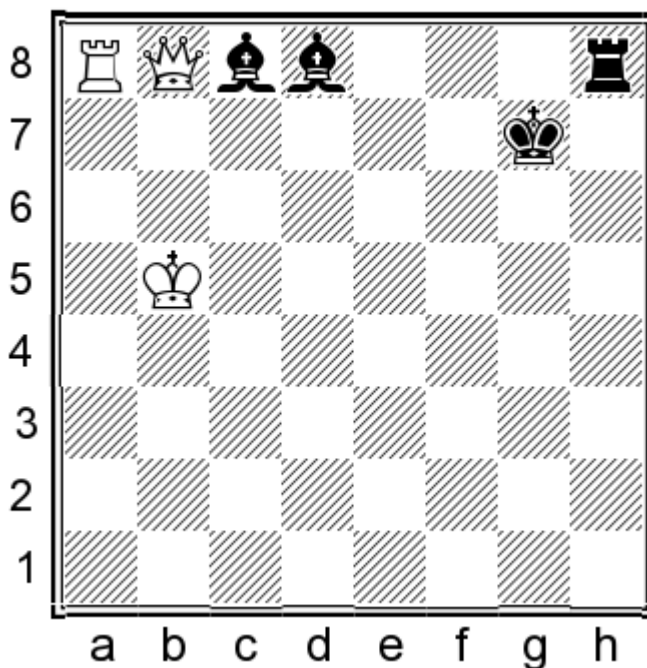
White to play and win

White wants to promote his pawn, but he must watch out that the newly-born queen is not captured by the black rook after a bishop check.

1.b8Q Bh4+ 2.Kd2

The king cannot go to a light square.

2...Bg5+ 3.Kc3 Bf6+ 4.Kb4 Be7+ 5.Ka5 Bd8+ 6.Kb5!



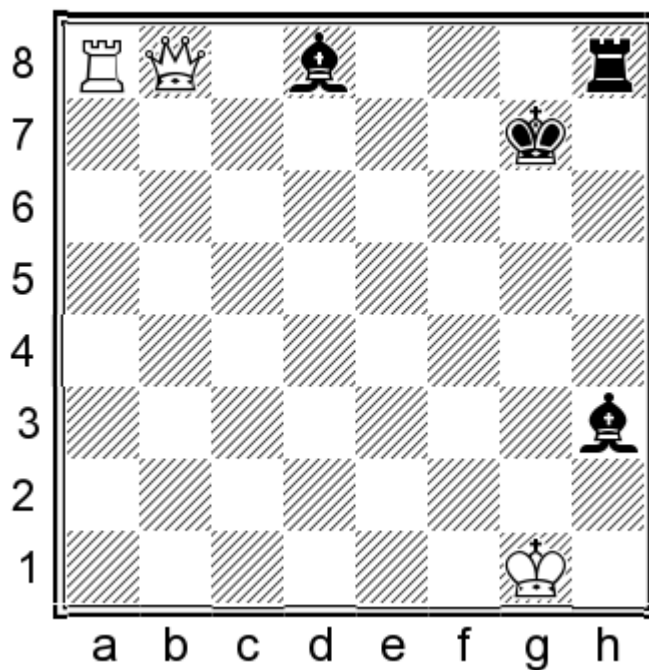
Only now that the king's bishop is blocking the 8th rank again, the light squares are available for the king.

6...Bd7+

The duel between the king and the queen's bishop starts. Now White has to avoid the dark squares.

7.Kc4 Be6+ 8.Kd3 Bf5+ 9.Ke2 Bg4+ 10.Kf1 Bh3+ 11.Kg1!

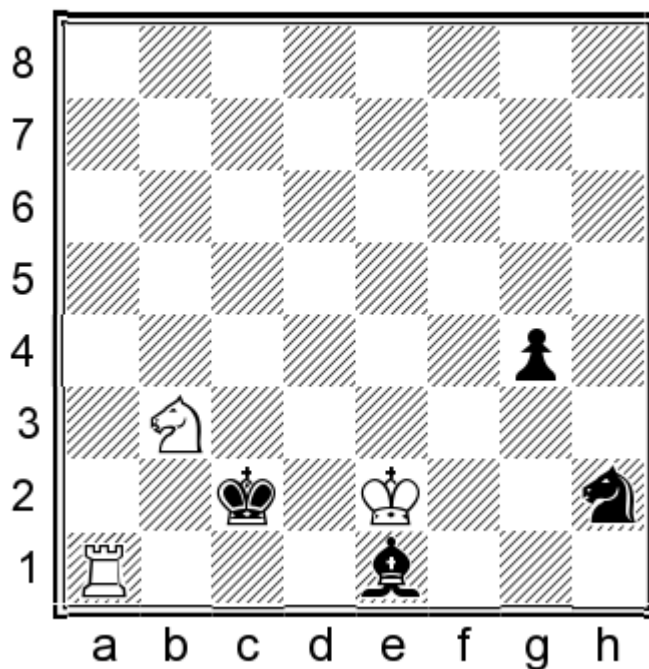
Finally the white king can move to a dark square again.



11...Bb6+ 12.Qxb6 Rxa8 13.Qb7+ 1-0

The struggle between king and knight is fascinating.

Liburkin, 'Shakhmaty v SSSR' 1938



White to play and win

The white knight and the black bishop are both under attack. By giving checks, White hopes to save his knight, and then to capture the bishop.

1.Nd4+ Kc3 2.Nb5+ Kc4!

Not 2...Kb4 in view of 3.Rb1+ and 4.Kxe1.

3.Nd6+ Kc5

Once more Black has to allow a knight check, as otherwise a rook check would follow.

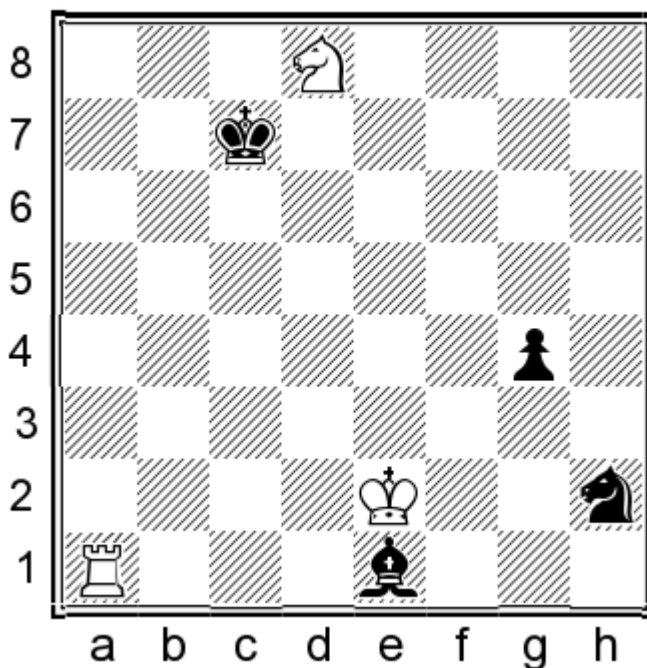
4.Nb7+

The knight has to move up further. With 4.Ne4+? Kd5 5.Nf6+ Ke5 6.Nd7+ Ke6 White would achieve nothing.

4...Kc6 5.Nd8+

The king-and-knight dance continues.

5...Kc7



The knight and king have reached the edge of the board. Now the systematic manoeuvre is continued in the direction of the kingside.

6.Ne6+ Kd7 7.Nf8+ Ke7

Black must keep avoiding rook checks.

8.Ng6+ Kf7 9.Nh8+!

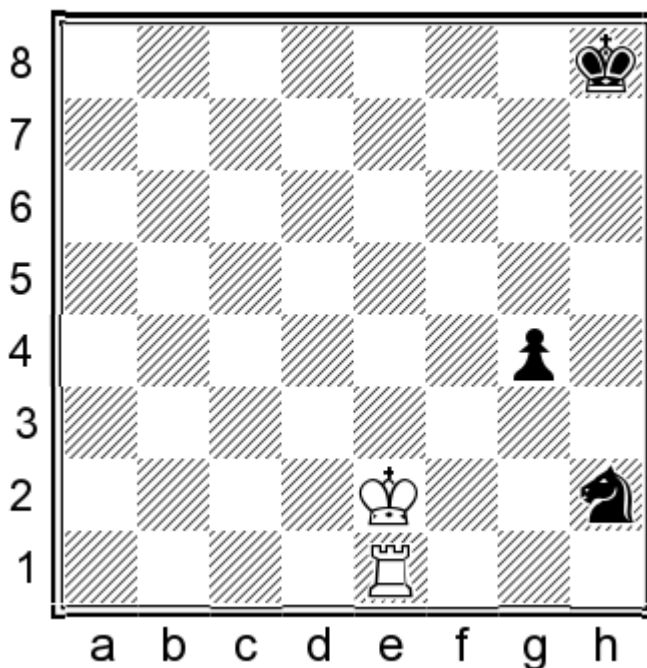
The ninth and last check! White allows his knight to be caught in the corner in order to conquer the enemy knight with tactical tricks.

9...Kg7 10.Rxe1

Finally White finds time to capture the bishop.

10...Kxh8

The finish contains a few more attractive points.



11.Rh1 g3 12.Ke3!

Now the white king is going to collect the g-pawn via f4.

12...Kg7

The king moves out, just too late to save the knight.

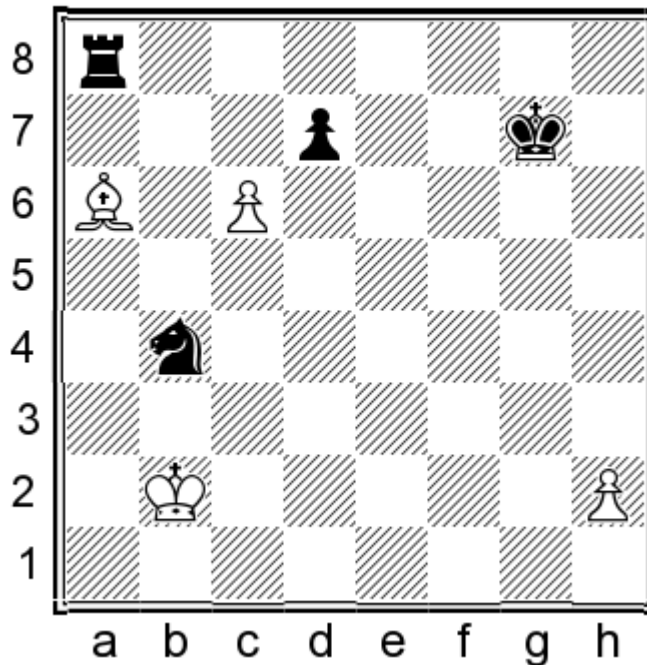
13.Kf4 g2 14.Rg1 Nf1 15.Rxg2+

And wins. On the next move White plays 16.Rf2, after which the knight is lost.

For this study Liburkin received 4th prize; a scant reward for such an extraordinary idea.

I started investigating in what circumstances the duel between the king and knight could take place. The knight must be supported by a rook. Only then is the enemy king forced to attack the knight diagonally in order to avoid rook checks. The board has to be almost empty. This is in fact a necessary condition for studies with systematic manoeuvres – space is needed.

Moreover, it seemed a good idea to add a theoretical endgame to the manoeuvres as a finale.



White to play and draw (after Liburkin)

White is a rook behind. He has to try to promote his c-pawn.

1.Bb7 Nd3+

The knight checks start. Insufficient for the win was 1...Ra2+ 2.Kb3 dxc6 3.Bxc6 Rc2 4.Bb5 and the knight is lost.

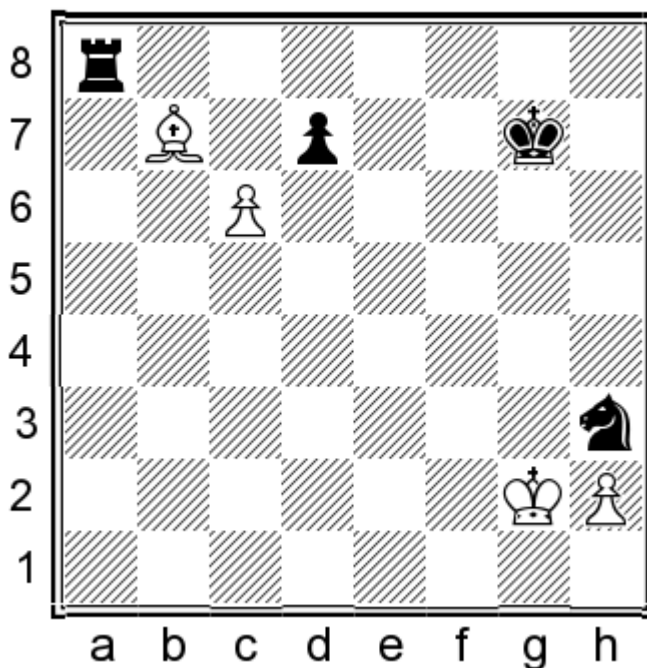
2.Kc2!

The diagonal attack. After 2.Kc3 Ra3+ Black would win.

2...Ne1+ 3.Kd2

The king-and-knight dance starts. First they move towards the kingside.

3...Nf3+ 4.Ke2 Ng1+ 5.Kf2 Nh3+ 6.Kg2



The first series of checks is finished, and now the king and knight move up.

6...Nf4+ 7.Kg3

Again White has to attack the knight diagonally. After 7.Kf3? Rf8 Black would have a winning discovered check at his disposal.

7...Nh5+ 8.Kh4!

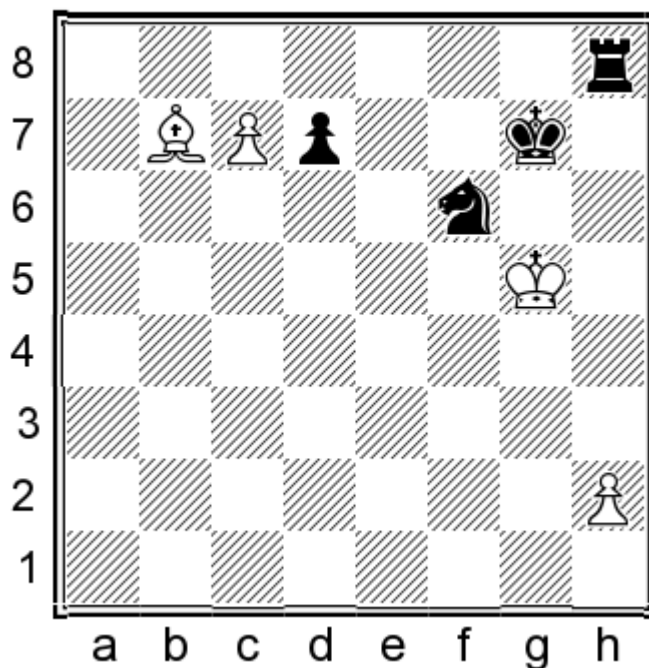
For the first time White avoids a knight check.

8...Rh8 9.c7

Now the discovered check is less dangerous. But Black can still make a serious winning attempt.

9...Nf6+ 10.Kg5

White must put his king in as active a position as possible.



10...Ne4+!

With this fine point Black reaches a rook versus bishop ending with one pawn on each side.

11.Bxe4 Rc8

A continuation of Chapter 2. White must push his passed pawn quickly, as otherwise the ending is a theoretical loss.

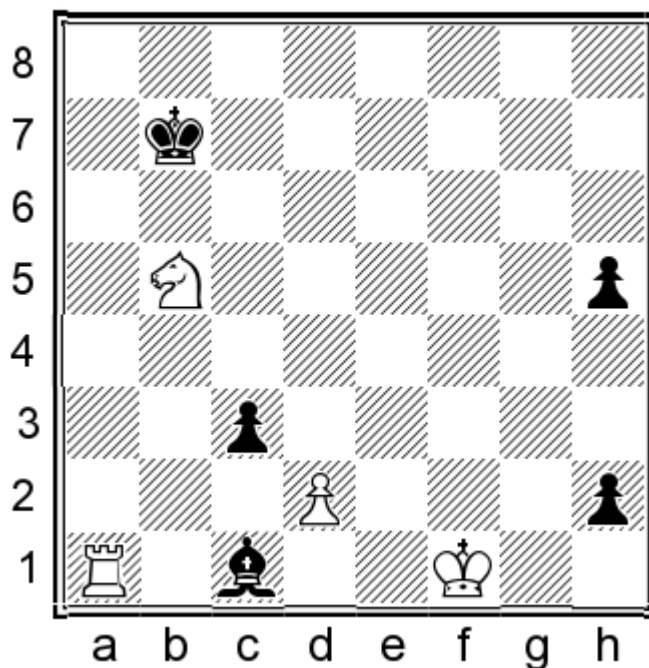
12.h4 Rxc7 13.h5 Rc5+ 14.Bf5

White must maintain his active set-up.

14...d6 15.h6+ with a draw.

In the end, just as in Liburkin's study, the main line contained nine knight checks; however, the final two were not thematic. I started looking for a study version with even more interesting content and more thematic knight checks.

Timman 2011



White to play and win

Before the ritual starts, White has to take some precautions.

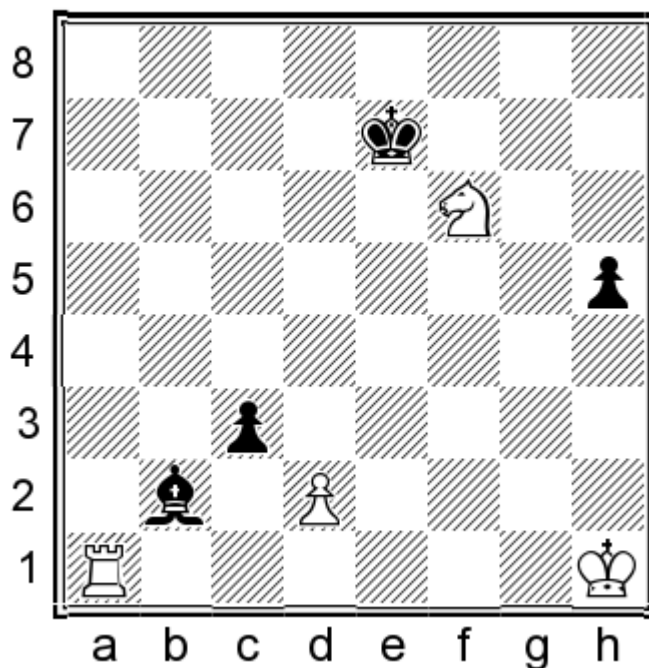
1.Kg2 h1Q+!

Black sacrifices a pawn in order to have more space for his king later on, when it has to travel the long road to the kingside.

2.Kxh1 Bb2 3.Nd6+

Starting the king-and-knight dance.

3...Kc7 4.Ne8+ Kd7 5.Nf6+ Ke7



6.Ng8+

The knight has to travel to the far edges of the board again.

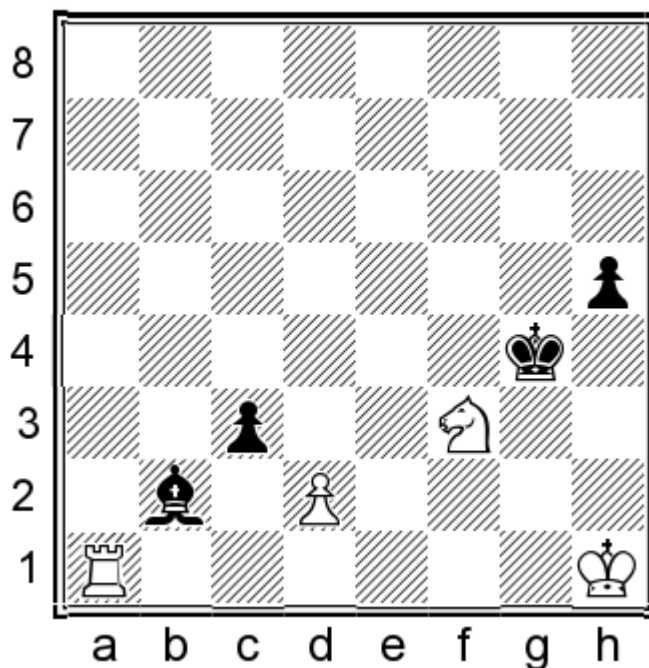
6...Kf7 7.Nh6+ Kg7 8.Nf5+ Kg6

Not 8...Kf6 on account of 9.Rf1, followed by a devastating discovered check by the knight.

9.Nh4+ Kg5

The h-pawn is in the way. Again, Black has to allow a thematic check.

10.Nf3+ Kg4



An important moment. Now the thematic try is 11.Nh2+. But with this ninth thematic check White would let the win slip through his fingers. Black would reply 11...Kh3, when the white rook cannot intervene decisively. For the win an extremely subtle move is needed:

11.Ra2!!

Highly unexpected. Now Black cannot take the knight, since after 11...Kxf3 12.dxc3 he would not have any good squares for his bishop.

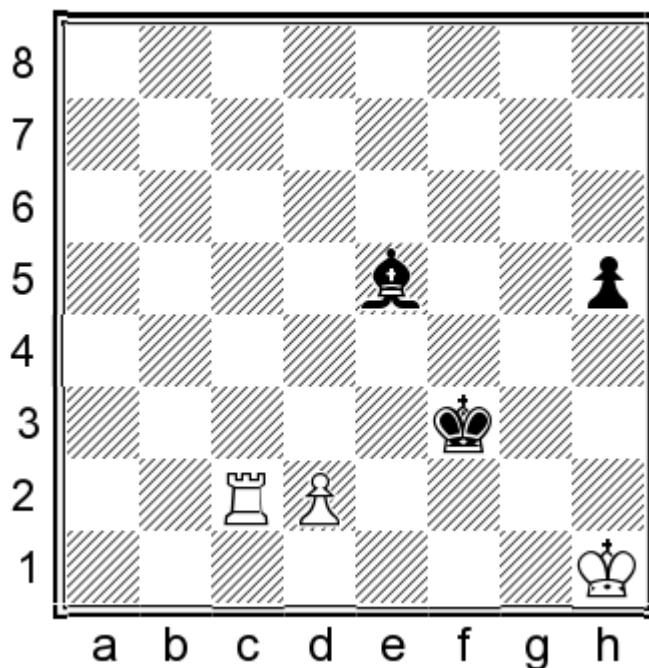
11...c2

The best chance. Now White has the same resource as in the previous study.

12.Ne5+! Bxe5

Again, his best chance. If the white knight reaches the d3-square, Black has nothing left to hope for.

13.Rxc2 Kf3



14.Rc4!

In this final phase too, White has to keep playing accurately. With the text he denies the black king access to the e-file.

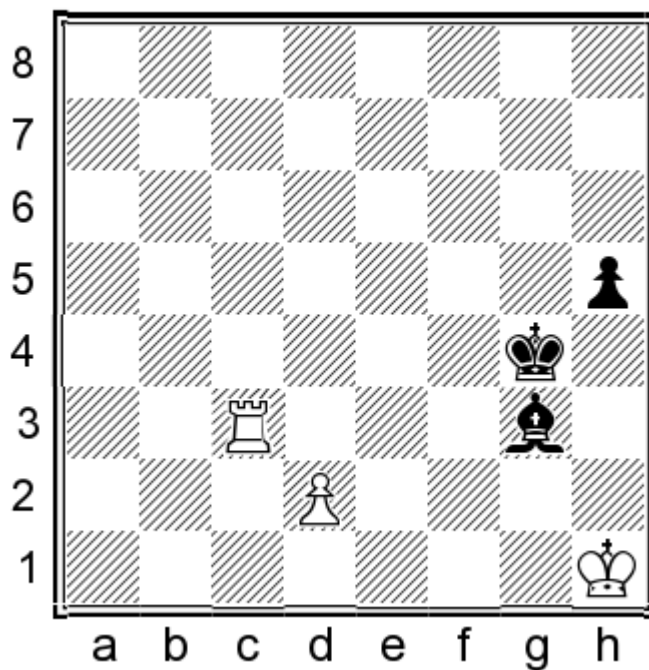
14...Bg3

Threatening 15...h4, when White cannot win.

15.Rc3+

Again the black king is cut off from the e-file.

15...Kg4



16.d4!

You can also start a game with this move, but in these circumstances, on an almost empty board, it can be quite effective. Black cannot stop the passed d-pawn any more.

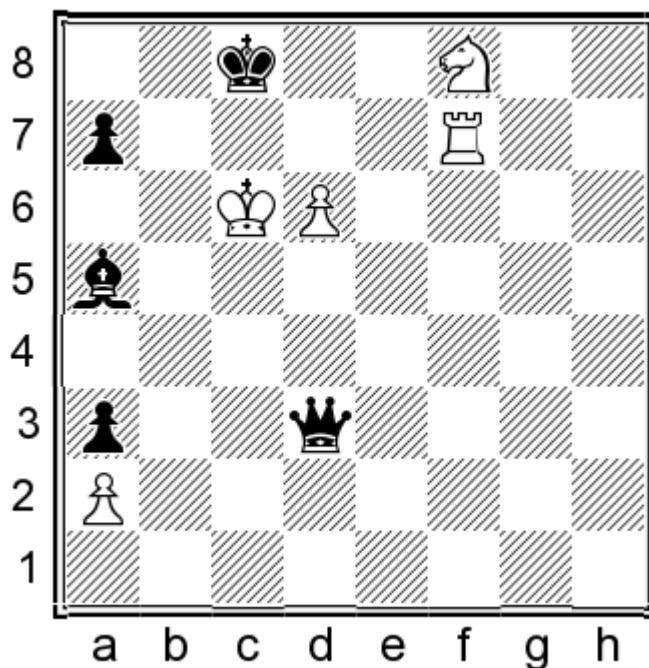
Chapter 12

The disappearing trick

In Chapter 7 I already touched on the theme of the present chapter: in a study variation one of White's pieces disappears – in other words: the same position arises as before, but now without a certain piece. The absence of this piece gives White extra possibilities. Such piece sacrifices are always spectacular. I have named this theme 'the disappearing trick' since it made me think of the work of an illusionist: you make something disappear and then a brilliant point follows.

Kubbel has made three studies where he used the disappearing trick to force stalemate.

Kubbel, 'Novoye Vremya' 1914



White to play and draw

The solution to this one is quite straightforward.

1.d7+

Forcing the king to step aside.

1...Kb8 2.d8Q+

First the pawn is sacrificed.

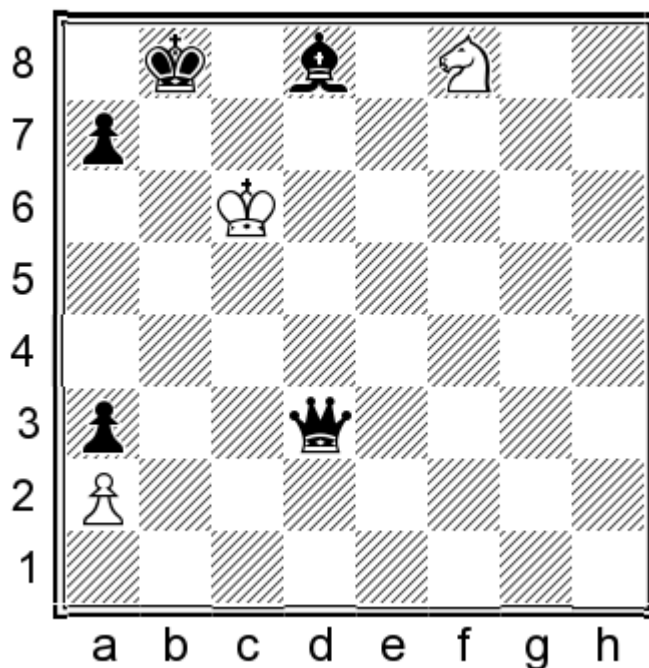
2...Bxd8

After 2...Qxd8 3.Nd7+, followed by 4.Rf8, White would immediately attain the draw.

3.Rb7+

Introducing the disappearing trick.

3...Kc8 4.Rb8+! Kxb8



On the board we have the same position as two moves ago, only now without the white rook. The stalemate is not far off now.

5.Nd7+ Kc8 6.Nb6+!

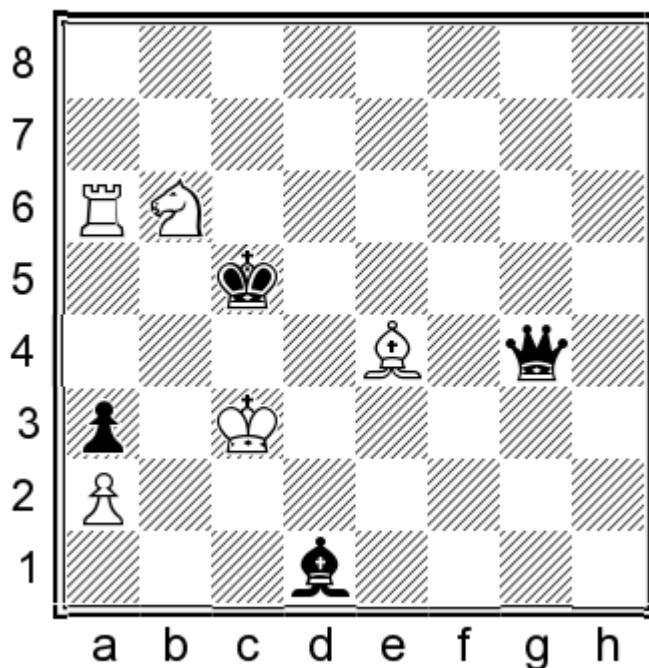
The third and last sacrifice. If Black does not take the knight, White will give perpetual check with it.

6...Bxb6

Stalemate.

This was a study without great surprises. More or less the same goes for the following study.

Kubbel, 'Bohemia' 1909



White to play and draw

Again White has to try to sacrifice all his pieces.

1.Nd7+

First the knight.

1...Qxd7 2.Rc6+ Kb5

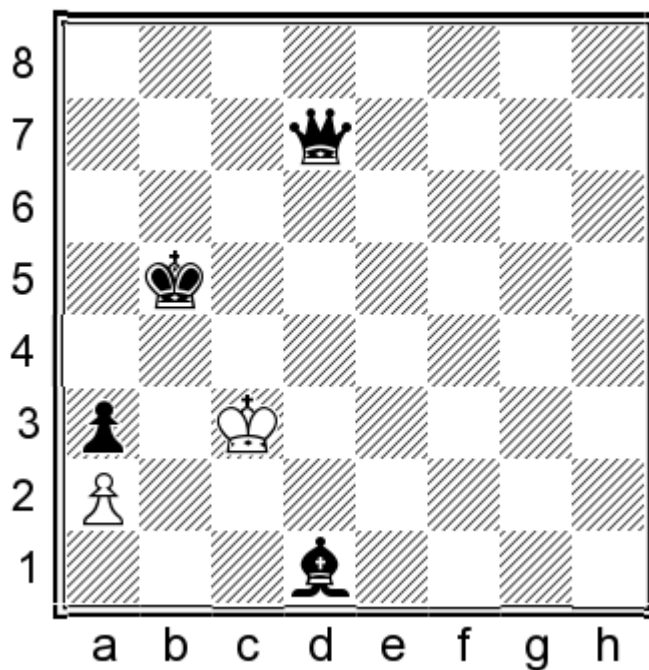
Without the rook and bishop this would be stalemate.

How does White get rid of these pieces?

3.Bd3+!

Black has to capture the rook, as otherwise he will be mated.

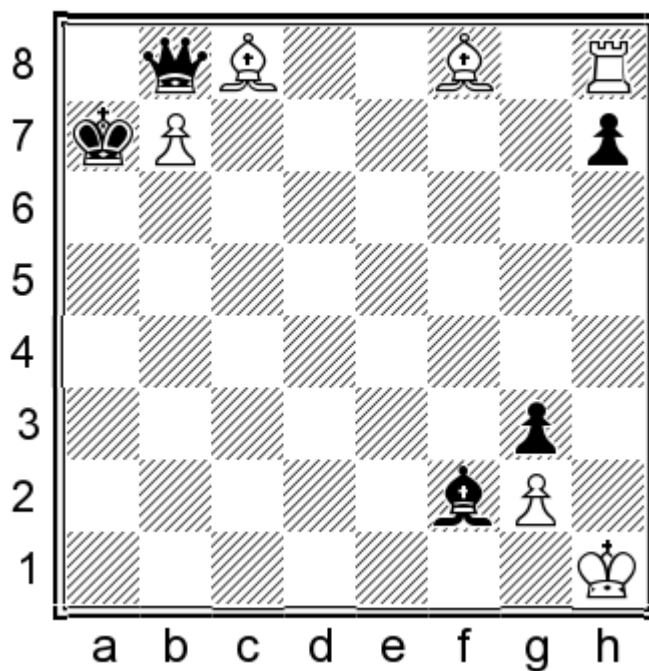
3...Kxc6 4.Bb5+! Kxb5



The rook and bishop have disappeared from the stage and White is stalemated.

The following study is of a higher calibre.

Kubbel, 'Deutsche Schachzeitung' 1907



White to play and draw

The white king is already in a stalemate position. He has to sacrifice his pieces in an accurate way.

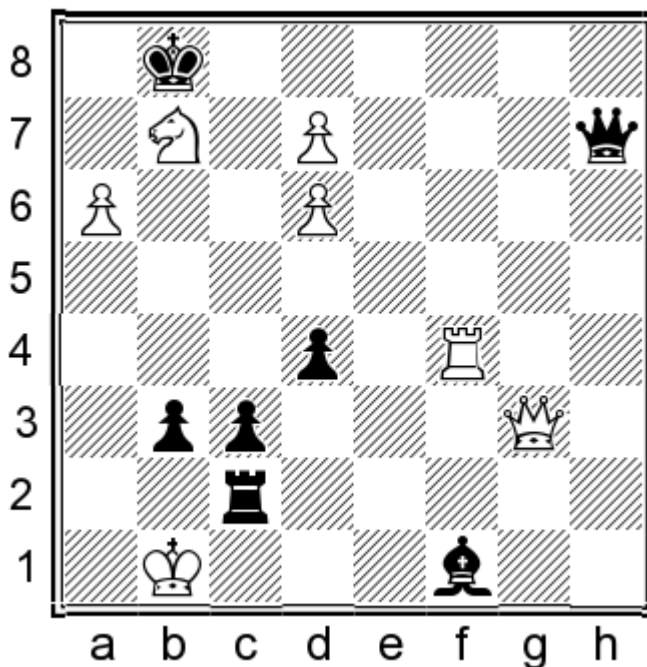
1.Bd6 Qxd6 2.b8Q+

Black has two ways to take back:

- A) 2...Kxb8 3.Bh3+! Kc7 4.Rxh7+ Kb6 5.Rh6! Qxh6 stalemate;
- B) 2...Qxb8 In this variation our theme is featured: 3.Rxh7+ Ka8 4.Bb7+ Ka7 5.Bc8+ with either perpetual check or stalemate.

There are also present-day variations on this interpretation of our theme.

Kralin/Pervakov, 'Uralski Problemist' 2003



White to play and draw

Both kings are in danger, but the white king more so. Moreover, it is almost stalemated. For this reason White will now sacrifice all his pieces.

1.Rf8+

White must first sacrifice the rook – otherwise he will not lose everything in the end.

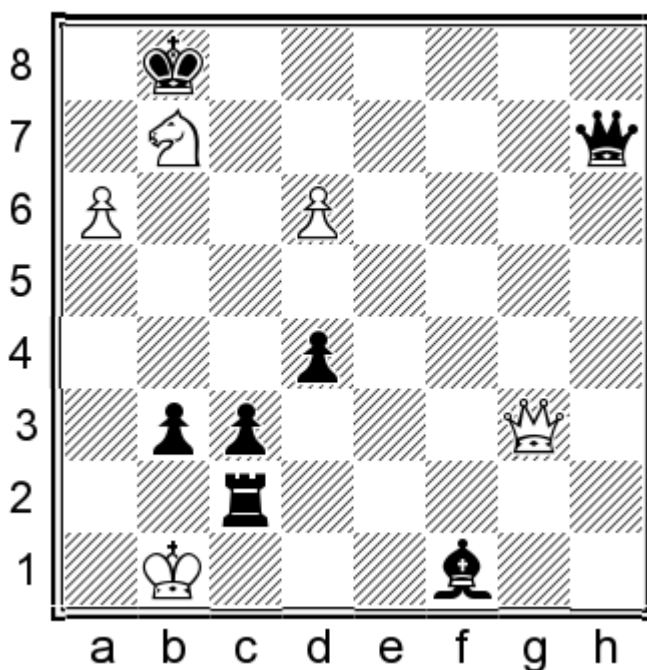
1...Ka7 2.Ra8+ Kxa8

Not yet a disappearing trick; the black king has landed on another square.

3.d8Q+ Ka7 4.Qb8+!

With this queen sacrifice White makes new checks possible.

4...Kxb8



Now the starting position is reached, without the rook and the d7 pawn.

5.d7+ Ka7 6.Qb8+!

The second queen is sacrificed on the same square.

6...Kxb8

And now the starting position appears on the board without the white queen, rook, and pawn on d6! The depletion of the white forces is very swift.

7.d8Q+ Ka7 8.Qxd4+ Kxa6 9.Nc5+ Kb5 10.Qa4+

Forcing the king to take the knight.

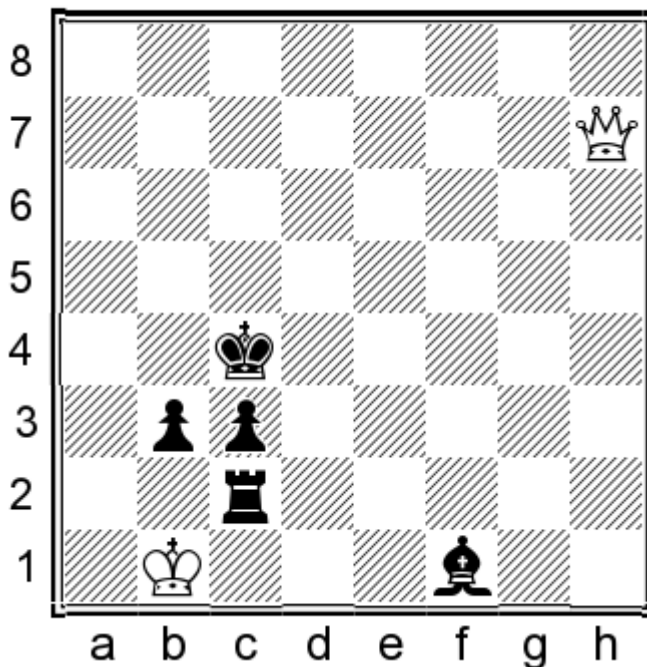
10...Kxc5 11.Qa7+

The third queen sacrifice. This time Black does not have to accept.

11...Kc4!

Sacrificing his own queen. Black plays for mate.

12.Qxh7



12...Rb2+ 13.Kc1 Rb1+!

Now it is Black's turn to take refuge in a disappearing trick.

14.Qxb1

Certainly not 14.Kxb1 in view of 14...Bd3+ and Black wins.

14...Bd3

The situation is precarious for White. However, he still has a stalemate trap.

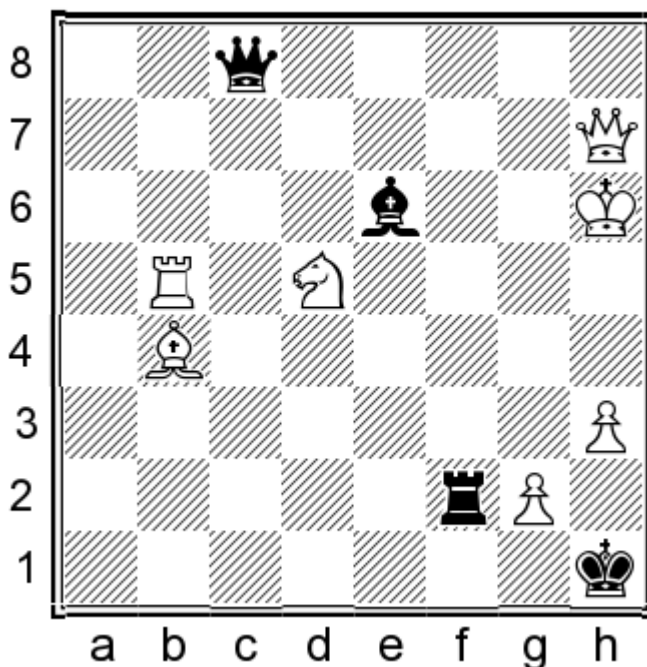
15.Qc2!

The final queen sacrifice. Whichever way Black takes, it is stalemate.

For this study, Kralin and Pervakov received second prize in the tourney of the Russian magazine.

Nikolay Kralin and Oleg Pervakov are both grandmasters in the field of the endgame study. Together they have made magnificent studies. Pervakov has also used our theme in a study he composed on his own.

Pervakov 2005



Black to move – White draws

As far as material is concerned, White has nothing to complain about, but his king is unsafe.

1...Qc1+ 2.Kh5

The only square.

2...Bf7+ 3.Kh4 Rxc2

After a few introductory checks Black creates dangerous threats.

4.Bd2!!

With this bishop sacrifice White clears the way for his rook.

4...Qxd2 5.Rb1+ Kh2 6.Rh1+!

Here is the theme. White clears the way for his queen.

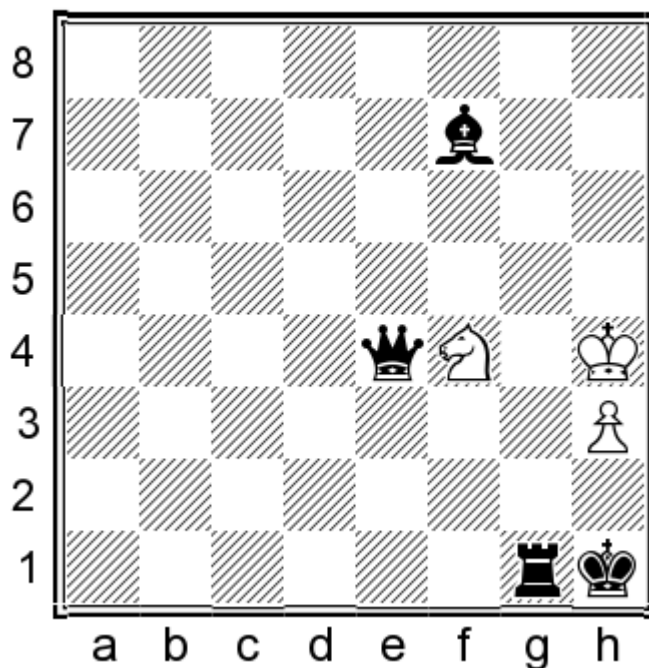
6...Kxh1 7.Qb1+ Kh2 8.Qb8+ Kh1 9.Qb1+ Rg1

The only way to escape the checks.

10.Qe4+ Qg2 11.Nf4!!

A magnificent dénouement.

11...Qxe4

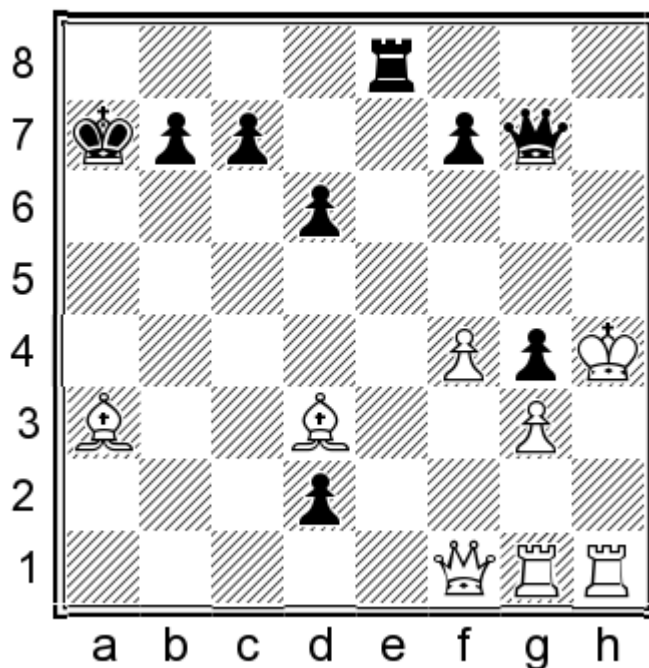


Stalemate.

For this study Pervakov received first prize in the World Cup.

There is a difference between stalemate studies from the beginning of the 20th century and those from the beginning of this century; the present-day adaptations are more complicated, and play takes place over the entire board. By the way, for studies with a great number of disappearing pieces, the stalemate motif is quite suitable.

Timman 2011



White to play and draw

The white king is caught in a mating net. He could give his queen with 1.Qb1 Rh8+ 2.Bh7, but the ensuing ending is prospectless.

1.Bc5+! Kb8

Otherwise White would trade queens on a1.

2.Ba7+! Ka8

Again, the only square. After 2...Kc8 3.Bf5+ White would win. But what can he do now against the threatened mate?

3.Bg6!!

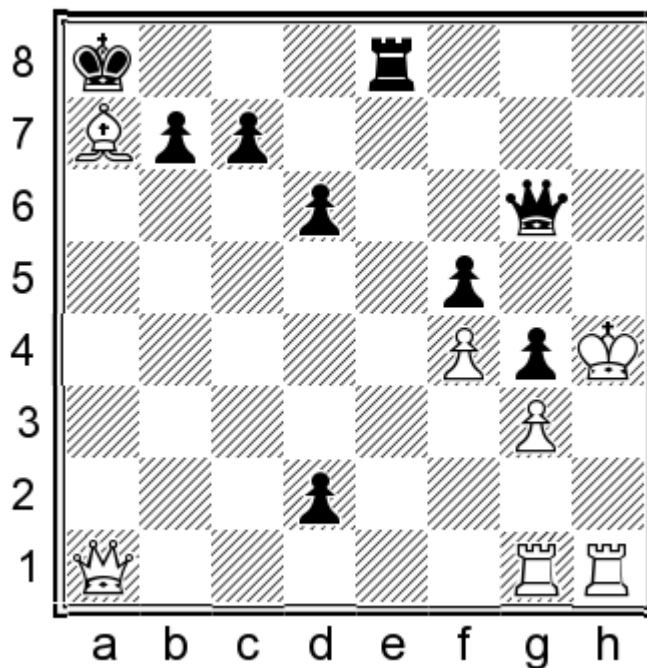
A true problem move. The enemy queen is driven to g6, after which the white queen can control the h8-square.

3...Qxg6

An important alternative was 3...Qf6+ 4.Kxg4 Re1!. With 5.Bc2! White can just hold.

4.Qa1! f5!

The best attempt. After 4...Rg8 5.Be3+! Kb8 6.Qa7+ Kc8 7.Qa8+ Kd7 8.Qxg8 Qxg8 9.f5! White would have the advantage. After the text move he must again arm himself against the threat of mate in one.



5.Bb8+!

This fourth bishop sacrifice marks the beginning of a sacrificial slugfest.

5...Kxb8

Now, all white pieces will be sacrificed on the corner square.

6.Qa8+!

First the queen.

6...Kxa8 7.Ra1+

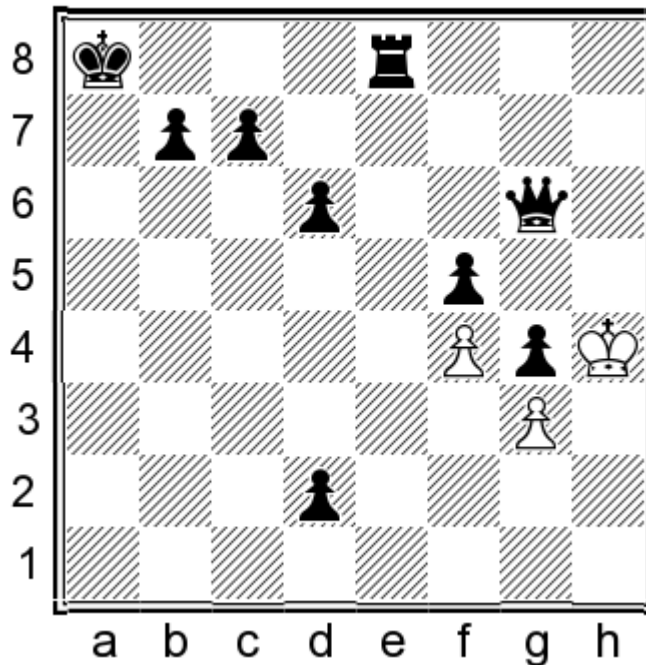
The first rook presents itself.

7...Kb8 8.Ra8+! Kxa8 9.Ra1+

And the second.

9...Kb8 10.Ra8+! Kxa8

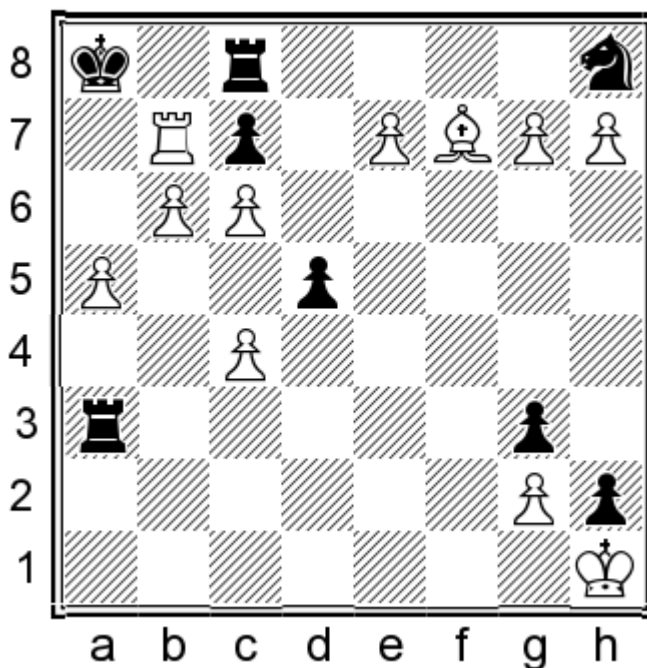
Stalemate.



A real deforestation has taken place. The previous diagram position is again on the board, only now without the four white pieces.

In almost all the other studies that I will present, White uses the disappearing trick to win. Sometimes White wants to lose a piece in order to create a passage for a pawn.

Bron, 'Magyar Sakkélet' 1948



White to play and win

Black threatens mate in one. Although three of his pawns are about to promote, White cannot solve this problem. He will have to create a new candidate for promotion.

1.Ra7+ Kb8 2.Ra8+!

Thus White gets rid of his rook.

2...Kxa8 3.b7+

The point of the rook sacrifice. The b-pawn gets free passage.

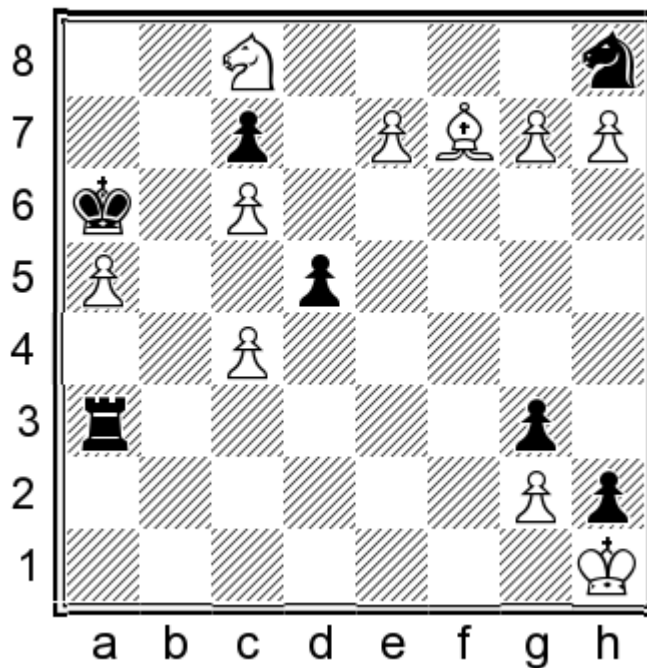
3...Ka7

The only move to prevent immediate mate.

4.bxc8N+!

With this minor promotion, Black's important defender of the back rank is eliminated with tempo.

4...Ka6



Introducing a stalemate trap into the position.

5.gxh8B!

The carousel of minor promotions continues. After 5.gxh8Q? d4!
6.Qxd4 Ra1+ Black would force stalemate.

5...d4!

In these circumstances, too, Black continues to play for stalemate.

6.Bxd4 Rd3 7.Bh5

Covering the d1-square.

7...Rb3

Continuing to harass White.

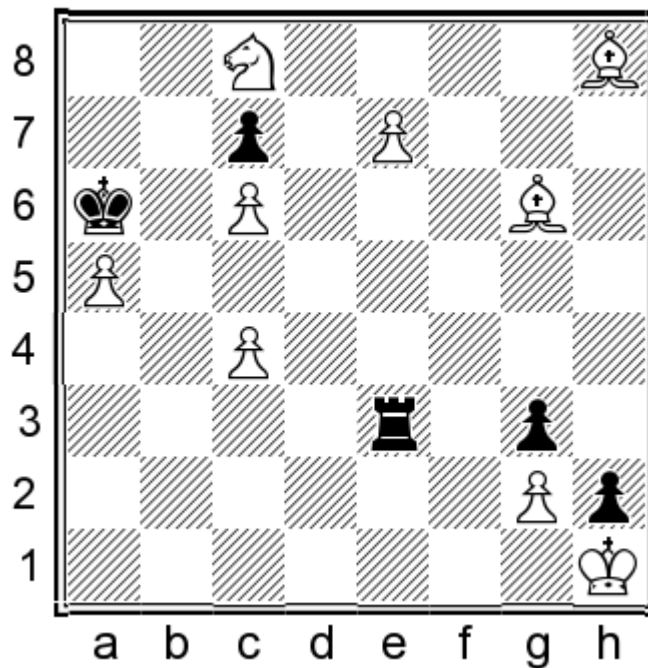
8.Bg6 Rc3!

Making use of the stalemate trap. Now White has to put his queen's bishop on another diagonal.

9.Be3 Ra3 10.h8B!

The second bishop promotion on the same promotion square.

10...Rxe3



The last attempt.

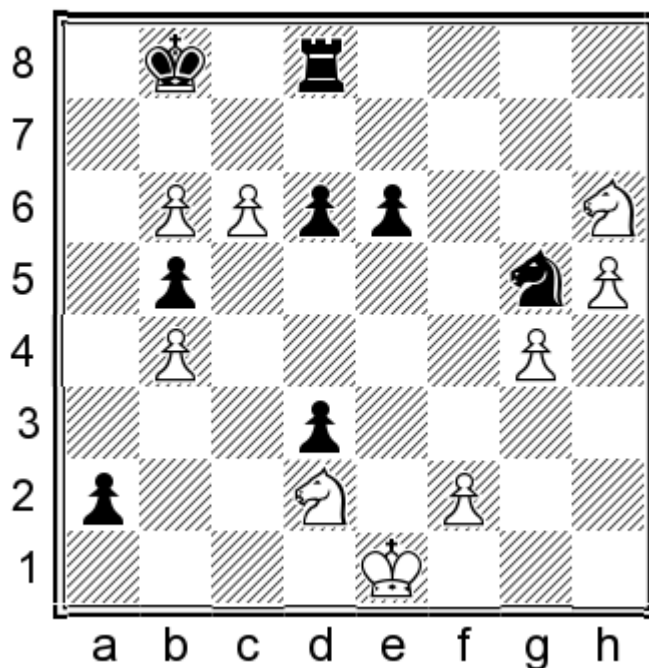
11.e8R! and wins.

For this study, Bron received first prize in the tourney of the Hungarian magazine.

Incidentally, the disappearing trick was not central in this study: it served to make several minor promotions possible.

The Romanian endgame study composer Emilian Dobrescu has made a study where the disappearing trick serves via an ingenious manoeuvre to grant a passed pawn free passage.

Dobrescu, 'L'Italia Scacchistica' 1968



White to play and win

A coincidence: just as in the previous study by Bron, White has passed pawns on b6 and c6.

1.c7+ Kb7

His best chance.

2.cxd8N+!

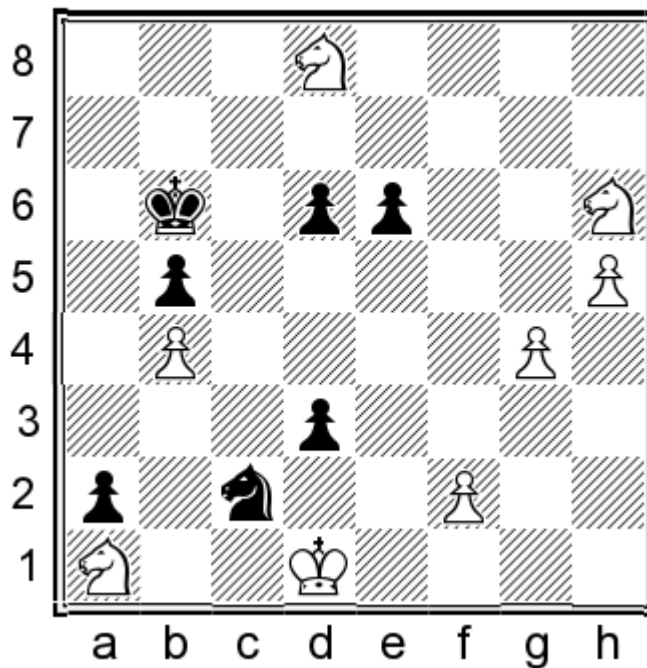
A second coincidence: here, too, White captures a rook and promotes to a knight with check.

The three white knights that are now on the board will all be sacrificed on the same corner square in the end.

2...Kxb6 3.Nb3

The first episode is concluded. White has a large material advantage, but the a-pawn remains very dangerous.

3...Nf3+ 4.Kd1 Nd4 5.Na1 Nc2



Black's counterplay materializes. He steers towards a repetition of moves.

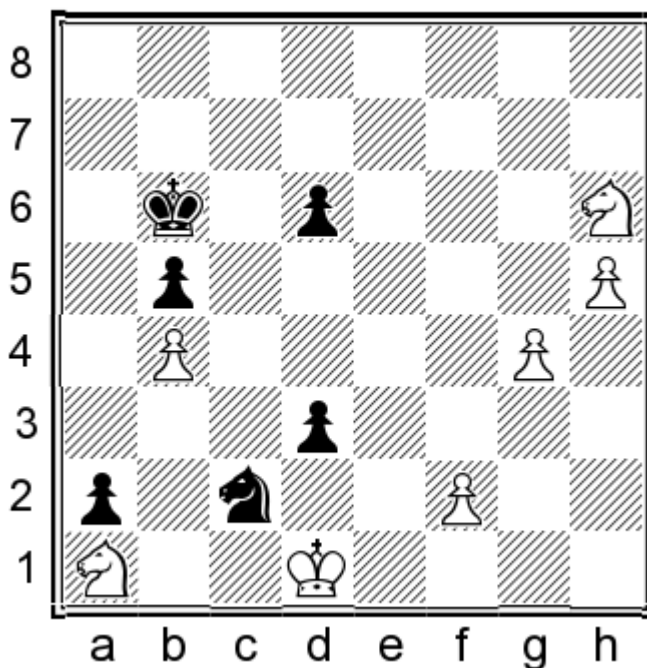
6.Nxe6!

The introduction to the disappearing trick. It is important that the black e-pawn disappears from the board.

6...Nxa1 7.Nd4 Nc2

The ritual continues; the two knights will change places.

8.Nb3 Nd4 9.Na1 Nc2



In four moves the same position will occur, only without the knight on h6.

10.Nf5!

This is now possible because there is no longer a black pawn on e6.

10...Nxa1 11.Nd4

The third knight enters the battle.

11...Nc2 12.Nb3

The ritual is played out for the third and last time.

12...Nd4 13.Na1 Nc2 14.h6!

This was what it was all about. The white kingside pawns decide the outcome of the battle.

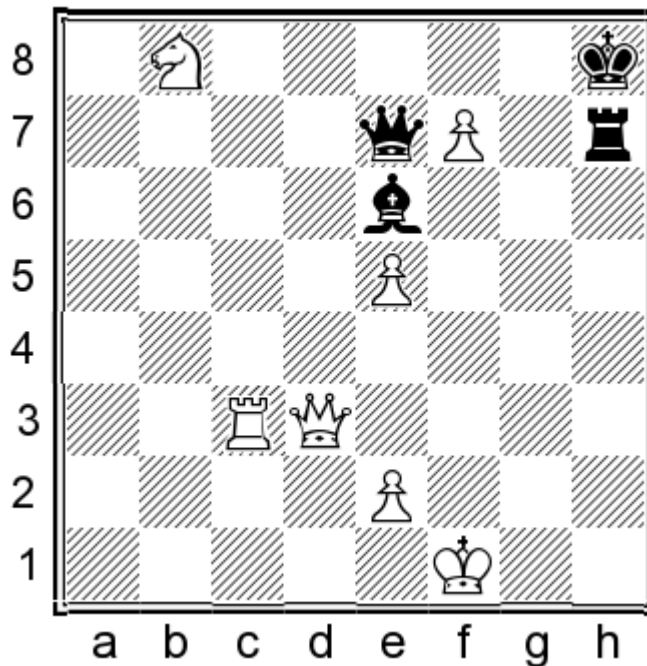
14...Nxa1 15.h7 Nc2 16.h8Q a1Q+ 17.Qxa1 Nxa1 18.g5 And wins.

For this study Dobrescu received first prize in the tourney of the Italian magazine.

Things are a little more difficult if the disappearing trick serves to enable a pawn to march, which is then also sacrificed in order to open up a diagonal for the queen.

In the following study, White has three extra pawns, but his knight is offside and also the safety of his king is not guaranteed.

Bazlov 2009



White to play and win

1.Nd7!

Black has to accept this knight sacrifice, otherwise the knight would reach the vital square f6.

1...Bxd7 2.e6!

The point. With a further pawn sacrifice, White opens up the long diagonal for the queen.

2...Bxe6

The starting position, without the white knight and e-pawn.

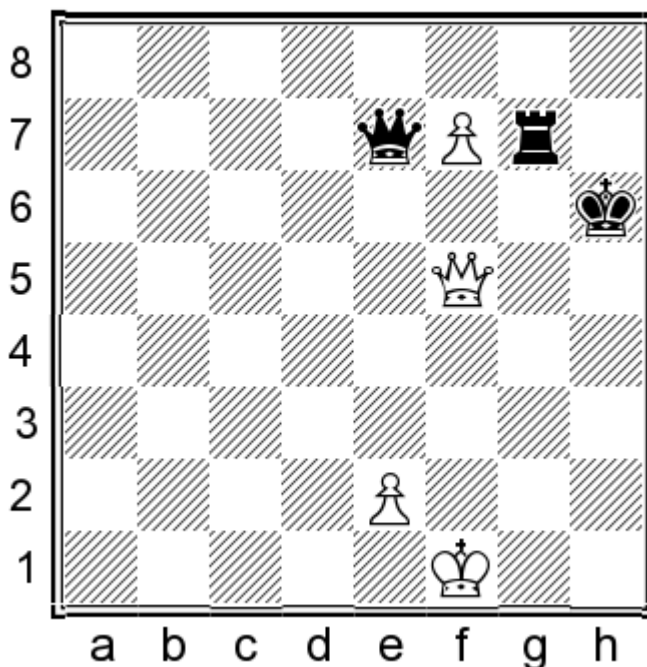
3.Rc8+!

The third consecutive sacrifice. White's attacking play is based on the strong f-pawn, which paralyzes Black's defences.

3...Bxc8 4.Qc3+ Rg7 5.Qxc8+

White has regained material with check, while his attack rages on.

5...Kh7 6.Qf5+ Kh6



Setting a stalemate trap.

7.f8R!

Certainly not 7.f8Q? on account of 7...Qxe2+! with stalemate.

7...Rg6

The white attack is unstoppable.

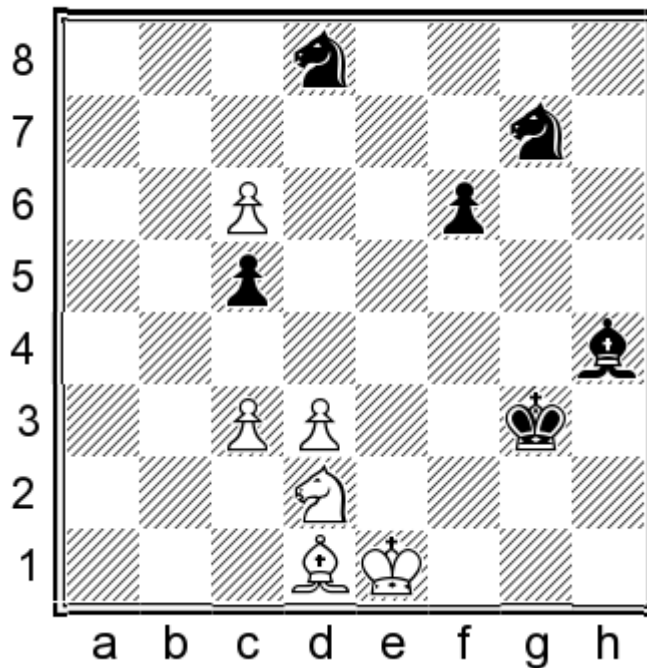
8.Qh3+ Kg7 9.Qh8+

Mate.

For this study Bazlov received first prize in the Sarychev Memorial Tourney.

Dobrescu made another interesting study with the disappearing trick. In this case it concerns only a single pawn, but the motif behind is worth seeing.

Dobrescu, 'Thèmes 64' 1981



White to play and win

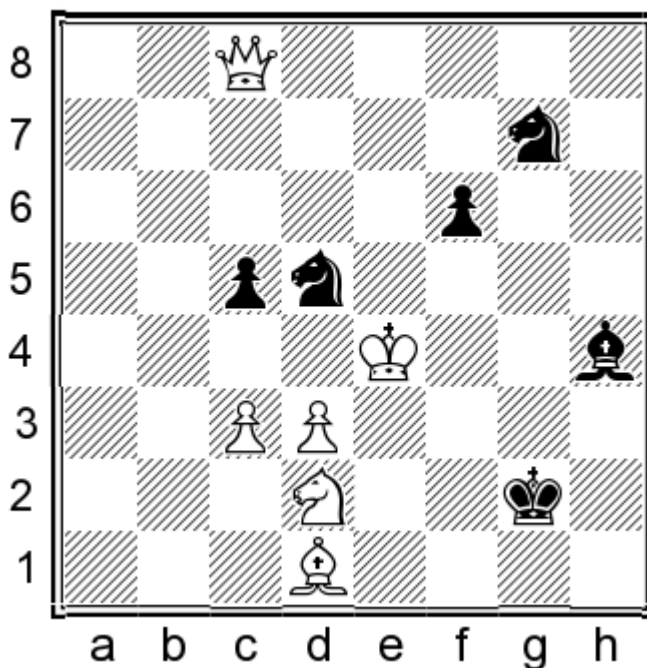
Black cannot prevent the promotion of the white c-pawn, but he gets counterplay because the white king has few squares at its disposal.

1.c7 Nde6 2.c8Q Kg2+

This is the start of a long series of checks.

3.Ke2 Nf4+ 4.Ke3 Nd5+ 5.Ke4

The king has to move up further.



5...Nxc3+ 6.Kf4

The white king moves to the kingside in order to conquer the black bishop, which deprives it of the square e1.

6...Nd5+ 7.Kg4 Ne3+ 8.Kxh4 Nef5+ 9.Kg4

And now, back again.

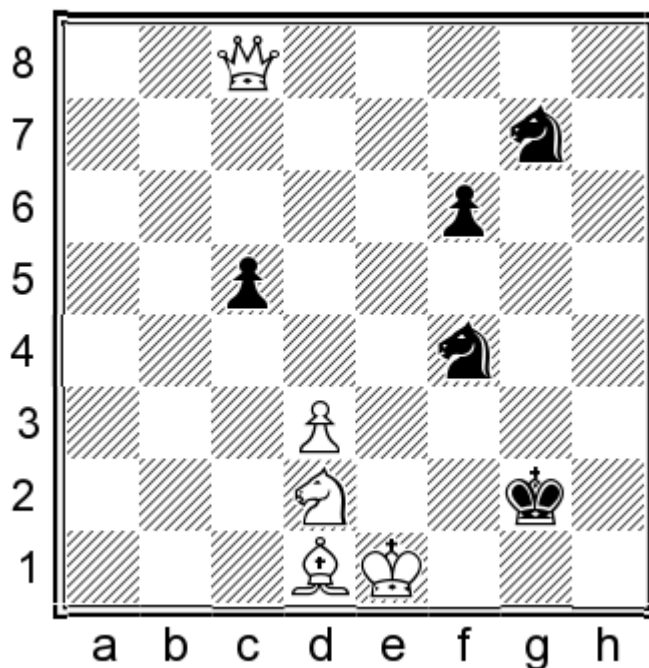
9...Ne3+ 10.Kf4 Nd5+ 11.Ke4 Nc3+

How can White escape from the checks now?

12.Ke3

Down again.

12...Nd5+ 13.Ke2 Nf4+ 14.Ke1!



The theme becomes apparent. White forces Black to take the d-pawn.

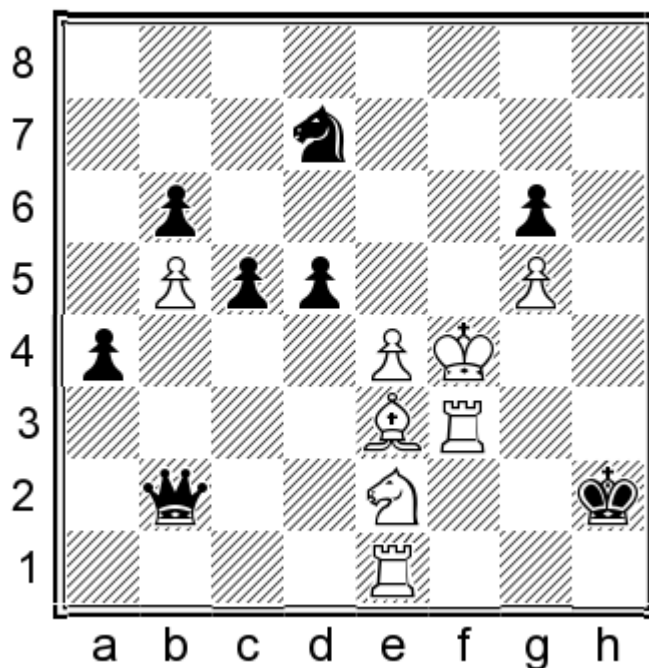
14...Nxd3+ 15.Ke2 Nf4+ 16.Ke3

And wins, as White now gets the square d3 for the king.

For this study Dobrescu received first prize from the French magazine.

In the previous study, White made the pawn disappear in order to avoid perpetual check. For this purpose, we can also make two white pieces disappear.

Timman 2011



Black to move – White wins

White threatens to give mate. Black has to take drastic measures to continue the struggle.

1...Qe5+ 2.Kg4

Now the queen is in the way of a knight check. For this reason, Black is the first to resort to a disappearing trick.

2...Qe6+ 3.Kh4

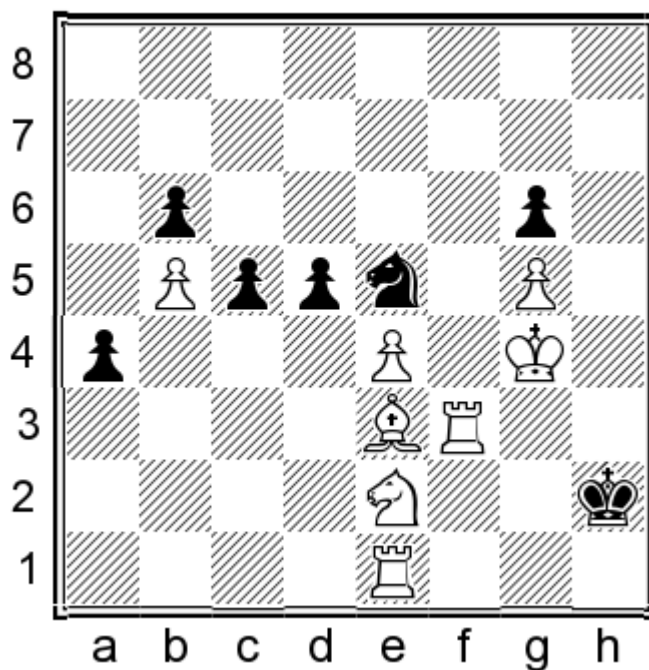
It looks as if Black has already run out of moves. However, he still has a surprising resource.

3...Qg4+!!

An astonishing queen sacrifice, and at the same time Black's contribution to the theme.

4.Kxg4 Ne5+

The knight takes the place of the queen.



5.Kh4!

White sacrifices a rook in order to create an escape square for the king.

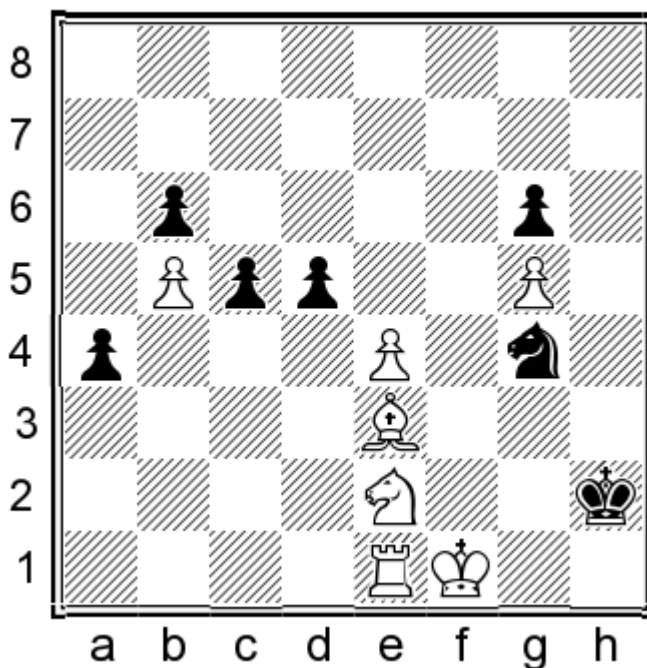
5...Nxf3+ 6.Kg4

Same position as two moves earlier, only now without the rook on f3.

6...Ne5+ 7.Kf4 Nd3+ 8.Kf3 Ne5+

The alternative was 8...Nxe1+. After 9.Kg4 dxe4 10.Nc3 a3 11.Kf4 Nc2 12.Kxe4 Kg3 13.Bc1! Black cannot prevent the white king's decisive penetration via e5. After the text move White has to continue manoeuvring.

9.Kf2 Ng4+ 10.Kf1!



As in Dobrescu's study, White sacrifices his bishop in order to clear the e3-square for his king.

10...Nxe3+ 11.Kf2 Ng4+ 12.Kf3 Ne5+ 13.Ke3

Finally the white king has some space.

However, the enemy checks are not exhausted yet:

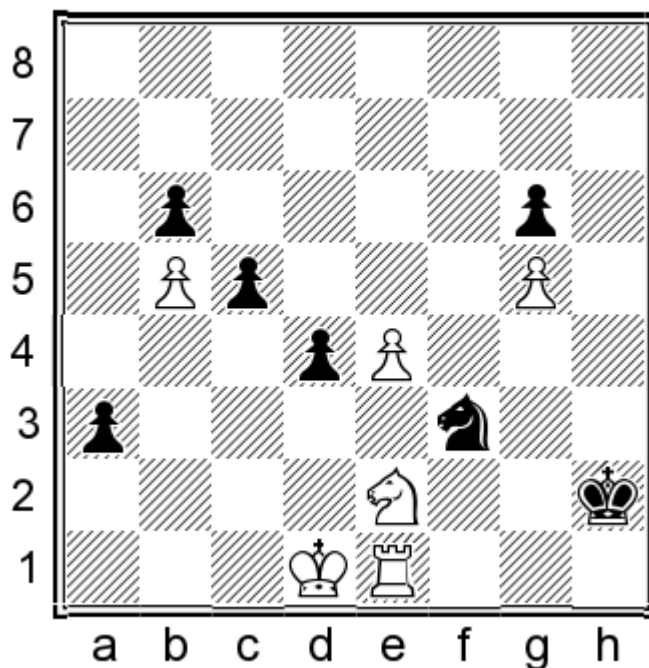
13...d4+ 14.Kd2!

Not 14.Nxd4 cxd4+ 15.Ke2 on account of 15...Kg3 16.Rf1 a3! and thanks to his strong knight Black can just hold.

14...Nf3+ 15.Kd1

The conclusion of a long king march. But Black has yet another string to his bow.

15...a3



16.Nc1!

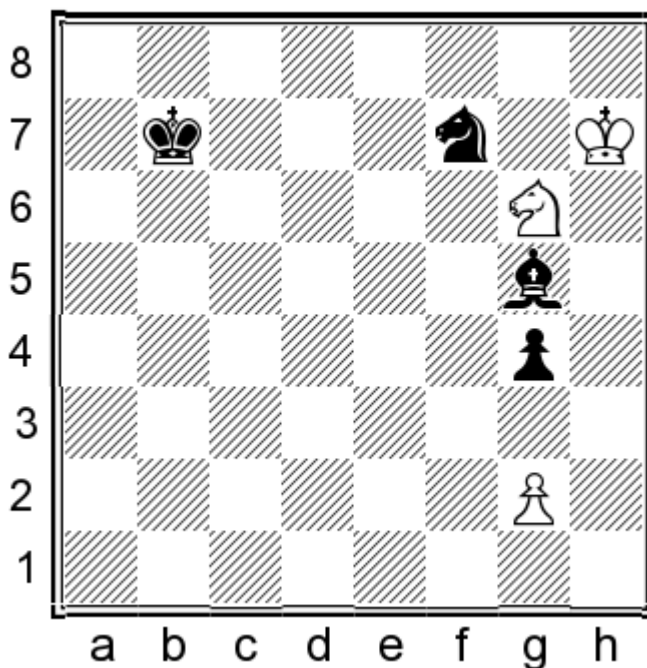
It all fits nicely.

16...Nxe1 17.Kxe1 Kg3 18.e5

And the e-pawn decides.

Square clearance for the king as a motif for the disappearing trick can also occur in a miniature study.

Bazlov, Nunn 50-JT 2005



White to play and draw

Without the knight, White could play 1. Kg6. If the white king takes a detour, it will be too late: 1.Kg7 Nd6 2.Ne5 g3 3.Kg6 Bd8! 4.Kh5 Ne4 5.Kg4 Bc7 and the black g-pawn is solidly defended. White has no chance to exchange the knights.

1.Nh8!

Offering the exchange of knights. If Black complies, the white king will be back just in time, as becomes clear after 1...Nxb8 2.Kxb8 Kc6 3.Kg7 Kd5 4.Kg6 Bd8 5.Kf5 g3 6.Kf4! Bc7+ 7.Ke3 and the king reaches the safe square e2, after which White has a fortress.

1...Ne5

Centralization. Now what can White do?

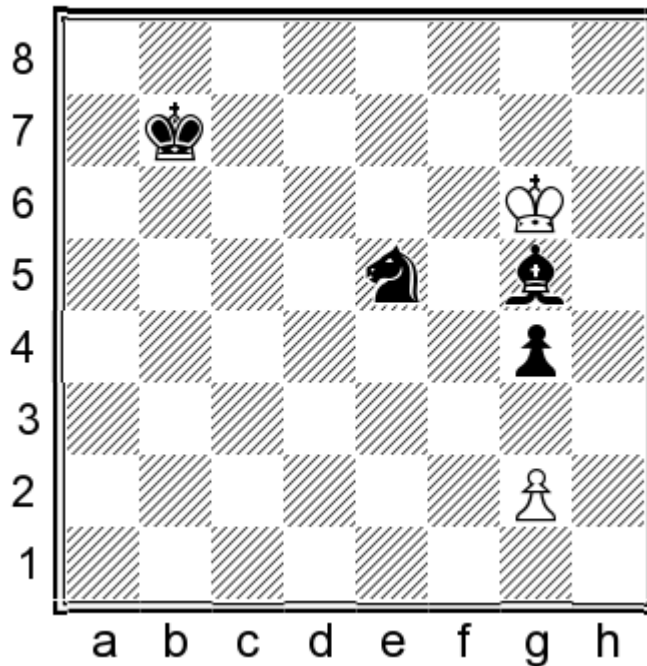
2.Nf7!!

The magnificent point. White sacrifices his knight in order to obtain the square g6 for the king.

2...Nxf7 3.Kg6

The king takes the knight's place.

3...Ne5+



The best try. Now, after 4.Kxg5 Kc6 5.Kf4 Kd6!, White would not stand a chance. But he does not have to take the bishop.

4.Kf5!!

A fantastic move. White would rather take the knight than the bishop and therefore he puts his king in between the two pieces.

4...Nf7

There is nothing better. 4...Nf3 would be met by 5.Kxg4.

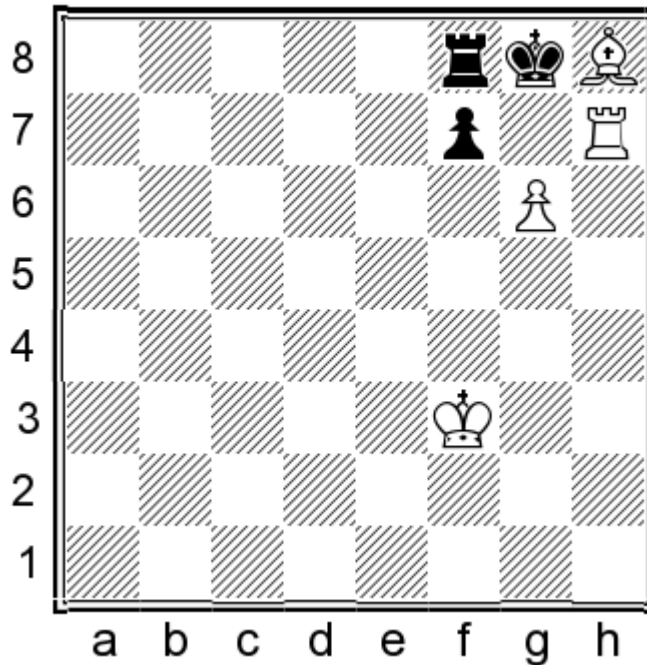
5.Kg6

And Black cannot make progress.

In my opinion this is the best study with the disappearing trick theme.

The disappearing trick can also serve to clear a square for other pieces than the king. The famous example:

Kozlowski, 'Swiat Szachowy' 1931



White to play and win

The solution is not difficult. White forces the decision with:

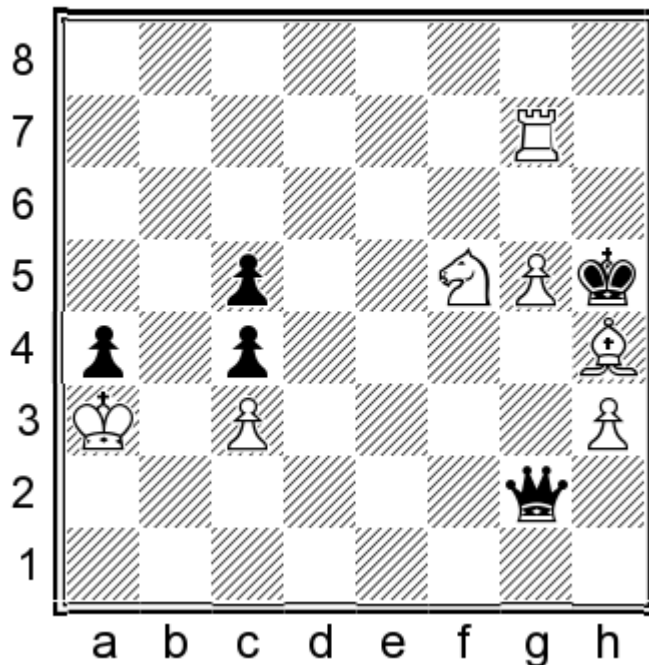
1.Rg7+! Kxh8 2.Rh7+ Kg8 3.g7

The bishop sacrifice has cleared the h8-square for the rook.

It is harder to prove that the alternative 1.g7 does not win. After all, if White managed to exchange rooks, it would no longer matter that the bishop on h8 is bad. The defensive scheme that Kozlowski indicated implies that in the end Black sacrifices his f-pawn and puts his king on h7 and his rook on the g-file. Indeed, it looks as if Black has a fortress in that case. By the way, I wouldn't enjoy defending such an endgame in practice.

A bishop can also be sacrificed in order to clear a square for a knight.

Timman, WCCT-7 2004



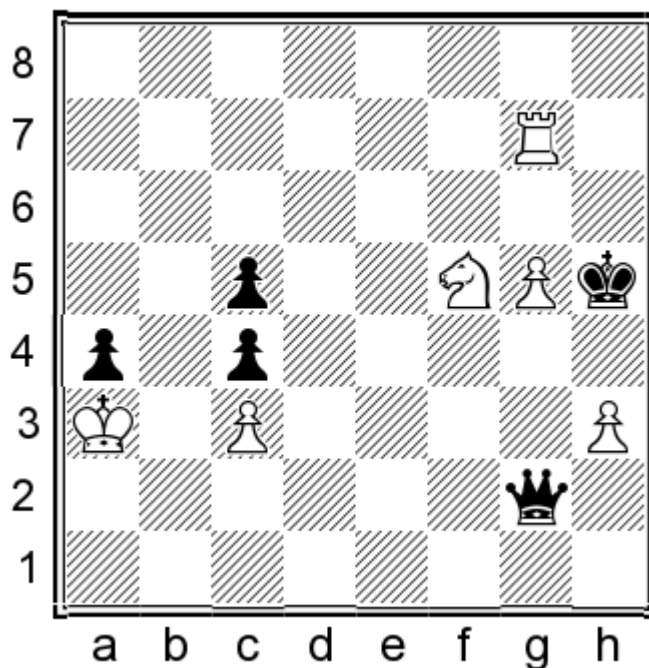
White to play and win

Materially White clearly has the upper hand, but Black threatens to bring his queen to c2.

1.Ng3+!

Forcing Black to take the bishop. On 1...Qxg3, the *zwischenzschach* 2.Rh7+ would win instantly.

1...Kxh4 2.Nf5+ Kh5



The starting position, only without the white bishop.

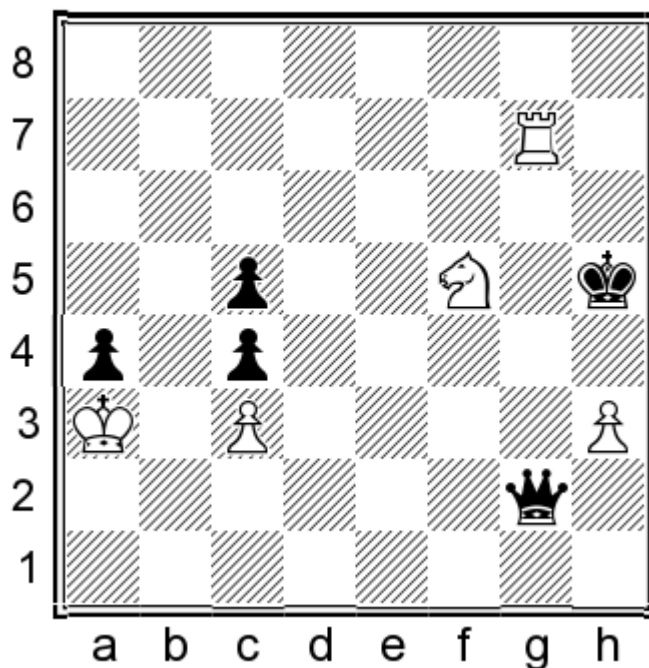
3.Rh7+

The point of the bishop sacrifice. Now square h4 has been cleared for the knight, the black king cannot go to g6.

3...Kxg5

Playing for stalemate.

4.Rg7+ Kh5



The g-pawn also disappeared from the board, and stalemate is close. However, White has another trick.

5.h4!

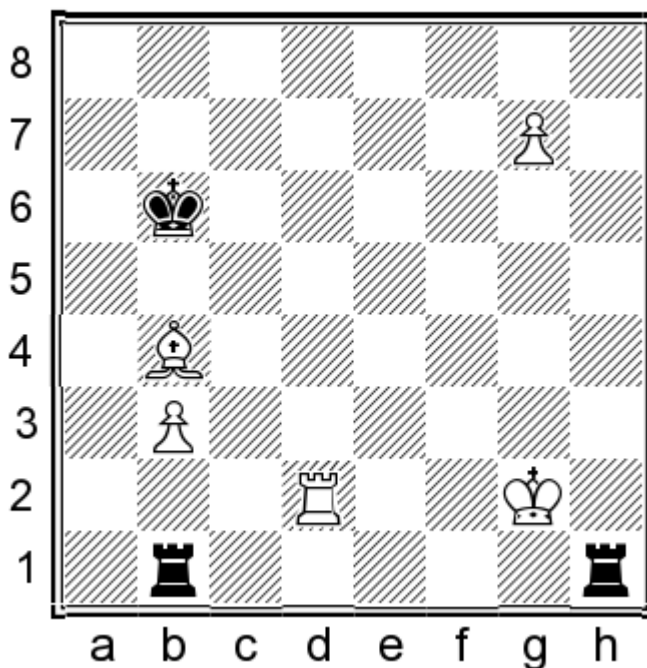
From stalemate to mate. The deadly check on g5 cannot be prevented.

5...Qg1 6.Rg5+

And wins.

Line clearance can also be a motif for the disappearing trick.

Wotawa, 'Deutsche Schachzeitung' 1954



White to play and win

It looks as if Black has managed to keep command of the situation. Without the white bishop and b-pawn, a check on b2 would decide the issue. But how can White lose the bishop and the pawn?

1.Kg3!

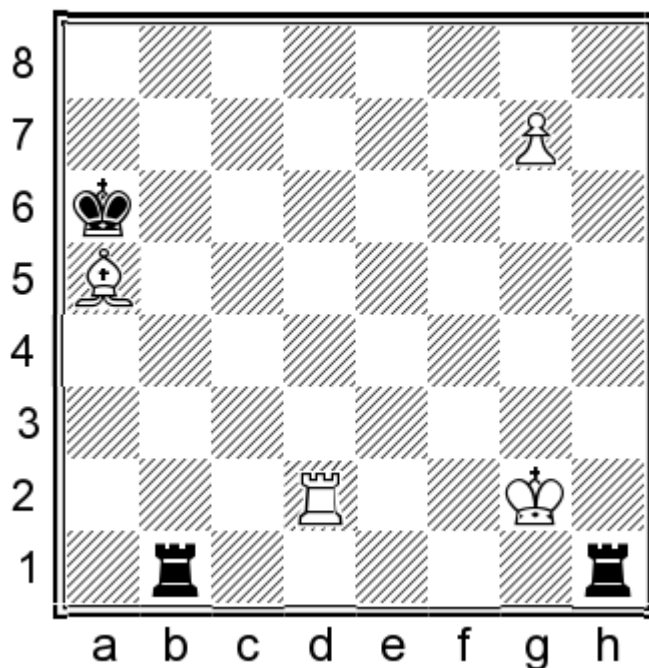
Forces Black to take on b3.

1...Rxb3+ 2.Kg2 Rbb1

The b-pawn has been removed. Now the bishop.

3.Ba5+! Ka6

After 3...Kxa5 4.Ra2+ followed by 5.Rb2+ White would have achieved his goal.



4.Bb6!!

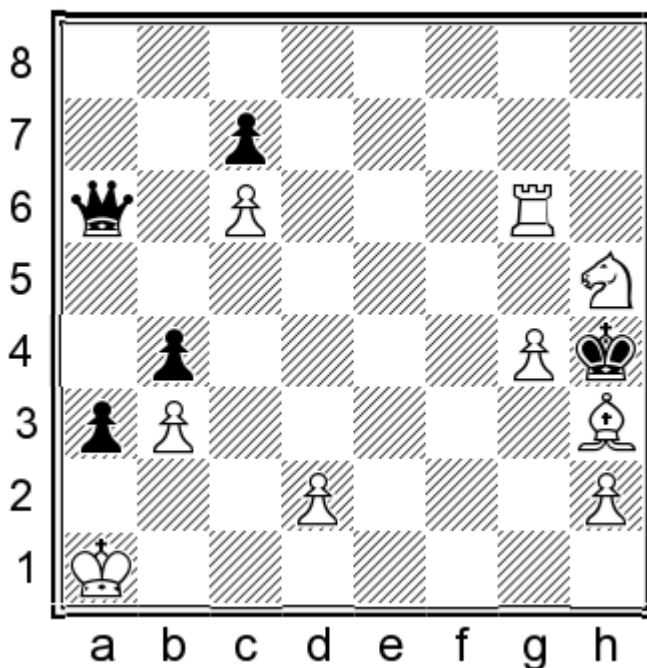
A fantastic move. As the bishop controls the square g1, it has to be captured.

4...Kxb6 5.Rb2+! Rxb2+ 6.Kxh1 Rb1+ 7.Kg2

The white king marches to f6, and Black will run out of rook checks.

For my 2004 study I received 11th prize in the 2003 World Championships, which had the disappearing trick as its theme. With hindsight I wasn't satisfied with this study. The play only occurs on the kingside, and White's king plays no active role. A better version turned out to be possible.

Timman 2011

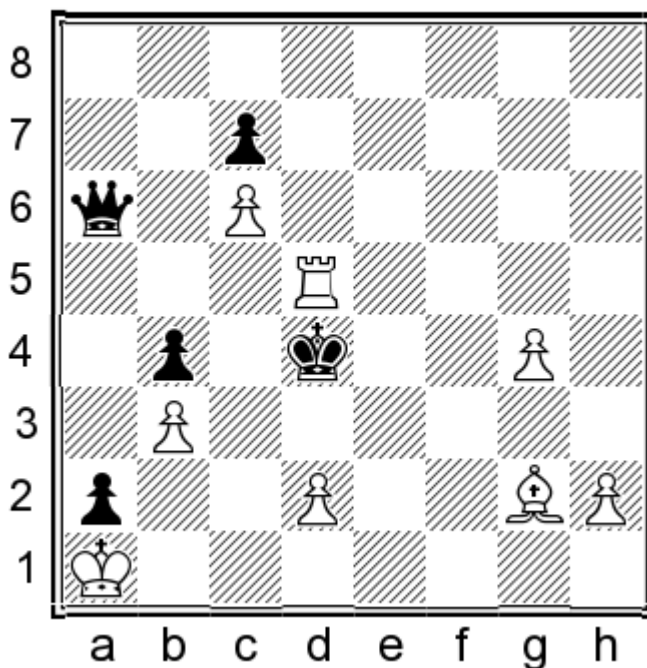


White to play and win

Black's counterplay is not to be underestimated. White has to protect his bishop; all other moves lose.

1.Nf4 Qb6

An important alternative was 1...a2 with the threat of a queen sortie to a3. In that case White has an elegant, hidden way to win: 2.Rh6+ Kg5 3.Rh5+! Kxf4 4.Rf5+ Ke4 5.Bg2+ Kd4 (5...Kd3 6.Bf1+) 6.Rd5 mate.



A clean mate, in the middle of the board.

2.Ka2!

A quiet move, after which the black queen is dominated.

2...Qg1

2...Qd4 would be met by 3.Rh6+ Kg5 4.Ne6+ and wins.

Also after 2...Qf2 3.Rh6+ Kg5 4.Rh5+ Kf6 5.Rf5+ the queen is lost.

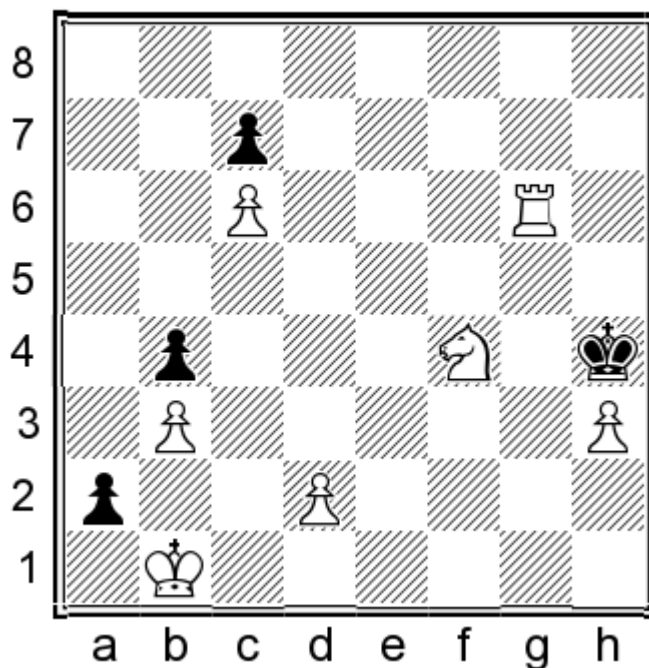
3.Ng2+

White prepares the disappearing trick.

3...Kxh3 4.Nf4+ Kh4 5.Rh6+ Kxg4 6.Rg6+ Kh4 7.h3!

Again this little move. Black can still resist and play for stalemate.

7...Qb1+ 8.Kxb1 a2+



9.Kc2!

The only good square for the king. White has to avoid the a-pawn promoting with check.

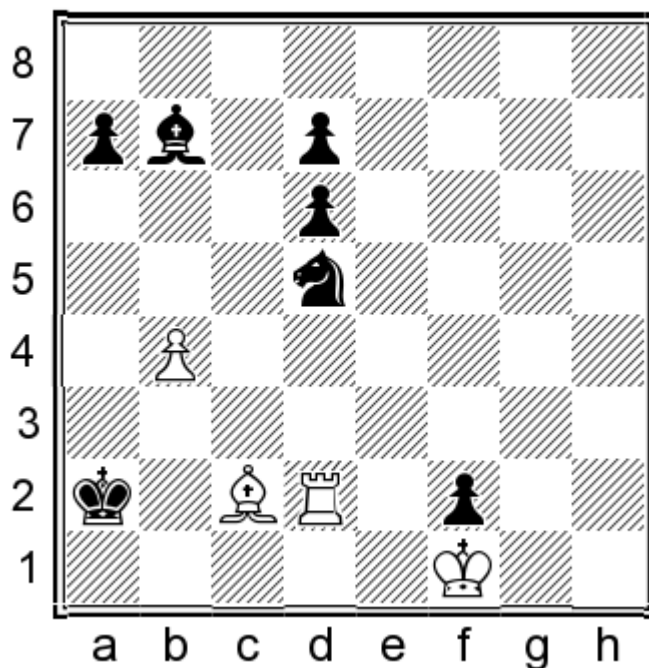
9...a1Q 10.Rg4

Mate.

After the bishop I made the g-pawn disappear, with the aim of opening the g-file. It is only logical that this is achieved by means of a pawn sacrifice. After all, the presence (or absence) of pawns determines if a file is closed, half-open or open.

This motif also features in a youthful study by Kralin.

Kralin, 'Shakhmatnaya Moskva' 1968



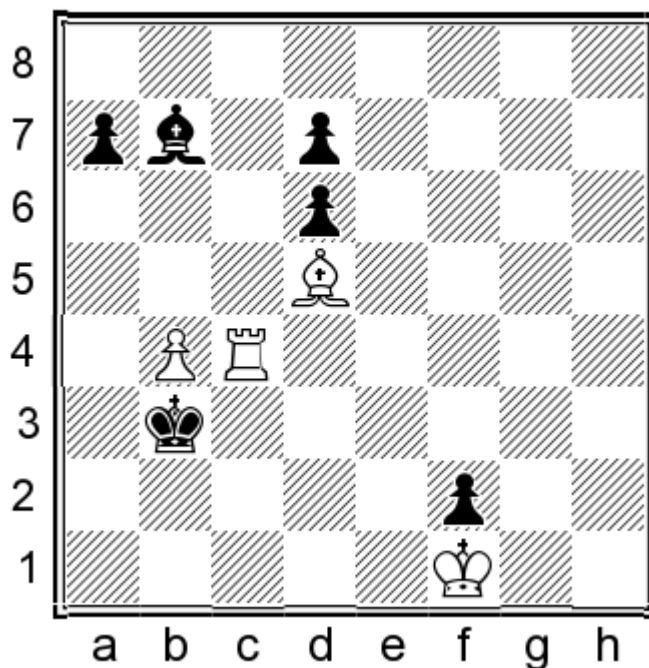
White to play and win

White has to capture the knight in order to create winning potential.

1.Be4+ Kb3 2.Bxd5+ Kc3 3.Rd1 Kc2

Black's plan of defence consists of simply pursuing the rook with the king.

4.Rd4 Kc3 5.Rc4+ Kb3



How to go on from here?

6.Rc6+!!

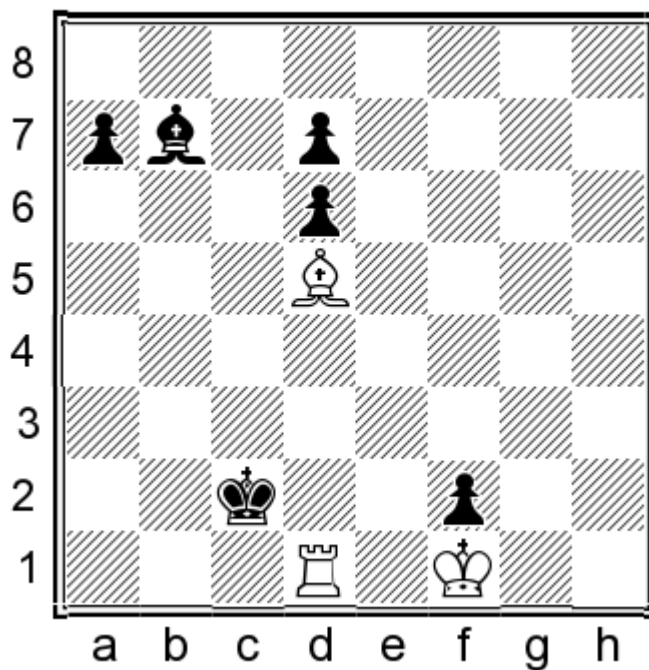
The climax of the study. White forces the king to capture the b-pawn.

Insufficient for the win would have been 6.Rc5+. White has the same idea: 6...Kxb4 is met by 7.Rc4+. But with 6...Ka4! 7.Ra5+ Kxb4 Black could wrongfoot the white rook.

6...Kxb4 7.Rc4+

Now the rook will travel the whole way back.

7...Kb3 8.Rd4+ Kc3 9.Rd1 Kc2



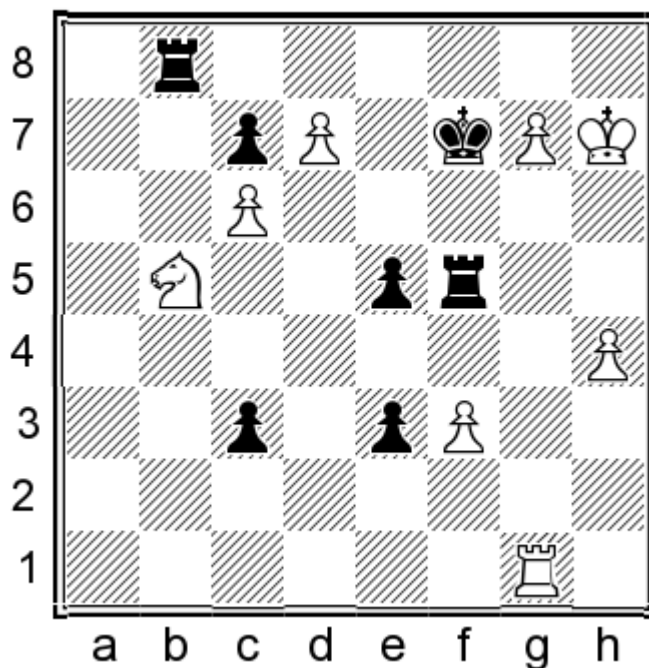
10.Bb3+!

The final point. Now that the b-file is open, White has this tactical trick.

10...Kxb3 11.Rb1+ and wins.

In the following study the f-file has to be opened.

Sochniev, Gurgenedze JT 2004



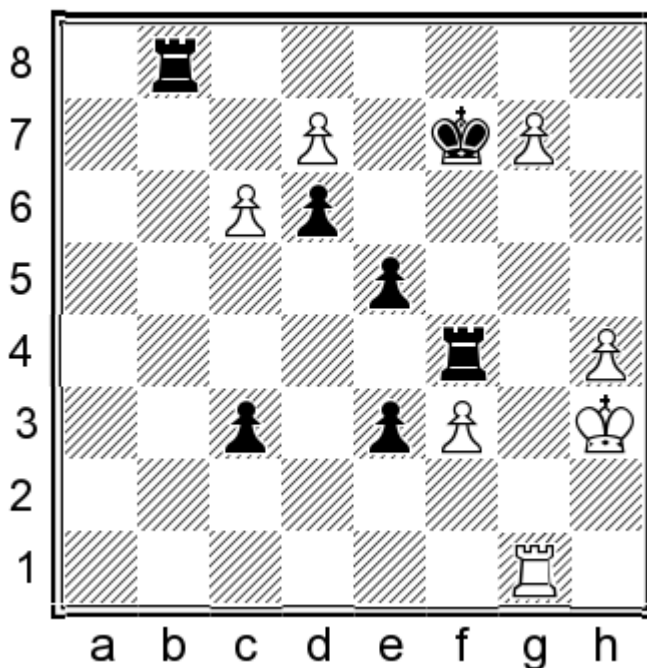
White to play and win

Black is threatening mate in one. Before White prevents this, he first sacrifices his knight in order to create a mighty, far-advanced pawn pair.

1.Nd6+! cxd6 2.Kh6 Rf6+ 3.Kh5 Rf5+

The win is not easy for White. For instance, he cannot play 4.Rg5, as then the black passed pawns become too strong.

4.Kg4 Rf4+ 5.Kh3!



This way White forces Black to take the f-pawn.

5...Rxf3+ 6.Kg4 Rf4+ 7.Kh5 Rf5+ 8.Kh6 Rf6+ 9.Kh7 Rf5

Via a systematic manoeuvre we are back in the position of seven moves ago, but the white f-pawn has fallen.

10.Rf1!

That's why White wanted to open the f-file. With the rook sacrifice he gains time to promote his pawns.

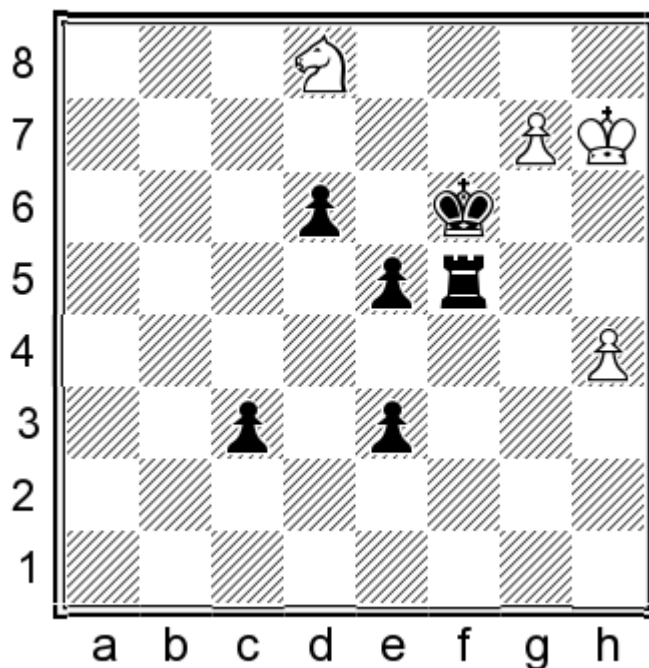
10...Rxf1 11.c7 Rf5

Black is defending tenaciously. Again, mate is threatened.

12.d8N+!

The only way.

12...Rxd8 13.cxd8N+! Kf6



Black maintains his threat.

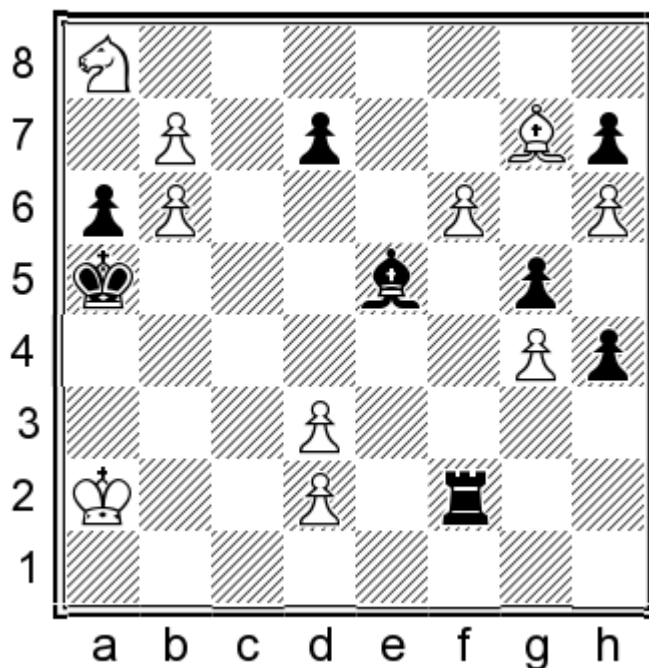
14.g8N!

Mate.

For this study Sochniev received shared first prize in the Gurgenedze Jubilee Tourney.

Back to the 2003 World Champion-ships. Second prize went to Pervakov, who incorporated a highly complicated square clearance in a study that makes a slightly chaotic impression.

Pervakov, WCCT-7 2004



White to play and win

Many things are going on here. White has two dangerous passed pawns, but the black h-pawn should not be underestimated either. For example, 1.f7? would be insufficient in view of 1...Bb8! 2.f8Q Rxf8 3.Bxf8 h3, and the h-pawn decides the issue. Therefore White must prepare the promotion of his b-pawn.

1.Nc7! Rxd2+ 2.Ka3!

The only good square for the king. Here is a long variation which illustrates why 2.Kb3 is not good: 2.Kb3 Rb2+ 3.Kc4 Rxb6 4.f7 Bd6 5.Ne8 Be7 6.Bf6 Rb4+ 7.Kc3 Bf8 8.Bg7 Be7 9.Be5 Rxb7 10.Bd6 h3! and in the end Black draws the long end of the stick.

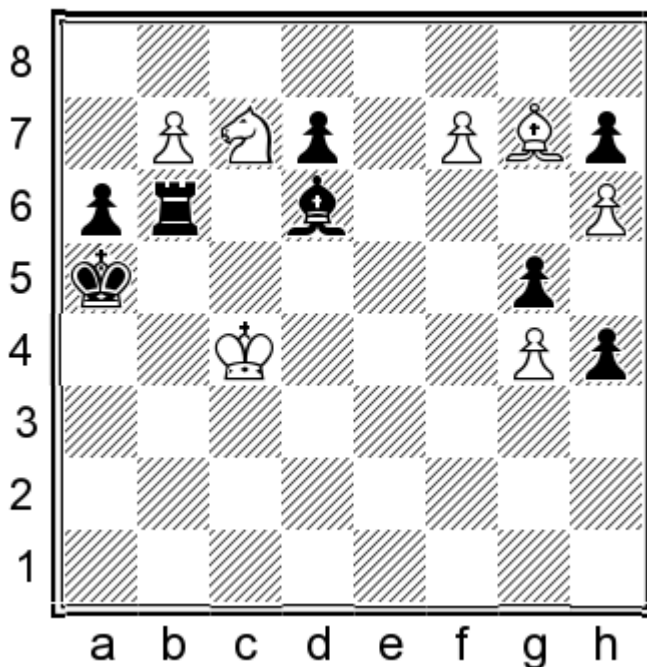
2...Rxd3+ 3.Ka2

The theme is clear again: White has given up the d-pawn in order to reach the same position. The absence of the pawn provides him with an extra square for the king later on.

3...Rd2+ 4.Kb3

Now he can play this.

4...Rb2+ 5.Kc4 Rxb6 6.f7 Bd6



7.Ne8!

So far the variation is the same as in the comments to White's second move.

Now 7...Be7 would fail to 8.Bf6 Rb4+ 9.Kd3 Bf8 10.Bc3, when White gains a decisive tempo by attacking the rook.

7...Ba3

The best try.

8.Nd6!

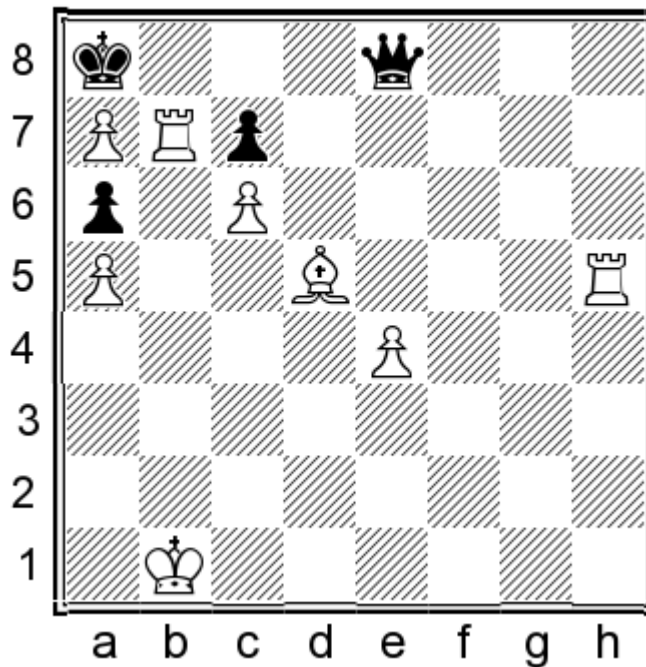
The thematic knight sacrifice. After 8.Be5? Rxb7 9.Bd6 Bxd6 10.Nxd6 Rb8 11.Ne8 Rb4+, followed by 12...Rf4, Black would win.

8...Bxd6 9.Be5 Ba3 10.Bc7

The bishop goes to the vacated square. White wins.

And the first prize study? That was a quite exceptional piece of work.

Bennö, WCCT-7 2004



White to play and win

If White does not play carefully, Black will have a kamikaze queen. Therefore he must first get rid of his foremost a-pawn.

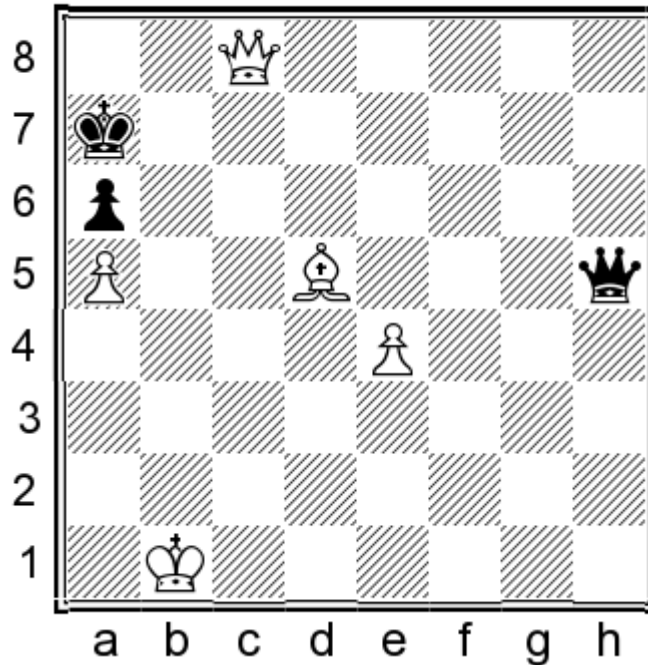
1.Rb8+ Kxa7 2.Rb7+ Ka8 3.Rxc7 Qxh5

Perpetual check is threatened. White now also sacrifices his second rook.

4.Rc8+ Ka7 5.Ra8+ Kxa8 6.c7+

A familiar motif. The rook has disappeared in order to provide passage for the c-pawn.

6...Ka7 7.c8Q



On 7...Qd1+ White has prepared 8.Qc1. Black has to play for stalemate.

7...Qxd5 8.Qc7+ Ka8

The stalemate is still not forestalled.

9.Qa7+!

But now it is!

9...Kxa7

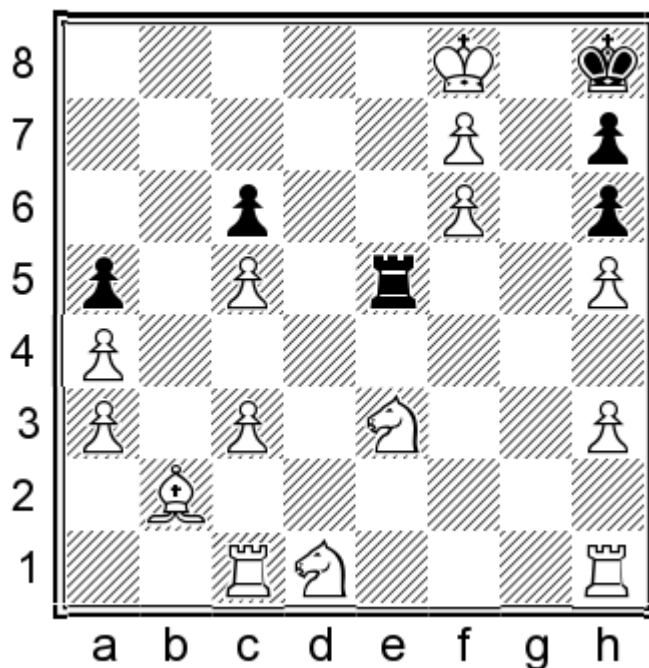
The same position, now without the white queen.

10.exd5

And wins.

Avoiding stalemate is a useful motif for a disappearing trick.

Korolkov, 'Shakhmaty v SSSR' 1938(version Didukh)



White to play and win

Black is threatening to sacrifice his rook on e8. There is only one way to avoid the stalemate.

1.Nd5! Rxd5

Now White has a move's respite before Black has a concrete stalemate threat again.

2.Ne3

The second knight enters the stage...

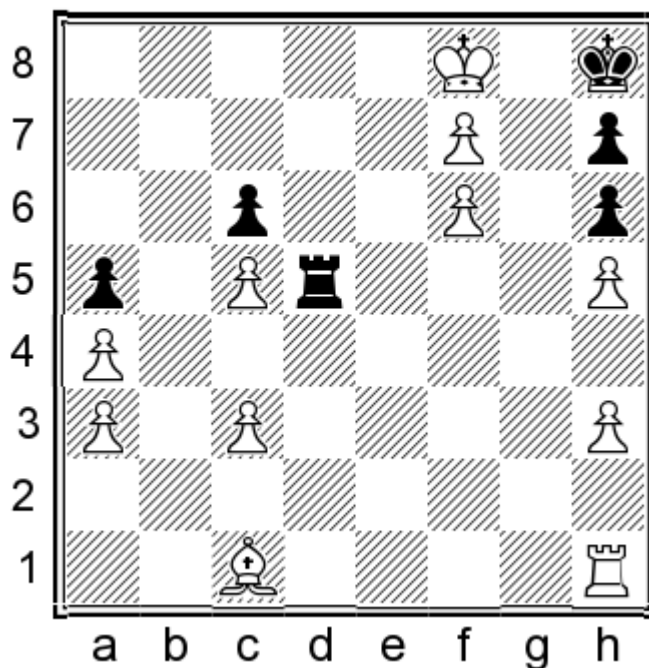
2...Re5 3.Nd5!

... and is sacrificed on the same square.

3...Rxd5 4.Rcd1 Re5 5.Rd5!

The rook also chooses the central square on which to be sacrificed.

5...Rxd5 6.Bc1



The knight on d1 was sacrificed to clear its square for the rook – the rook in turn has made its original square available for the bishop.

6...Re5

For the third time the rook returns to the centre square.

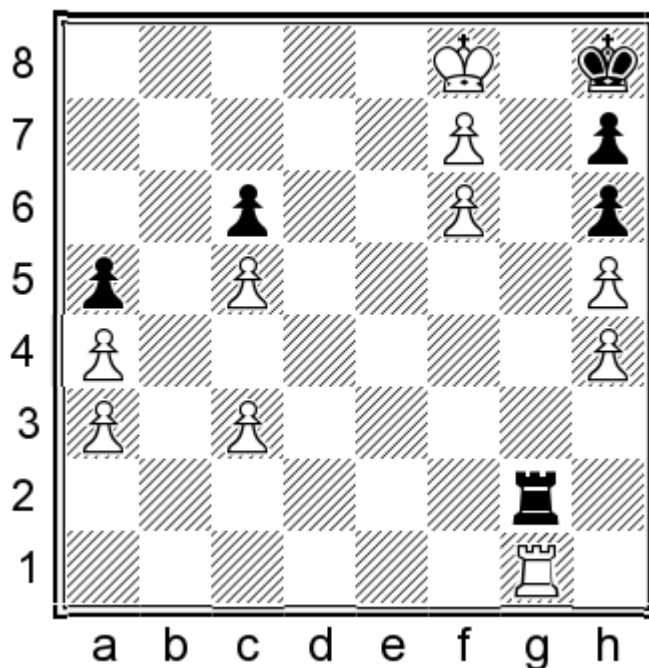
7.Bg5!

The battle scene is shifted to the g-file.

7...Rxg5 8.Rg1

Forcing the rook to stay on the g-file. Now there follow several systematic manoeuvres.

8...Rg2 9.h4!



Reciprocal zugzwang. The black rook has to move up.

9...Rg3 10.Rg2!

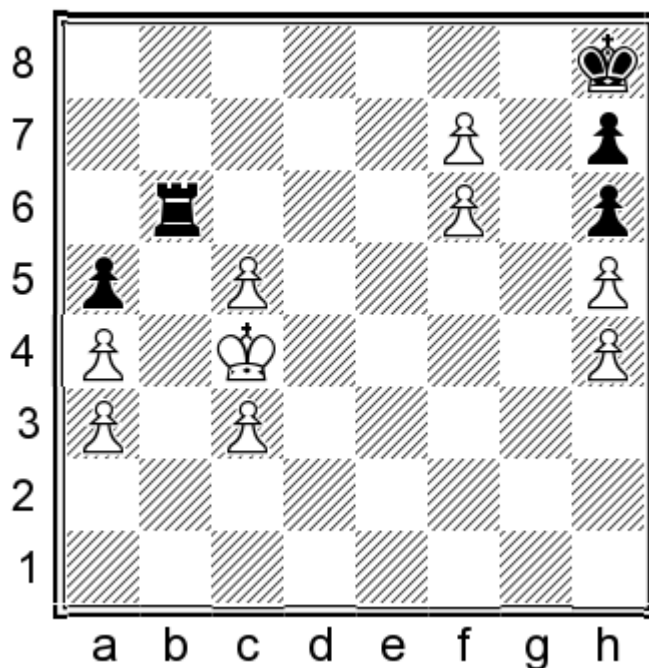
And the white rook follows suit.

10...Rg4 11.Rg3! Rxc3

There's nothing to be done about it.

There now follows a finale in which White manages to neutralize Black's rampant rook.

12.Ke7 Re3+ 13.Kd7 Rd3+ 14.Kxc6 Rd6+ 15.Kb5 Rb6+ 16.Kc4



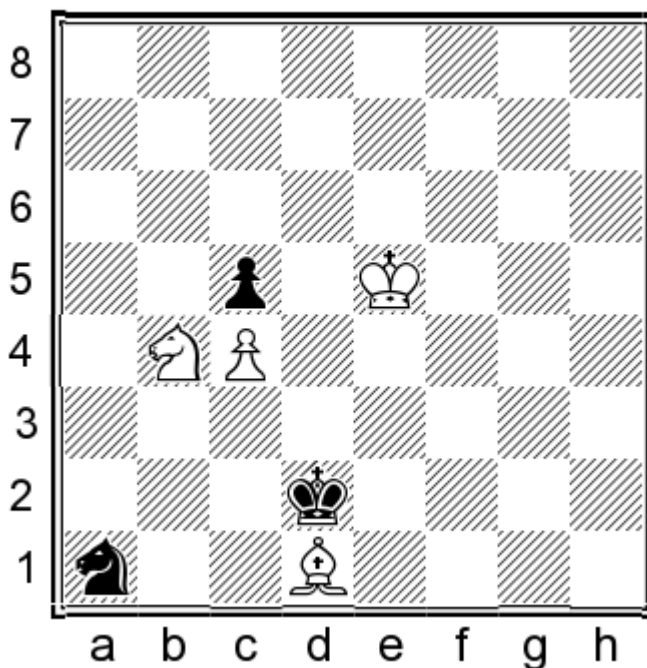
The checks are exhausted.

16...Rxf6 17.Kb5

And wins. An impressive study. There is also a version with a white queen on f3 instead of a knight on e3 in the starting position. There the first move is 1.Qd5!.

An interesting occasion for a disappearing trick is when a piece is attacked by an enemy pawn. White wants to prevent this capture by sacrificing the piece in question on another square.

Afek, 'Thèmes 64' 1977



White to play and win

Both white pieces are under attack. It looks as if White can win easily with 1.Ba4 cxb4 2.c5, but with 2...b3 3.Bxb3 Nxb3 4.c6 Na5! 5.c7 Nc6+ 6.Kd6 Na7 Black succeeds in stopping the c-pawn.

1.Nc2!

White has no objections to playing a pawn ending.

1...Nb3

The only way to maintain the knight. Now it appears that White has not achieved anything special, since after 2.Ne3 Na5 Black easily holds the draw.

2.Na1!!

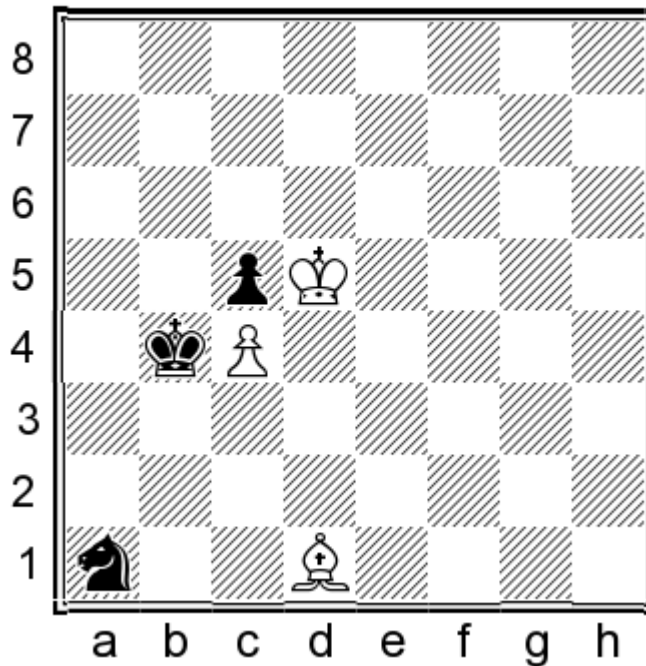
A tremendous surprise. White sacrifices his knight in order to dominate the enemy knight. This miniature looks like Bazlov's, only

there the white knight was first played to the corner square and then sacrificed. Here the corner square is where the sacrifice takes place.

2...Nxa1

Otherwise 3.Nb3+ follows.

3.Ba4 Kc3 4.Kd5 Kb4 5.Bd1!

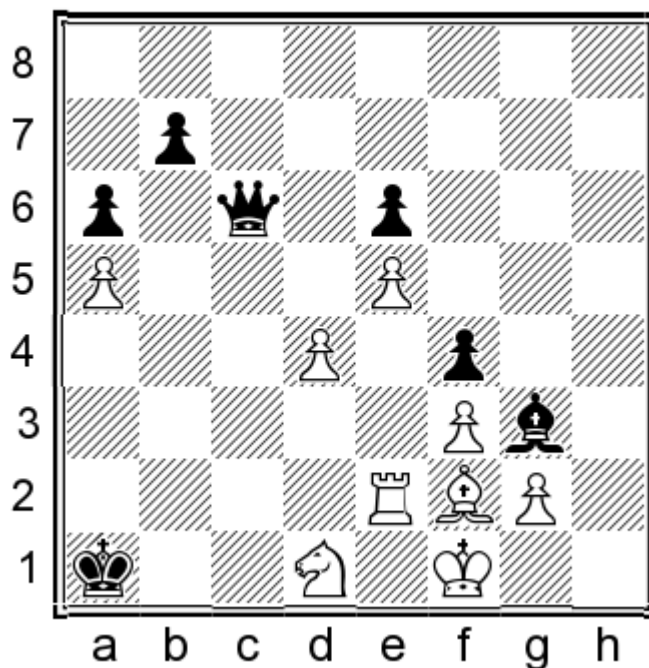


Reciprocal zugzwang.

White wins.

My own contribution looks slightly different, as the piece that will be sacrificed is not under attack yet. White sacrifices his bishop in anticipation of that attack.

Timman 1999/2011



White to play and win

To the old version I have added a starting move.

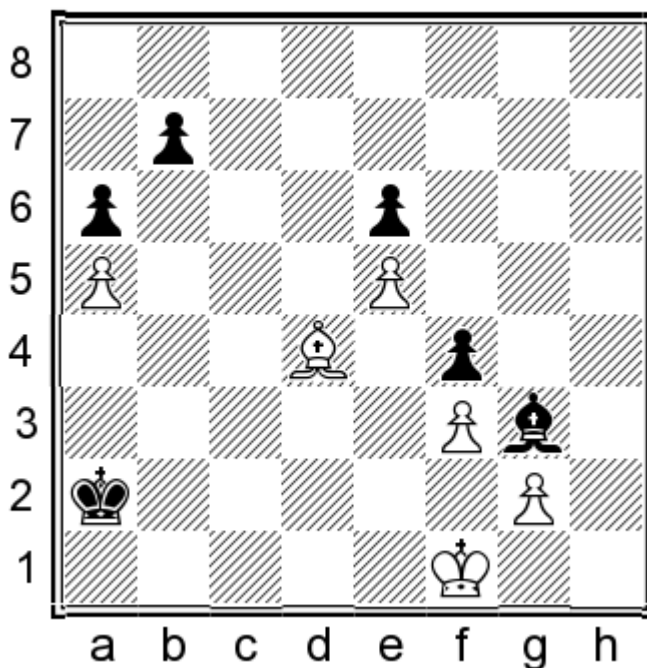
1.d5!

A thematic pawn sacrifice with which White increases the action range of his bishop.

1...Qxd5 2.Ra2+!!

The beautiful point of the previous move. White wins the queen.

2...Qxa2 3.Bd4+ Kb1 4.Nc3+ Kb2 5.Nxa2+ Kxa2



The picture has changed dramatically.

The ensuing bishop ending does not seem so bad for Black.

However, he has a problem: his remote king. White is going to exploit this factor.

6.Bf2

A 'switchback' by the bishop.

6...Bh2

Black should not consent to entering the pawn ending. The text move seems a safe option. If White sets his majority in motion, Black has no problems. After 7.g4 fxg3, each move by White's bishop is answered by 8...g2+, after which the black bishop is again free to move.

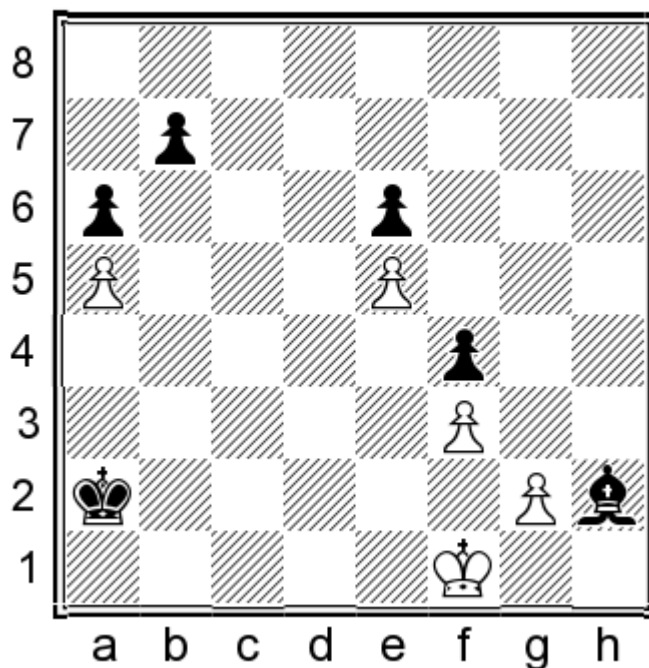
7.Bg1 Bg3

Again he avoids the bishop trade.

8.Bh2!!

An amazing version of the disappearing trick.

8...Bxh2



9.g4!!

Recently I read about someone who wanted to abolish the en passant rule. The game of chess would lose a lot of its beauty in that case.

9...fxg3 10.Kg2

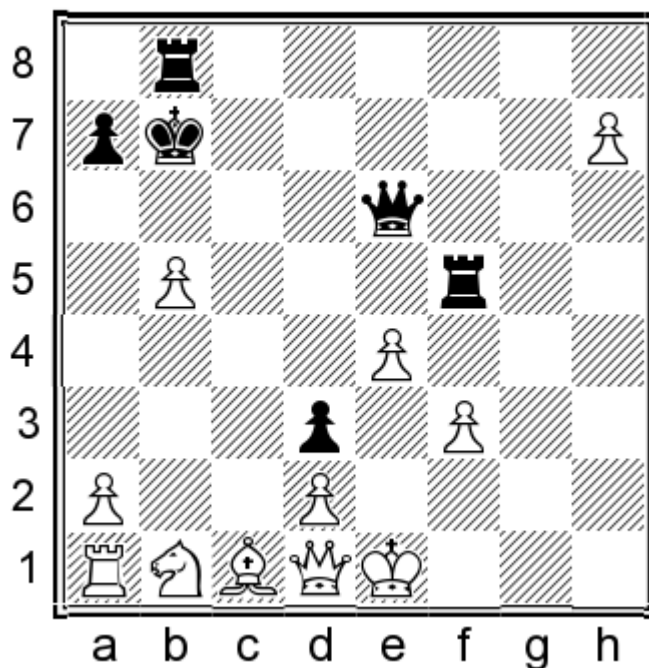
The point. Without the white bishop, the black bishop will remain cut off from play, and the white f-pawn has free passage.

10...Kb3 11.f4 Kc4 12.f5 Kd5 13.f6

And wins.

Is it possible to make a study where in the starting position no fewer than five white pieces are undeveloped on the first rank? Costeff succeeded in composing such a study, which is rich in content and striking in its originality.

Costeff, WCCT-7 2004



White to play and win

Materially, White has a large advantage, but particularly the far-advanced black d-pawn creates danger for his king. Therefore he will have to do everything he can to achieve the exchange of queens.

1.Qa4!

After other moves White will have a draw at best; for example, 1.Qb3 Qd6! 2.exf5 Qg3+ with a draw by perpetual check.

1...Rxf3

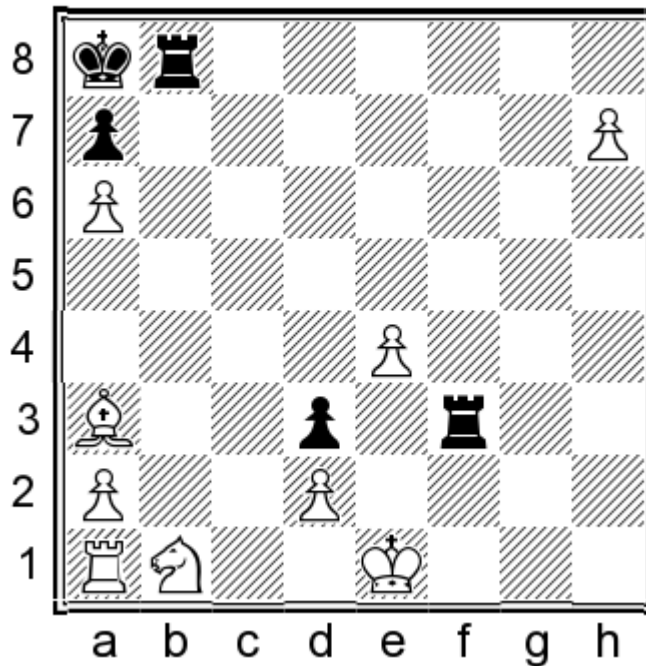
His best chance. Black allows the queen exchange and tries to obtain counterplay with his rooks.

2.Qa6+ Qxa6 3.bxa6+ Ka8!

A clever move. The alternative 3...Kxa6 was insufficient on account of 4.Ba3 (preventing 4...Rbf8), 4...Rh8 5.Nc3 Rxh7 6.0-0-0 and wins.

4.Ba3

Now too, White has to prevent the black rook occupying the f8-square.



4...Rxb1+!

The magnificent point of Black's previous move. Now, after 5.Rxb1 Black forces stalemate by 5...Rf1+.

5.Bc1!!

The ultimate disappearing trick. The black rook has to go back.

5...Rb8 6.Bb2

Preventing the rook check.

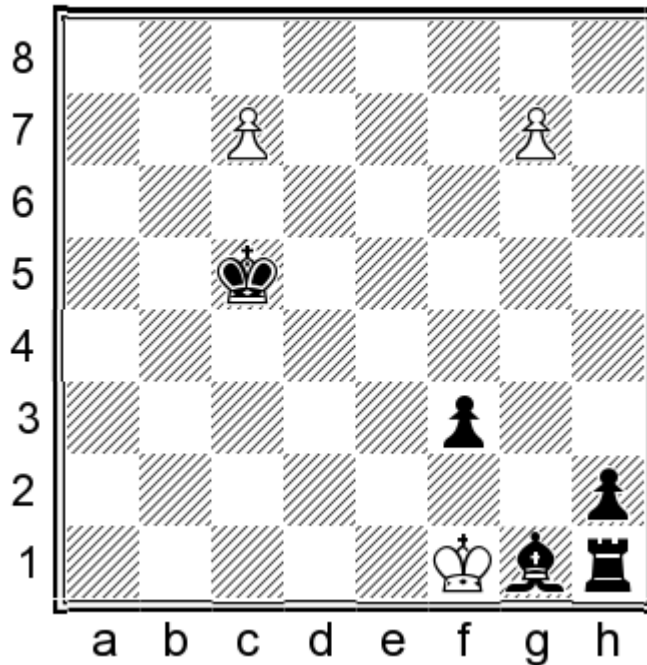
6...Rbf8 7.0-0-0

The final point. With the transaction that started with 4.Ba3, White has lost his knight, eventually gaining time to get his king out of the danger zone by castling queenside. White wins.

I succeeded in making a study where both sides take refuge in the disappearing trick. Actually this happened by coincidence. I had

been occupied with the following study by the Hungarian endgame study composer Attila Koranyi.

Koranyi, match Hungary-Finland 1979



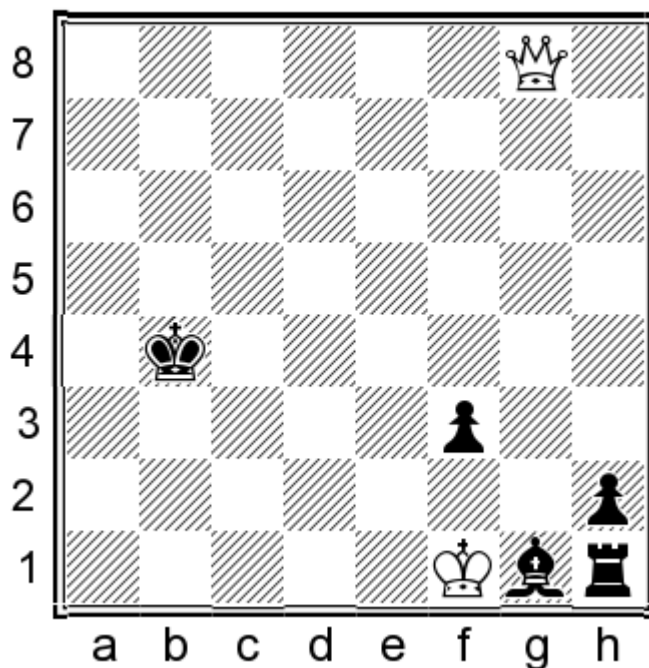
White to play and draw

Black threatens to give mate. It's clear that White has to queen.

1.c8Q+ Kb4

Now what? Only by sacrificing his queen can White prevent mate in one.

2.Qc4+! Kxc4 3.g8Q+ Kb4



Again, White has the same problem. But there is an elegant way out:

4.Qg2!

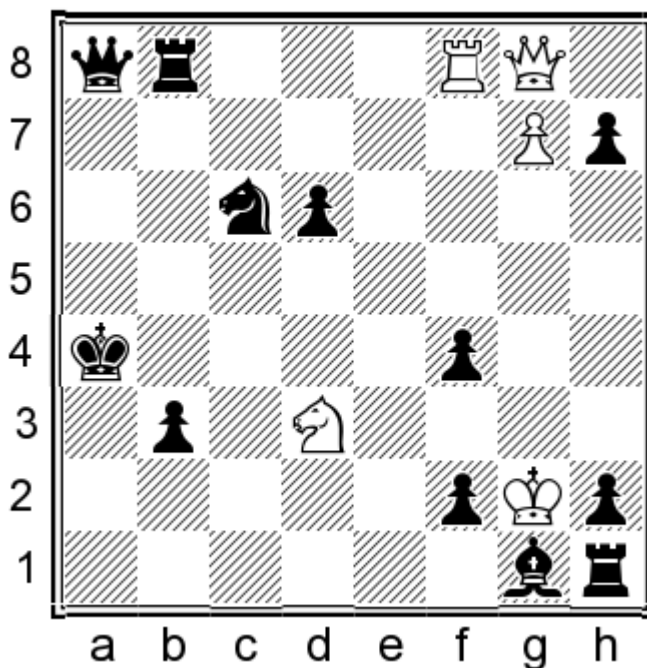
A second queen sacrifice, which Black again has to accept.

4...fxg2+ 5.Kxg2

Draw.

A modest study with an attractive theme. Something more could be gotten out of it. Together with the Argentinian composer Mario Garcia I composed the following study.

Timman/Garcia, 'Chess Star' 2019



White to play and draw

The first move is obvious.

1.Kf1 Ne5

Another tempting knight move is 1...Na5. White holds after 2.Qe6 Rxf8 3.gxf8Q Qxf8 4.Qd7+ Nc6 5.Qxc6+ Ka5 6.Qc3+. The black king can't escape from the perpetual.

2.Nxe5 d5!

The point of the previous move. Black keeps the white queen out of the game. After 2...dxe5 3.Qc4+ White draws easily.

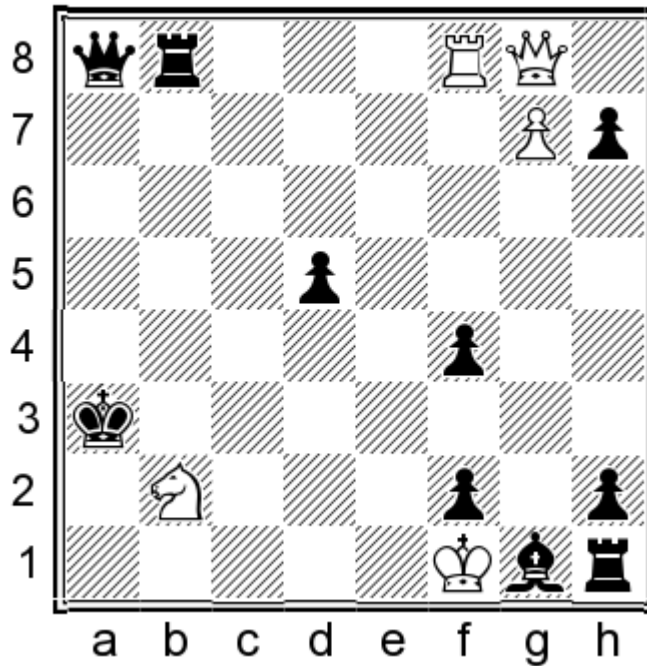
3.Nd3!

Stops the queen sac on a6.

3...b2

The alternative is 3...Qa5 looks promising, but White can just survive: 4.Rxf4+ Ka3 5.Qxb8 Qe1+ and now 6.Kg2! is forced, keeping Black's pieces on the kingside out: 6...f1Q+ 7.Rxf1 Qe2+ 8.Rf2 Bxf2 9.Qb4+ Ka2 10.Qa4+.

4.Nxb2+ Ka3



5.Nc4+!

The introduction to a spectacular final. The alternative 5.Qe6 was just insufficient. There is a long variation that finally results in a winning endgame for Black: 5...Qa5 6.Qd6+ Ka2 7.Qxd5+ Qxd5 8.Rxb8 Qg2+ 9.Kxg2 f1Q+ 10.Kxf1 Ba7+ 11.Kg2 Rg1+ 12.Kxh2 Rxg7 13.Rb5 f3 14.Nd1 and now 14...Bd4! 15.Rd5 Bg1+ 16.Kh1 Kb1 and White is outmanoeuvred.

5...dxc4 6.Rxb8 Qg2+!

The first queen sacrifice, this time by Black.

7.Kxg2 f1Q+ 8.Kxf1 f3

Threatening mate.

9.Rb3+!

The only way out.

9...cxb3 10.Qxb3+ Kxb3 11.g8Q+

Now we are on familiar ground.

11...Kb4 12.Qg2 fxg2+ 13.Kxg2 Bd4 14.Kxh1

Draw.

Chapter 13

Three themes

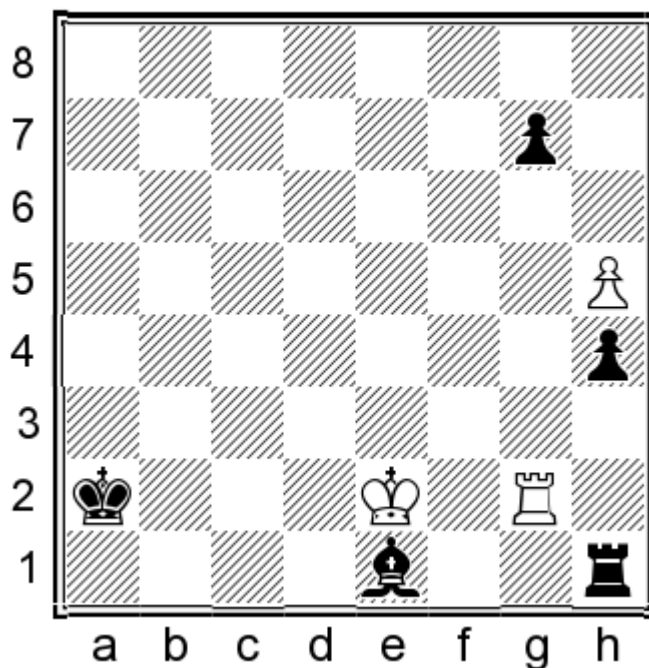
1. Troitzky/Amelung position

An interesting question is: can we compose a position where one side is a rook, bishop and pawn up, it is his move and yet he cannot win? I shall give two clues: stalemate is not a theme, and without that pawn it isn't possible.

In 1896 this position was discovered twice: by the Baltic/German endgame theoretician Friedrich Amelung in Riga, and by Alexey Troitzky in Smolensk. Each of them published a modest study in that year which showed the discovery: Amelung in the *Düna Zeitung*, and Troitzky in *Novoye Vremya*. In those times it was normal that new studies were published in daily newspapers.

Amelung's study looked as follows:

Amelung, 'Düna Zeitung' 1896



White to play and draw

White is a piece behind, and taking on g7 will not save him.

1.h6! gxh6 2.Kf3+ Kb1 3.Rb2+!

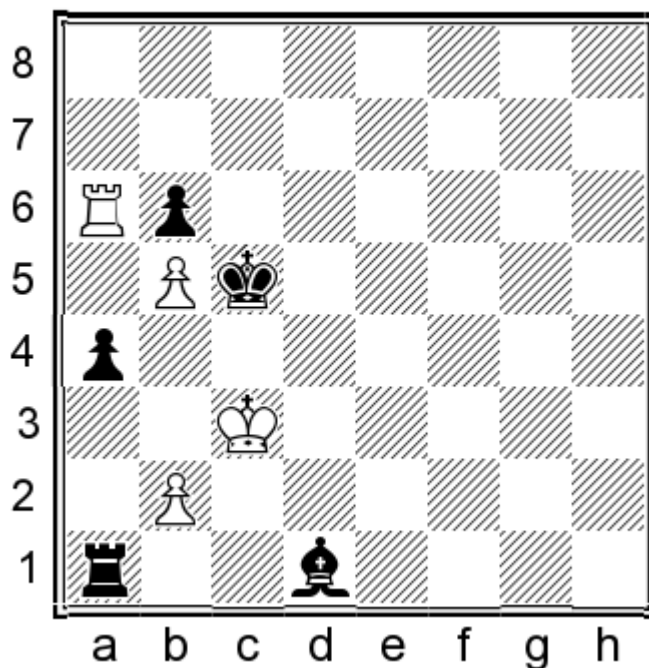
A rook sacrifice that serves to vacate the g2-square for the king.

3...Kxb2 4.Kg2

And the black rook has no squares.

In Troitzky's study, the play unfolds on the queenside.

Troitzky, 'Novoye Vremya' 1896



White to play and draw

Here also, a crucial square must be cleared for the white king.

1.b4+! Kxb5 2.Rxb6+! Kxb6 3.Kb2

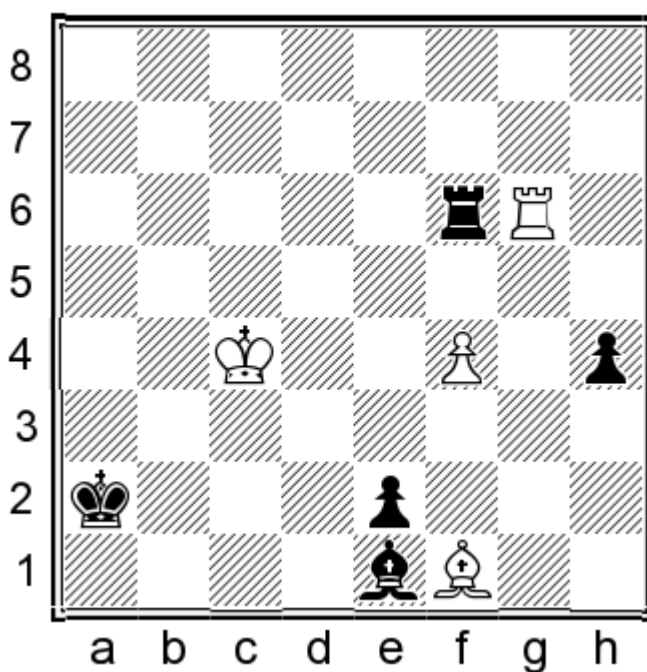
And again the black rook is caught.

Which of these studies appeared first? We don't know the publication date of Amelung's study in the *Düna Zeitung*, but we do have something to go on: his study was published again later, on May 17, in *Deutsches Wochenschach*. Troitzky's study is not dated. In fact this is a little strange. In 1896, Troitzky published 51 studies in *Novoye Vremya*. The greater part of these were dated, but precisely this one isn't. Because of this, we cannot say with certainty who was first with this discovery. Somewhere in Russia there may be someone who knows; it's unlikely that all the newspapers from before the Revolution have been lost.

It does seem certain that Troitzky and Amelung did not know each other's studies. News did not travel so fast in those days, but there does seem to have been an exchange of studies between Russia and the Baltic countries. Nevertheless, it seems improbable to me that Troitzky and Amelung knew each other's studies. Both composers had a reputation to lose. If the drawing position had been already known, they would have had to make an effort to compose a special study. As it was, it sufficed for them to show the idea in a modest form.

A fair number of studies have been made on this theme. Four decades later, Herbstman came up with the following adaptation.

Herbstman 1934



White to play and draw

Black threatens to promote his e-pawn, and at the same time White's rook is under attack.

The only solution to both these problems is a pin on the black e-pawn.

1.Rg2 Rxf4+

This seems to guarantee an easy win. However, White can just save himself thanks to the Troitzky/ Amelung position.

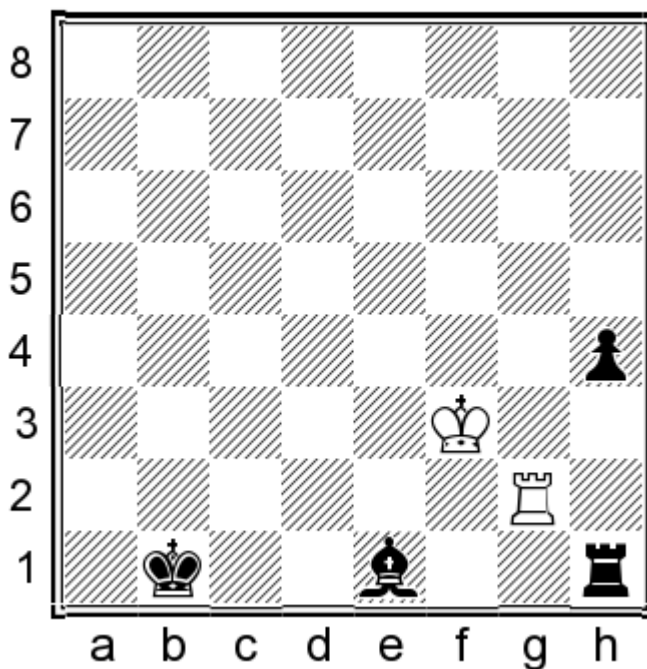
2.Kd3!

On the road to g2.

2...Rxf1 3.Kxe2

Driving the rook to the corner.

3...Rh1 4.Kf3+ Kb1



5.Rb2+!

Amelung's sacrifice.

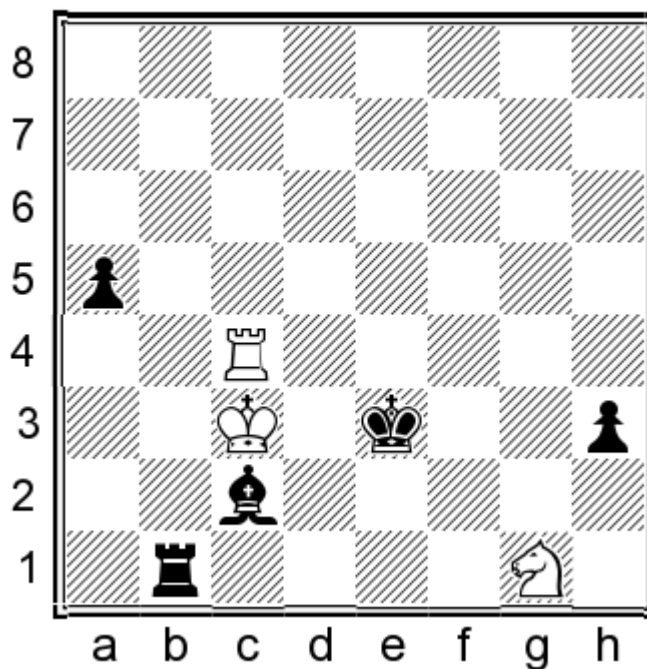
5...Kxb2 6.Kg2 draw.

For this study Herbstman received third prize in the ‘Communist Party Congress Tourney’ published in 64.

This adaptation is not entirely convincing. There are actually few surprises, and the black bishop is already poised to block the rook in the final position.

It turns out to be not at all easy to conceive of a fitting introduction. The Finnish study composer Pauli Perkonoja found this out when he made the following study.

Perkonoja, ‘Tidskrift för Schack’ 1963



White to play and draw

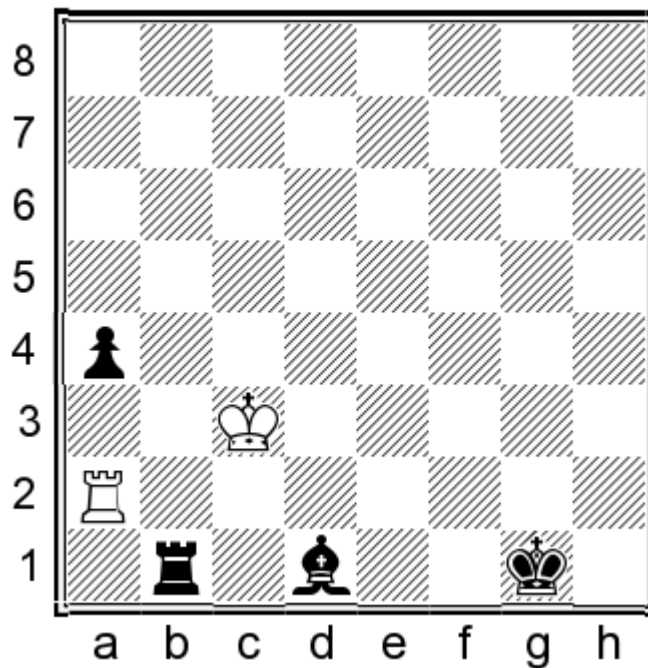
White will first have to take care of the black h-pawn. If he takes it with the knight, Black has a pretty win: 1.Nxh3 Bd1! (threatening mate on b3) 2.Rf4 Rb3+ 3.Kc4 a4 and the a-pawn cannot be

stopped, for example 4.Rf7 Be2+ followed by 5...a3 and the black king will assist in the pawn promotion.

1.Rh4 Bd1 2.Rxh3+ Kf2 3.Rh2+

The thematic way. The alternative 3.Kd2 was sufficient too.

3...Kxg1 4.Ra2 a4



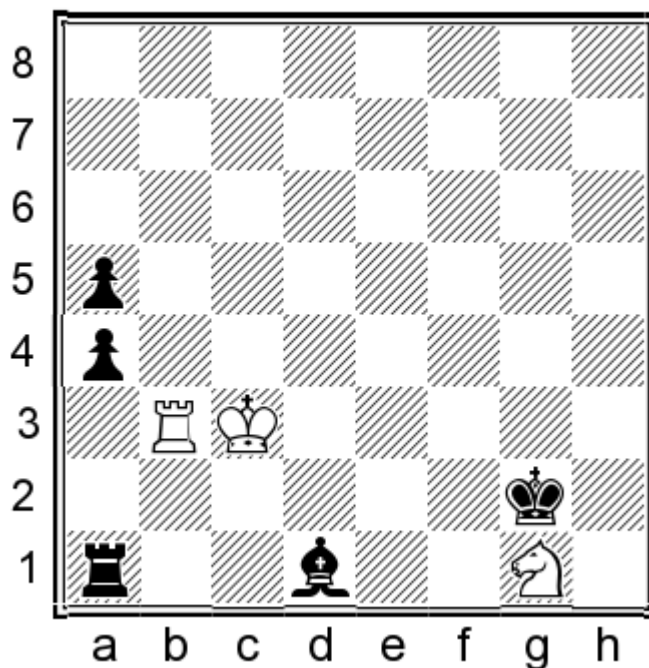
5.Ra1!

An attractive rook sacrifice in order to reach the famous position.

5...Rxa1 6.Kb2 draw.

I had the same trouble myself. As an illustration of the disappearing trick I had invented the following mini-study.

Timman, 'New In Chess' 2004



White to play and draw

The intended solution was:

1.Rb2+ Kxg1 2.Rg2+! Kxg2

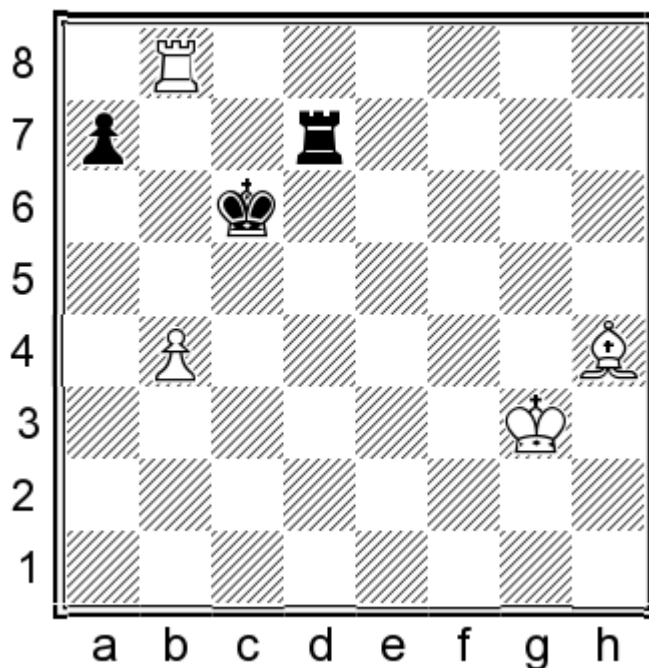
Two white pieces have disappeared.

3.Kb2

Draw. 1.Rb5 also does the trick. In order to exclude this solution, a black pawn on a6 can be added.

In the following mini-study, White manages to avoid the Troitzky/Amelung position.

Timman 2002



Black to move – White wins

It is tempting to force a rook exchange by 1...Rb7, but after 2.Rxb7 Kxb7 3.Bd8! White wins. So Black has to try something else.

1...a5 2.bxa5 Ra7

If White now plays the careless 3.Bd8, there follows 3...Ra8! with a draw.

3.Rc8+!

An important zwischenschach.

3...Kd6

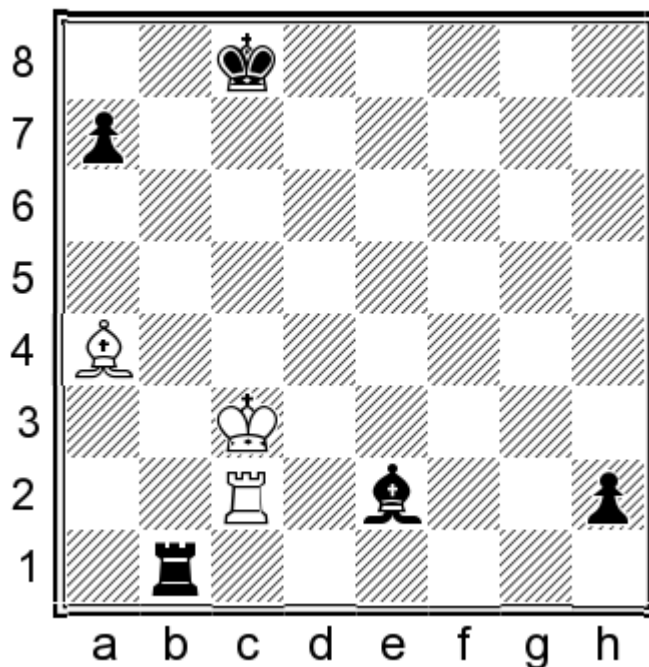
Black has to keep control of the square c5.

4.Bd8 Kd7 5.Rb8

And wins.

So far my contribution to this theme had been modest. The following study is more ambitious.

Timman 2010



White to play and draw

First of all White has to stop the h-pawn.

1.Bc6

Now, on 1...Rb6 White has planned 2.Bd5, and 1...Bb5 2.Be4 also leads to a problem-free draw.

However, Black has a stronger move:

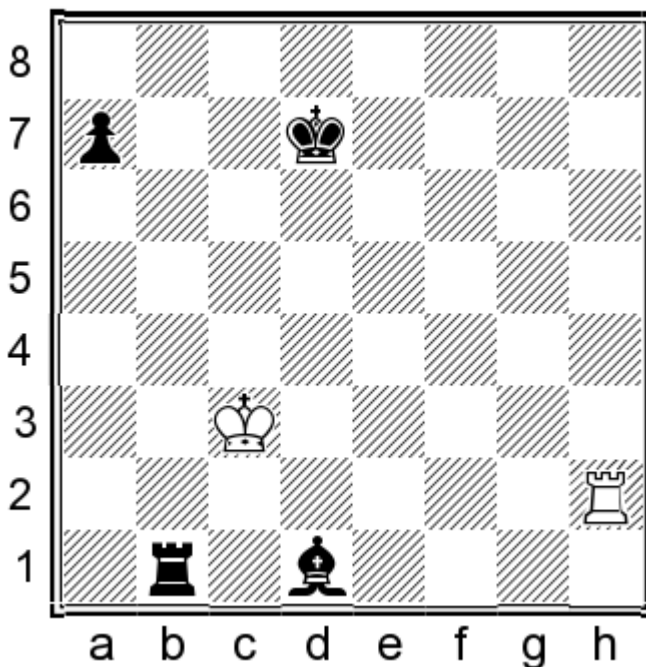
1...Bd1

Now what? This question brought many strong players to despair when I confronted them with this position. If White captures on h2, there follows a decisive check on c1.

2.Bd7+!!

Simply amazing! White sacrifices his bishop in order to drive the black king to a less favourable square.

2...Kxd7 3.Rxh2



At first glance it doesn't look as if White will be able to save himself. However, Black has trouble keeping the coordination of his forces intact. The a-pawn is indirectly attacked and 3...Kc6 is satisfactorily met by 4.Rh1, when, due to the pin along the first rank, Black cannot avoid the exchange of rooks.

3...a5

Now 4.Rh1 can be met by 4...a4. Then 5.Kd2 is decisively answered by 5...a3, since the a-pawn becomes too strong. Therefore White shuffles the cards.

4.Ra2!

Forcing the a-pawn further forward.

4...a4 5.Ra1!!

Perkonoja's rook sacrifice.

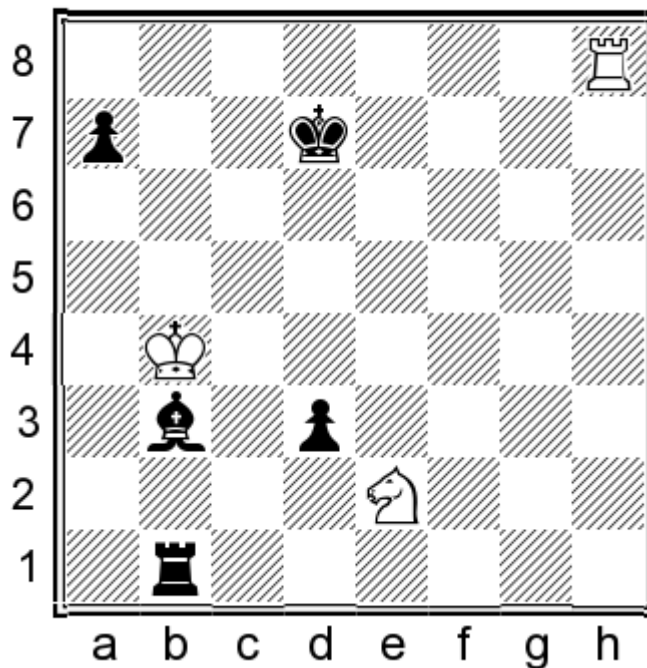
5...Rxa1 6.Kb2

Draw.

I was very pleased with this study. The play is lively, and the position after White's third move is intriguing.

Great was my disappointment when later I saw that this position had already been discovered by someone else, 31 years earlier.

Matous 1979



White to play and draw

White has to give his knight for the d-pawn.

1.Nc3 d2 2.Rh2! d1Q 3.Nxd1 Bxd1+ 4.Kc3!

And the same position has been reached.

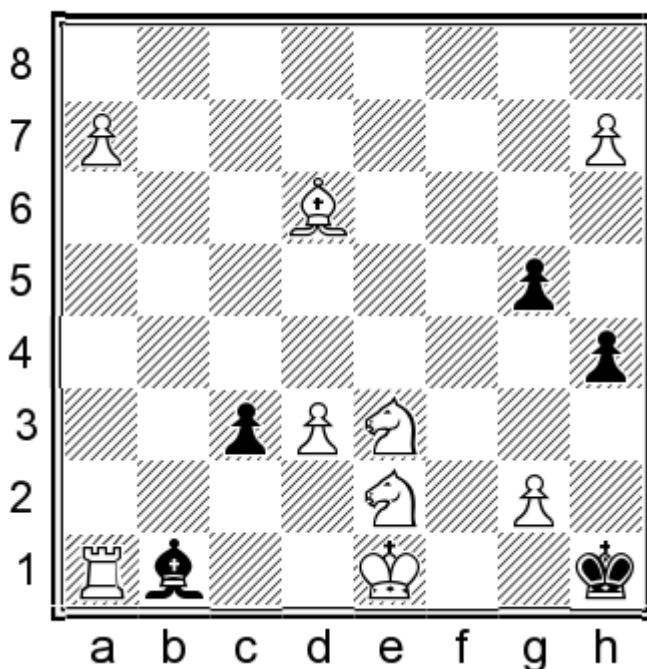
For this study Matous received second prize in the Réti Memorial. I could console myself with the thought that my introductory play was more surprising and probably also better.

2. Valladao Task

In Chapter 5 I already mentioned this task. Like the Novotny and Plachutta themes, the Valladao task stems from the world of problem chess, only it is of a much more recent date.

In 1964, the Brazilian Joaquim Valladao Monteiro composed the following problem.

Valladao Monteiro, 'O Globo' 1964



Mate in 2

The key move is:

1.g4

Threatening to give mate immediately by promoting on a8. Black has only two moves to postpone the mate.

A) 1...hxc3 2.h8Q mate;

B) 1...Ba2 2.0-0-0 and Black is mated as well.

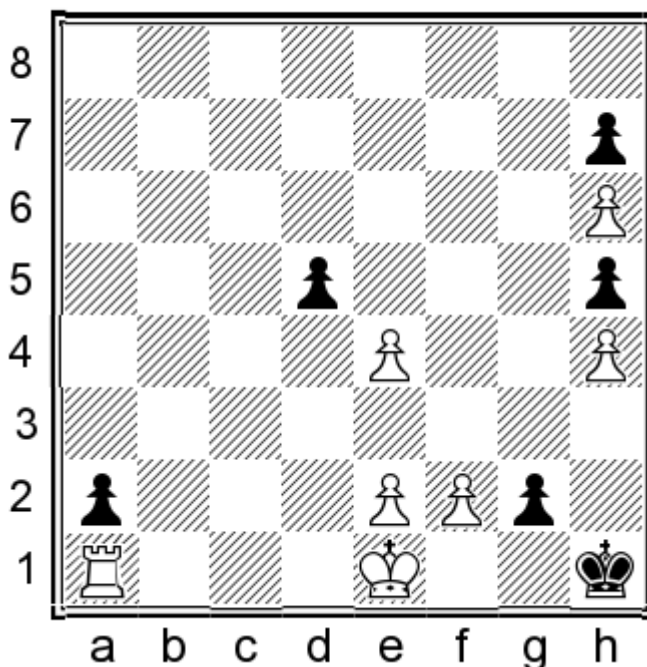
Not a very impressive problem.

Van der Heijden claimed that this task is better suited for endgame studies. Moreover, he specified the composer's task further: to the castling move and the en passant capture, a minor promotion should be added.

Not many studies have been made with this criterion so far. It isn't easy to add new points if all the 'Valladao ingredients' are already present.

A study by Costeff is relatively highly valued.

Costeff, 'The Problemist' 2006



White to play and win

The first move is obvious.

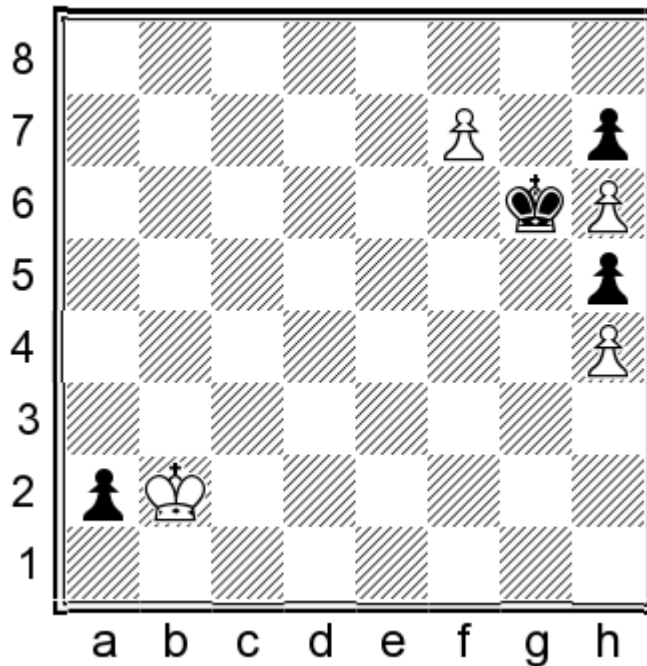
1.0-0-0+ g1Q 2.Rxg1+ Kxg1 3.Kb2 dxe4 4.f4!

Not 4.f3 in view of 4...e3, with a draw.

4...exf3 5.exf3 Kf2

Now the black king is going to pursue the f-pawn.

6.f4 Kf3 7.f5 Kf4 8.f6 Kf5 9.f7 Kg6



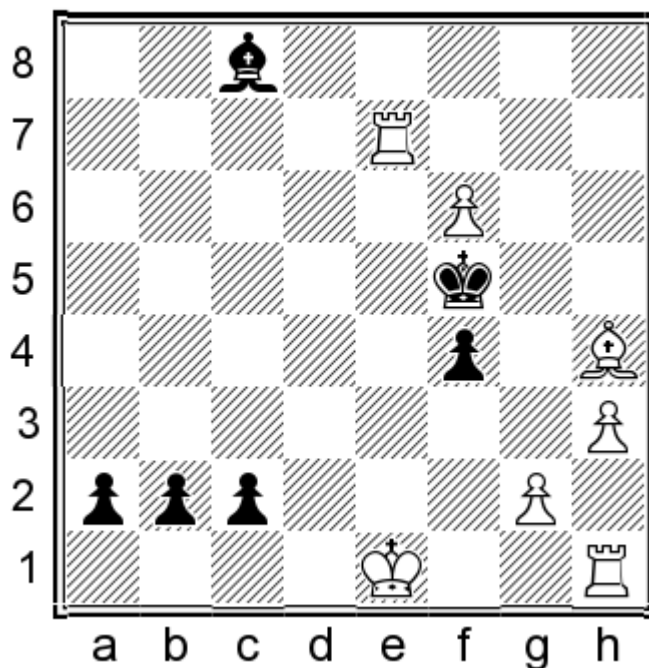
If White now queens, Black is stalemated; after a bishop promotion, Black has a fortress.

10.f8R!

The only correct promotion. White wins.

Afek has also fulfilled the Valladao task in a nice way.

Afek 2011



White to play and win

The black queenside pawns look threatening. White will have to play for mate.

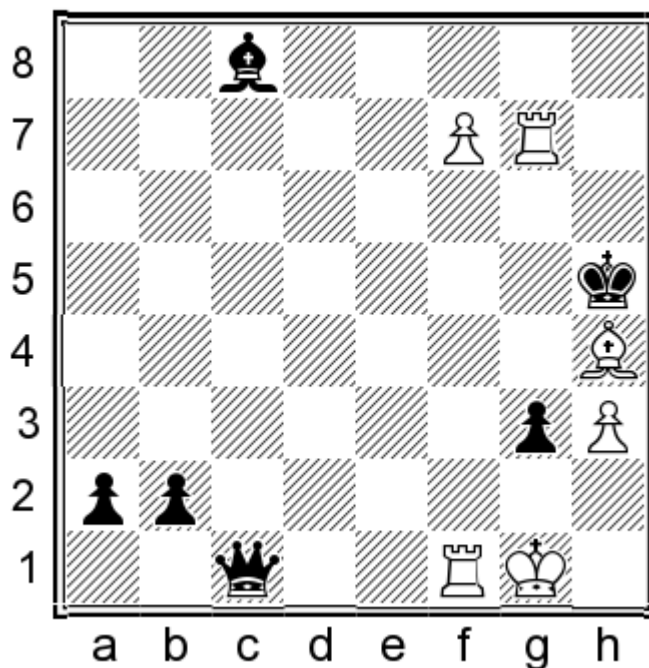
1.g4 fxg3

In order to prevent mate, Black has to take en passant.

2.0-0+

Two-thirds of the task has been completed.

2...Kg6 3.Rg7+ Kh5 4.f7 c1Q



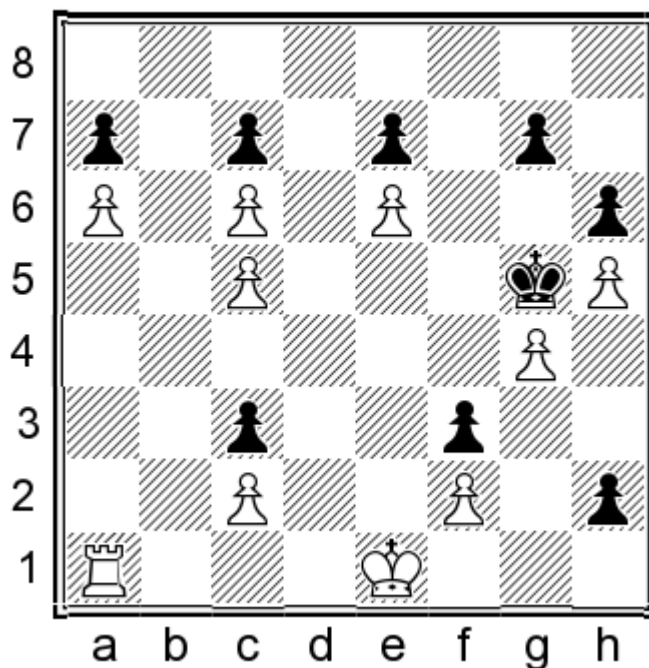
Now for the final touch.

5.Rh7+ Kg6 6.f8N

Mate.

Zinar succeeded in implementing the theme of the multiple knight promotions in a Valladao Task, resulting in the following study:

Zinar, 'Osintsev-50 JT' 2011



White to play and win

All sixteen pawns are still on the board!

1.0-0-0!

With this move, the first part is accomplished.

1...Kh4!

The best chance.

The other main line goes 1...Kxg4 2.Rh1 Kh3 3.Kd1 Kg2 4.Ke1 Kxh1 5.Kf1 g5 6.hxg6 h5 7.g7 h4 8.g8N h3 9.Nf6 exf6 10.e7 f5 11.e8Q f4 12.Ke1 and White wins.

2.Rh1! Kh3 3.Kd1

The white king rushes back to lock in the black king.

3...Kg2 4.Ke1 Kxh1 5.Kf1 g5 6.hxg6

The second part of the task.

6...h5 7.g7 h4! 8.g8N!

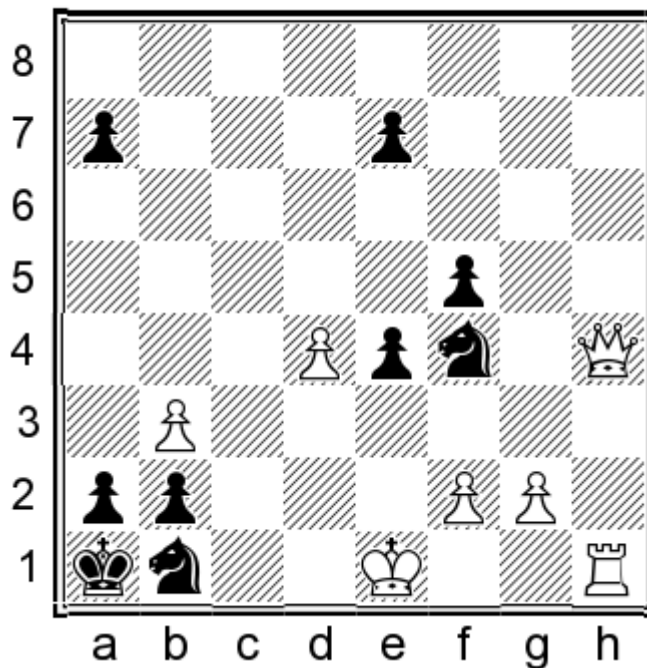
And the third part. We are now on familiar ground.

**8...h3 9.Nf6 exf6 10.e7 f5 11.e8N! f4! 12.Nd6 cxd6 13.c7 dxc5!
14.c8N! c4 15.Nb6 axb6 16.a7**

White wins.

I also managed to compose a decent study on the theme.

Timman, 'Phenix' 2015



White to play and win

A very complicated position.

1.Qg3!

The only move to get a grip on the position. White can't castle, since after 1.0-0? Ne2+ 2.Kh2 Nc1! Black actually wins, e.g. 3.Qf4

Nd2 4.Qxd2 Kb1 and Black promotes his a-pawn, keeping his strong b-pawn that will eventually promote.

Capturing the knight leads to a draw: 1.Qxf4 Nc3 2.0-0+ b1Q 3.Qd2 Qxf1+ 4.Kxf1 Kb1! and White should in fact be happy with a draw.

1...a5

Black had various alternatives:

A) 1...e6 White wins by 2.b4!. After 2...Nd3+ 3.Qxd3 exd3 4.0-0 f4 5.d5! exd5 6.g4! fxg3 7.f4! we get to the main line;

B) 1...e5 2.d5! e3 3.0-0! Ne2+ 4.Kh2 Nxg3 5.fxg3 and White wins;

C) 1...e3 2.Qxe3! Nxg2+ 3.Ke2 Nxe3 4.Kxe3 e6 5.b4 and Black has no resources left;

D) 1...Nd3+ 2.Qxd3 exd3 3.0-0 will lead to the main line.

2.d5!

It's still too early to castle; after 2.0-0? Ne2+ 3.Kh2 Nc1 Black is winning again.

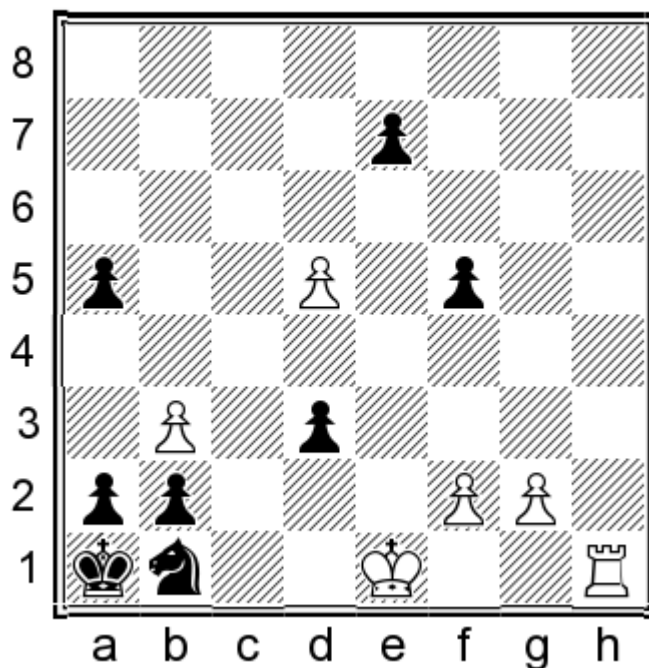
2...Nd3+

The best chance. On 2...a4 White wins by 3.Kd1 (or 3.Qg7).

3.Qxd3

The queen sacrifice is necessary, otherwise the knight reaches square c1.

3...exd3



4.0-0

Finally White castles. Now Black has only pawn moves.

4...f4

An important alternative is 4...d2. In that case White has to gain space by 5.f4! and Black will run out of moves.

5.d6!

This pawn sacrifice is needed to create a passed f-pawn.
After 5.Kh2? d2 6.Rd1 f3 there is no win.

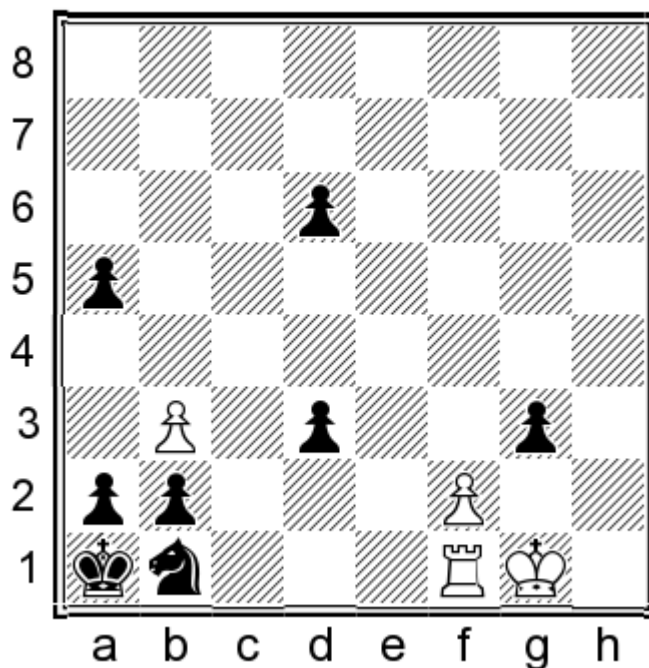
5...exd6

Another pawn sacrifice to create a passed f-pawn.

6.g4! fxg3

The second part of the task.

After 6...d2 7.g5 f3 8.g6 d5 9.g7 d4 10.g8N! White is on time to deliver mate on c2.



**7.f4! g2 8.Kxg2 d5 9.f5 d4 10.f6 d2 11.f7 d3 12.f8N! d1Q
13.Rxd1 d2 14.Ne6!**

Accuracy till the end.

After 14.Nd7? a4 15.Nc5 a3! there is no mate.

14...a4 15.Nd4 a3

Or 15...axb3 16.Nxb3#.

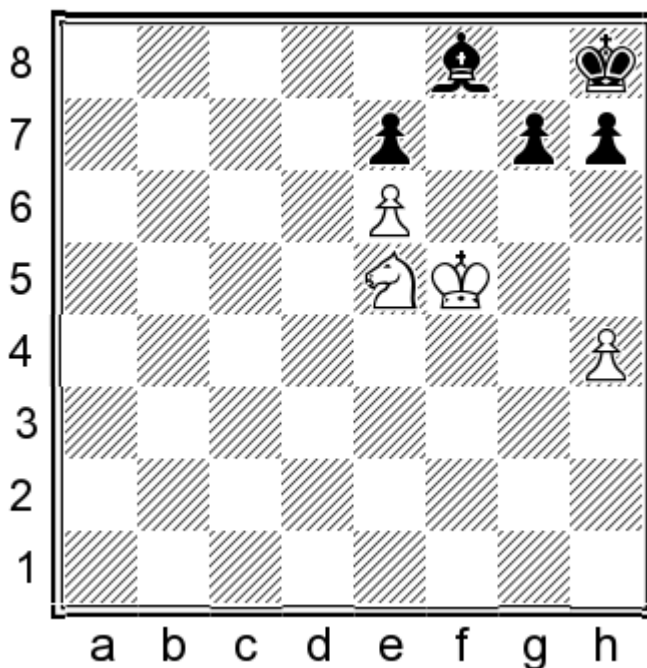
16.Nc2

Mate.

3. Liquidation to a pawn ending

This is a theme that has been sublimely adapted by Shaya Kozlowski.

Kozlowski, 'Glos Poranny' 1931



White to play and win

The black bishop is boxed in on its starting square, and it will never leave there.

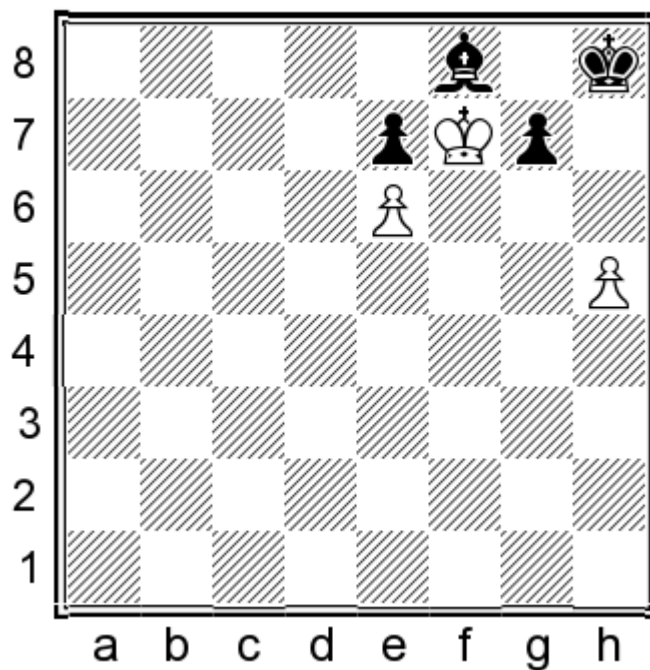
1.Ng6+!

A positional knight sacrifice. After other moves Black would free himself by pushing his g-pawn.

1...hxg6+ 2.Kxg6 Kg8 3.h5

Mutual zugzwang. If it were his move, White would lose.

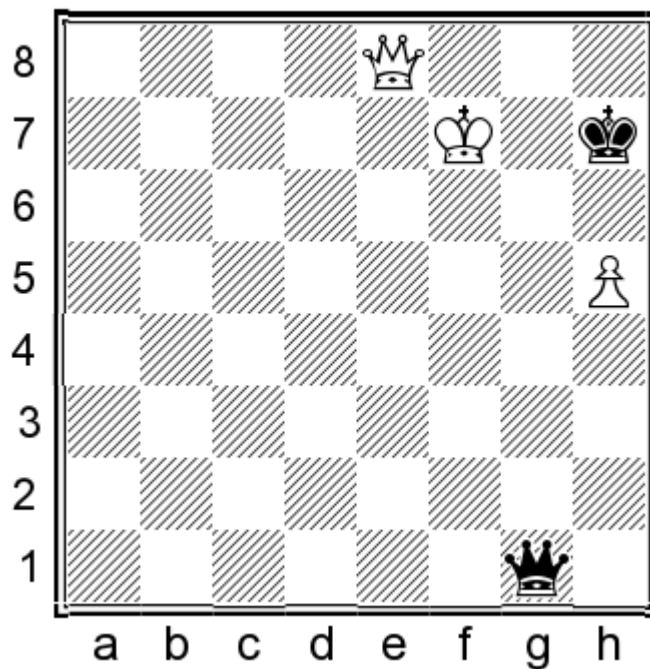
3...Kh8 4.Kf7



4...g5

His best chance. A pawn race follows.

5.Kxf8 g4 6.Kxe7 g3 7.Kf7 g2 8.e7 g1Q 9.e8Q+ Kh7



Both sides have promoted their pawns. Now White forces the exchange of queens by a series of checks.

10.Qe4+ Kh8 11.Qe5+ Kh7 12.Qf5+

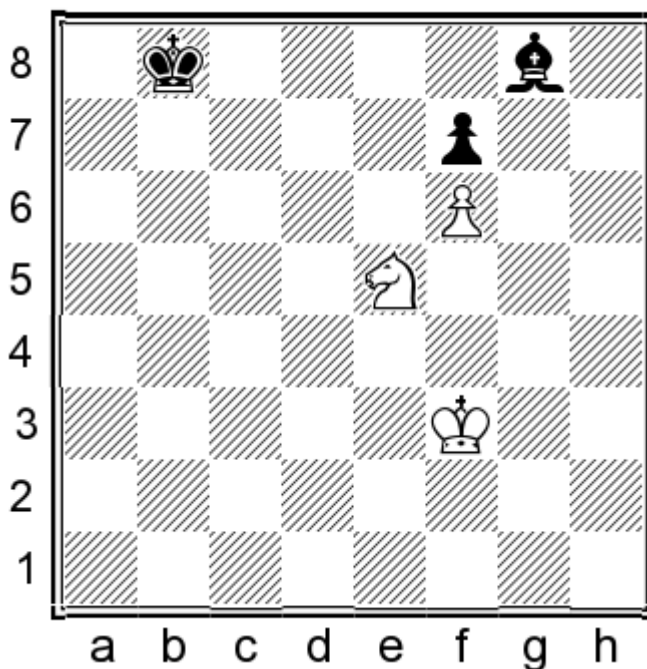
Step by step, the white queen approaches.

12...Kh8 13.Qf6+ Kh7 14.Qg6+

And White wins.

Even more interesting is the following miniature study.

Kozlowski, 'Glos Poranny' 1931



White to play and win

Without the black f-pawn this position would be drawn. As in the previous study, White is going to cut off the enemy bishop from play.

1.Nd7+ Kc7 2.Nf8!!

Amazing. White locks in his own knight in order to deprive the black bishop of the h7-square.

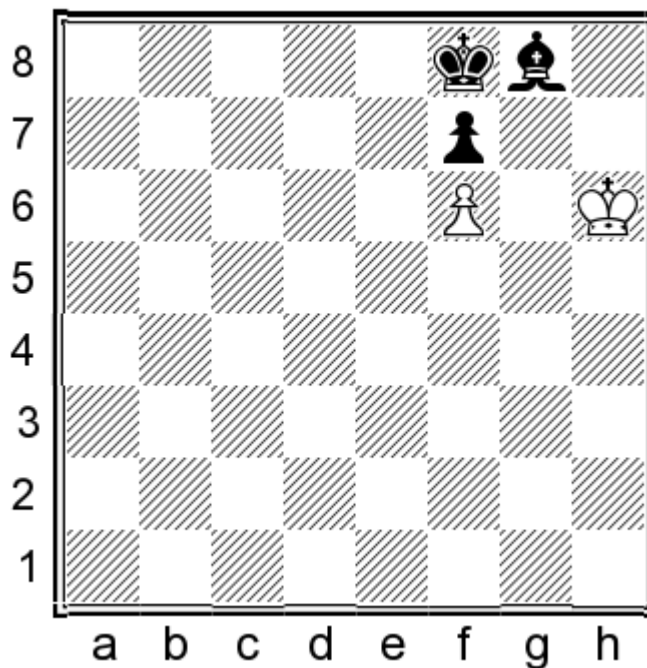
2...Kd8

The alternative was 2...Kd6. Then White wins with 3.Kg4 Kd5 4.Kh5, and White has the opposition. Since the two minor pieces are condemned to keep each other imprisoned, this position can be treated as a pawn ending.

3.Kf4

Also good is 3.Kg4.

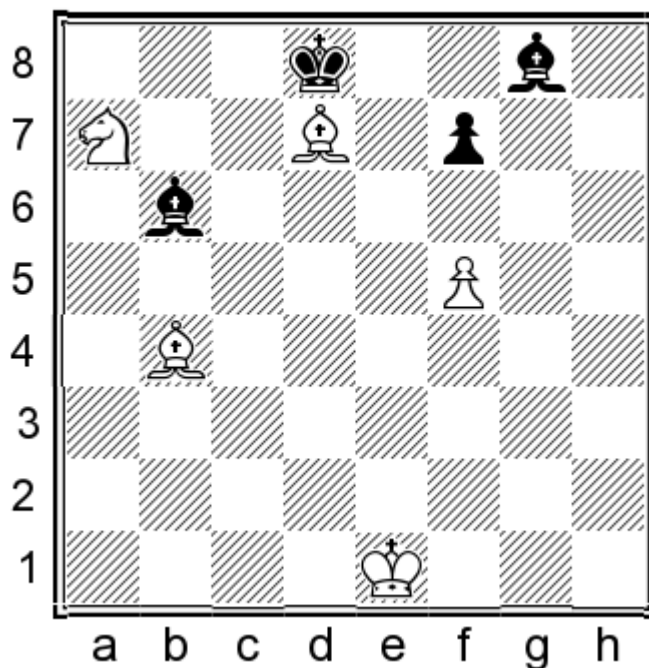
3...Ke8 4.Kg5 Kxf8 5.Kh6



Mutual zugzwang. White liquidates into a winning pawn ending. Without the black bishop it would be a draw.

I reckoned that it ought to be possible to elaborate on this study. With a little extra material, some new points can be added.

Timman 2011



White to play and win (after Kozlowski)

White is threatened with the loss of his extra piece.

1.Nc8

The only move to avoid this.

1...Ba5!

A subtle defence. Before he captures the king's bishop, Black drives the other bishop to a less favourable square.

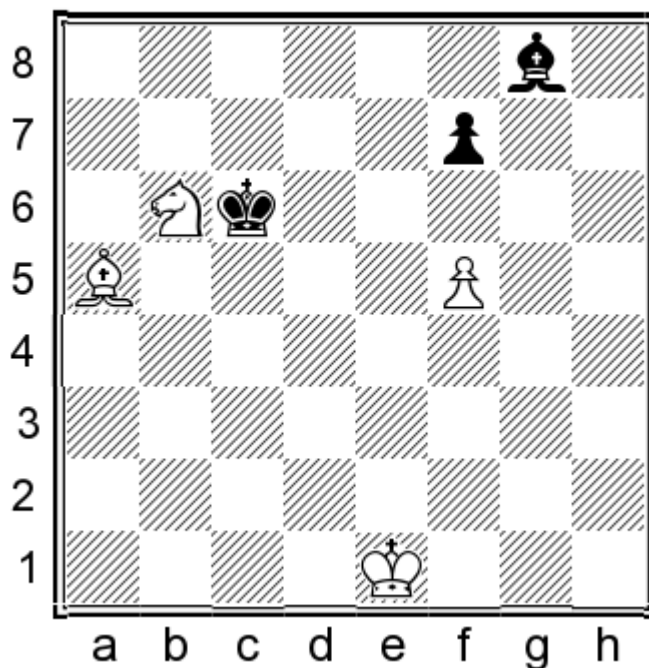
2.Bxa5+ Kxd7

Now White has a problem. If he plays 3.Na7, there follows 3...f6! 4.Nb5 Bh7 5.Nd4 Kd6 and he cannot maintain his f-pawn.

3.Nb6+!

Preparing a bishop sacrifice.

3...Kc6



4.f6!

Fixing the black f-pawn.

4...Kb5 5.Nd7!

The point of the previous move. The knight is on its way to f8.

5...Kxa5 6.Nf8!

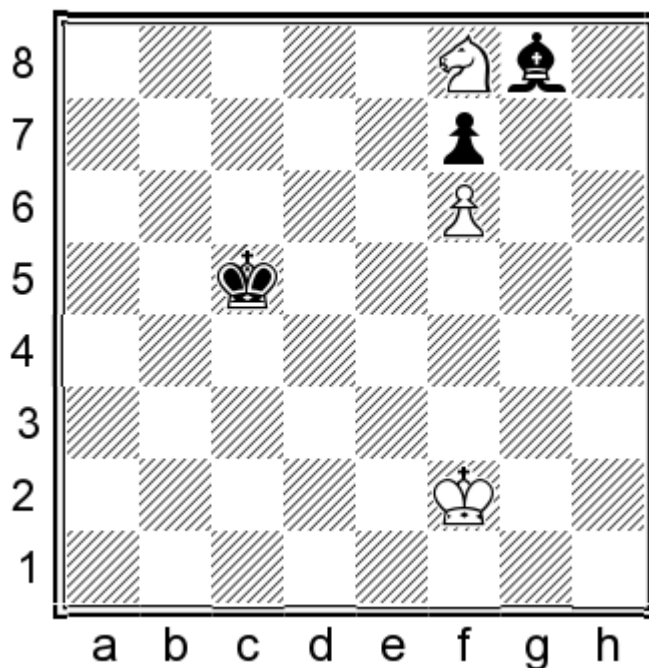
Here also, with both kings further removed, Kozłowski's concept works.

6...Kb6 7.Kf2

The only good king move.

7...Kc5

The alternative 7...Kc7 would lead to Kozłowski's main line.



8.Kg3!

Again the only move. The king is on its way to h4.

8...Kd5 9.Kh4!

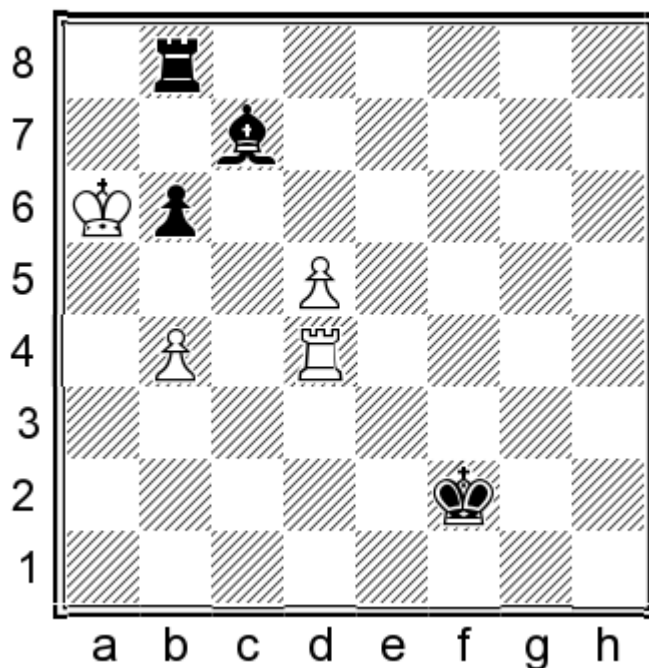
Thus White gains the opposition.

9...Ke4 10.Kg4 Kd4 11.Kh5! Ke5 12.Kg5

And wins.

Obviously we can conceive of countless studies where White liquidates into a pawn ending.

Timman 2011



White to play and win

White must aim for maximum domination of the enemy pieces.

1.d6 Bd8

Forced, since all rook endings are winning for White.

2.Ka7

Not immediately 2.Rf4+ Ke3 3.Rf8, as then Black can save himself just in time with 3...Bc7.

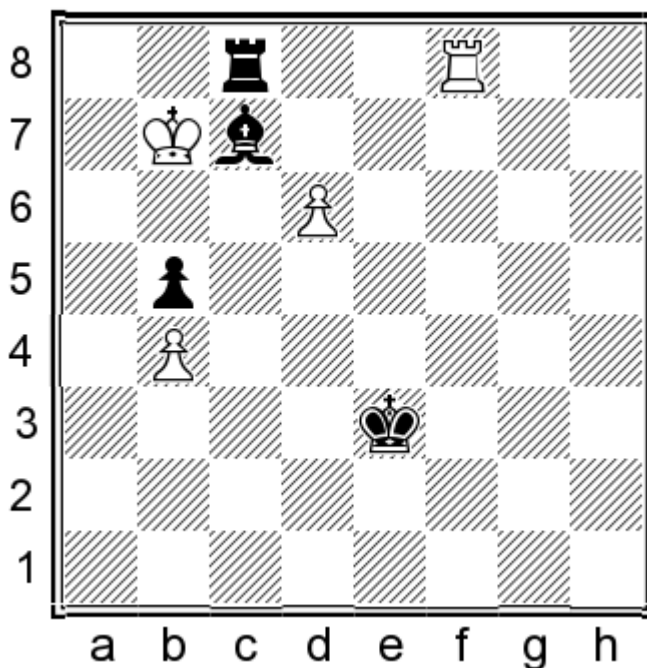
2...Rc8 3.Rf4+

Insufficient for the win was 3.Kb7 in view of 3...Rc3.

3...Ke3 4.Rf8

It looks as if the matter is settled. What can Black do against the threat of 5.Kb7 ?

4...b5 5.Kb7 Bc7!



The point of the previous move. If White takes the rook, he cannot win, and after 6.dxc7 Rxf8 he even has to be careful not to lose.

6.Rf3+!!

Terrific. White drives the black king further away from the b-pawns.

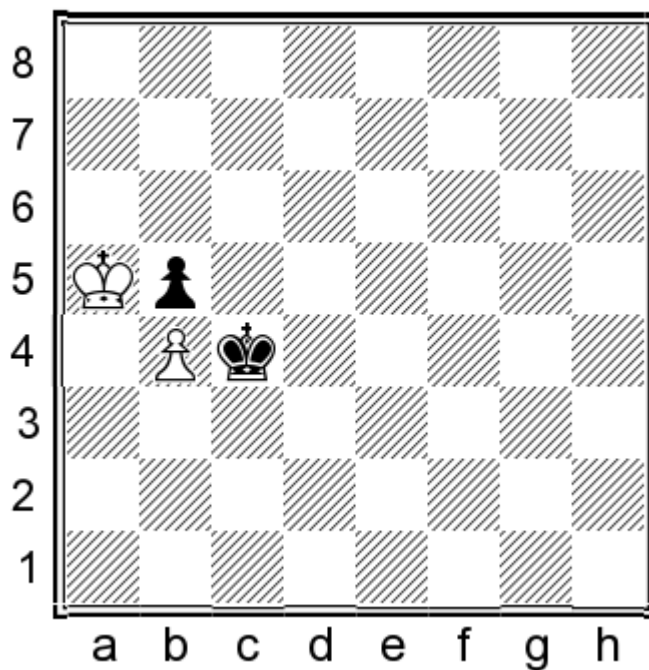
6...Kxf3 7.dxc7

Now the pawn endgame is won by the narrowest of margins.

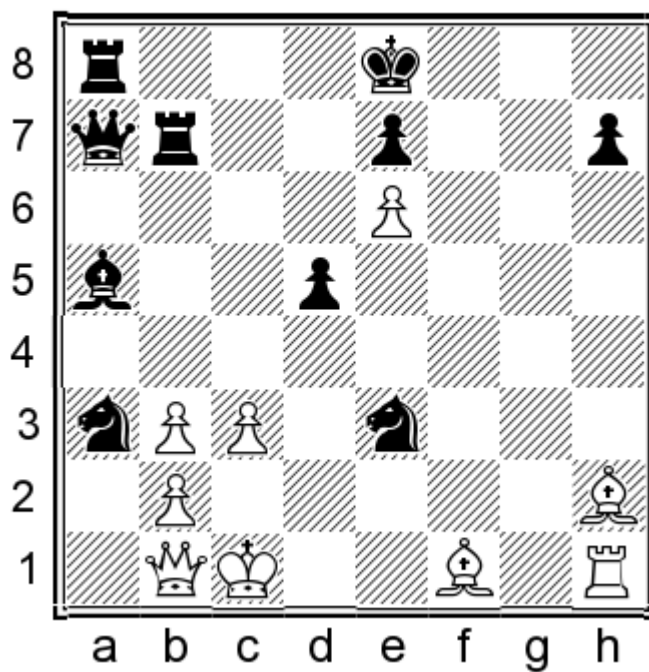
7...Rf8 8.c8Q Rxc8 9.Kxc8 Ke4 10.Kc7

Also good is 10.Kb7.

10...Kd5 11.Kb6 Kc4 12.Ka5



An elementary mutual zugzwang situation. White wins.
 Even with a board full of pieces, eventually a liquidation into a pawn ending may be possible.



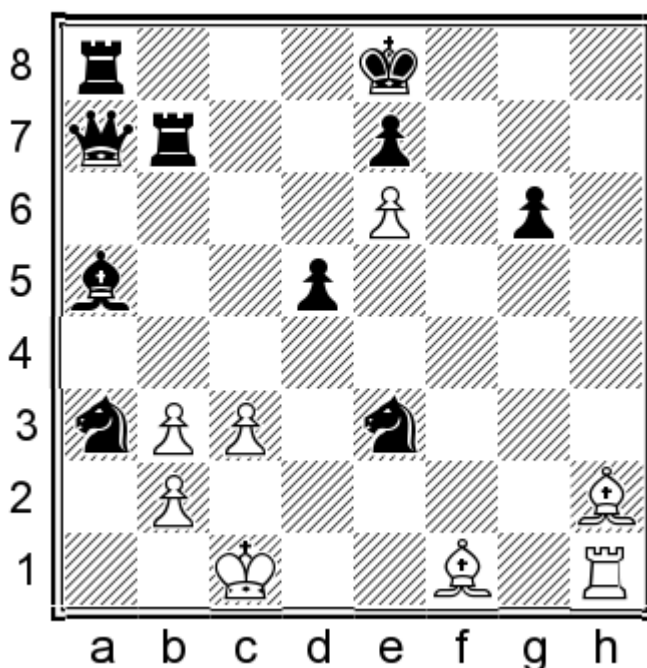
Timman 2011 White to play and win

The same construction as we saw in Chapter 11. Black is threatening to bring his king to safety by castling queenside.

1.Qg6+!

White is willing to sacrifice a full queen just to open the h-file.

1...hxg6



2.Bb8!!

The same problem move we saw earlier on.

Insufficient was 2.Bc7? in view of 2...Qd4! 3.cxd4 Rxc7+ and Black wins.

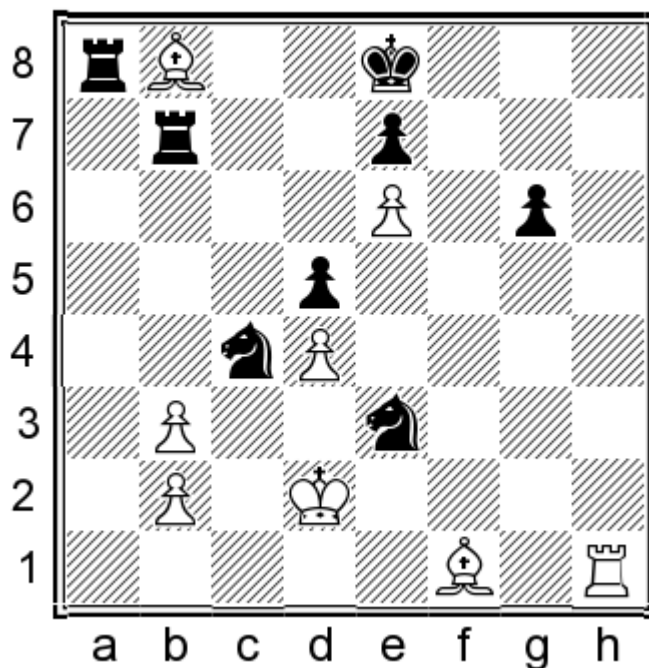
2...Qd4!

Here too, the only defence.

3.cxd4 Bd2+

Black has to keep sacrificing, or else mate is unavoidable.

4.Kxd2 Nac4+



White has to take the knight, as otherwise Black will play his king to f8. If Black controls the e5-square, his king can escape via g7.

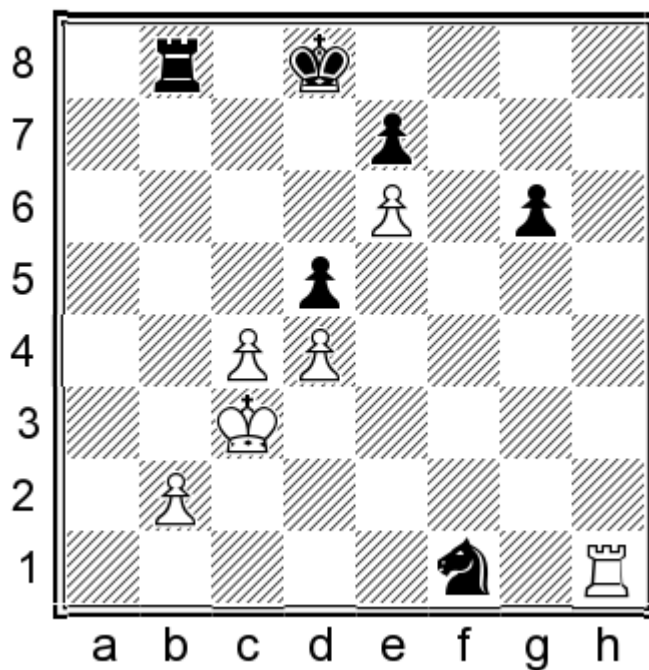
5.bxc4 Nxf1+ 6.Kc3!

The best square for the king.

6...Rb3+

Black has to keep sacrificing in order to avoid mate.

7.Kxb3 Rxb8+ 8.Kc3 Kd8



Finally Black has managed to bring his king into safety. Now, however, White coolly liquidates.

9.Rxf1 dxc4 10.Rf8+ Kc7 11.Rxb8 Kxb8 12.Kxc4 and wins.

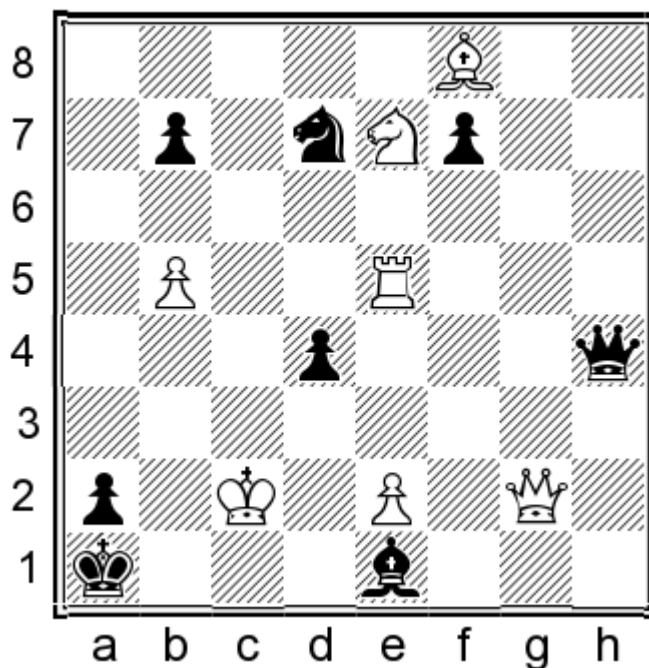
Chapter 14

Various endgame studies

1. Studies with others

Some endgame study composers regularly create studies in collaboration with colleagues. I have also done this once in a while. One example of such a collaboration was a study together with Harold van der Heijden, the man who created the database of endgame studies. The WCCT theme for 2012 was the queen sac. Van der Heijden had an interesting scheme for a study on this theme which I elaborated further.

Timman/Van der Heijden, WCCT-9 2012



White to play and win

A very complex position. White is a rook up and the black king is locked in, but the black queen is very versatile. It is not easy to get a grip on the position.

1.Ng6!

The main purpose of this knight sac is to force Black's f-pawn to g6. Eventually this will help White to open the long diagonal for his bishop. The alternative 1.Nf5 didn't work because of 1...Qf4 2.e3 d3+! and Black wins.

1...fxg6

The alternative is 1...d3+ to open the way for the queen to the queenside. After 2.exd3 Qa4+ 3.Kc1 Bc3 Black seems to get an attack. White, however, has the strong rejoinder 4.Qc2!, forcing the

exchange of queens. White wins, since the black king remains in a mating net. Note that it is important that White controls square f4.

2.Re3!!

A tremendous move. The main purpose of the sacrifice is to bring the rook to d3. It was premature to play 2.Bg7 since Black takes over after 2...d3+! 3.exd3 Qa4+.

2...dxe3

Now the long diagonal is opened for the white bishop. Again there was the alternative 2...d3+. After 3.exd3 Qa4+ 4.Kc1 Bc3 5.Qc2 Qd4 6.Qd1! White wins; the mating threat of 7.Kc2 can't be met.

3.Bg7+ Nf6 4.Qg4!

The first queen sacrifice.

4...b6 5.Bh8!

A quiet move. Black is in zugzwang.

5...Bg3

Black has to give up the control of square b4.

6.Qb4!

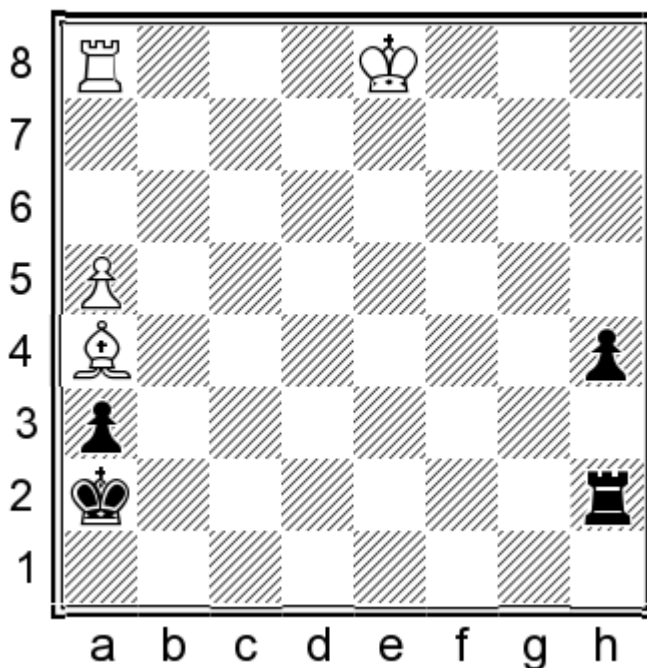
The second queen sacrifice.

6...Qxb4 7.Bxf6+

White wins.

Four years later I cooperated again with Van der Heijden.

Van der Heijden/Timman,3.p Moscow tourney 2016



White to play and win

The first move is obvious.

1.a6 Re2+

The best chance. On 1...Rg2 White continues 2.Bb3+! Kxb3 3.Rb8+ Kc2 4.a7 with an easy win.

2.Kd8!

Not 2.Kd7 Re5! 3.a7 Ra5 and Black holds.

2...h3

The alternative is 2...Re5. After 3.a7 Ra5 White has the winning move 4.Bd7!. That's the reason why the white king went to d8: to keep square d7 for the bishop. White is winning, e.g. 4...Ka1 5.Kc7 a2 6.Be6! h3 7.Kb7 h2 8.Rh8.

3.Bb3+!

It is important to sacrifice the bishop. After 3.a7 h2 4.Bc6 Re5! 5.Rb8 Ra5 6.a8Q Rxa8 7.Rxa8 Kb2 8.Bd5 h1Q 9.Bxh1 a2 Black is on time.

3...Kxb3

On 3...Ka1 White has the winning king manoeuvre 4.Kd7! Re5 5.Kc6! e.g. 5...Kb2 6.Rb8 Ra5 7.Bf7+ Kc3 8.Kb6 a2 9.Bxa2 Rxa2 10.a7 h2 11.Rh8 and wins.

4.Rb8+ Ka2 5.a7 Re8+!

A last ditch attempt; Black plays for stalemate.

6.Kxe8 h2 7.a8B!

Bishop promotion is the only way. The position after 7.a8Q h1Q would normally be winning, but the white queen has no checks.

7...Ka1 8.Rd8!

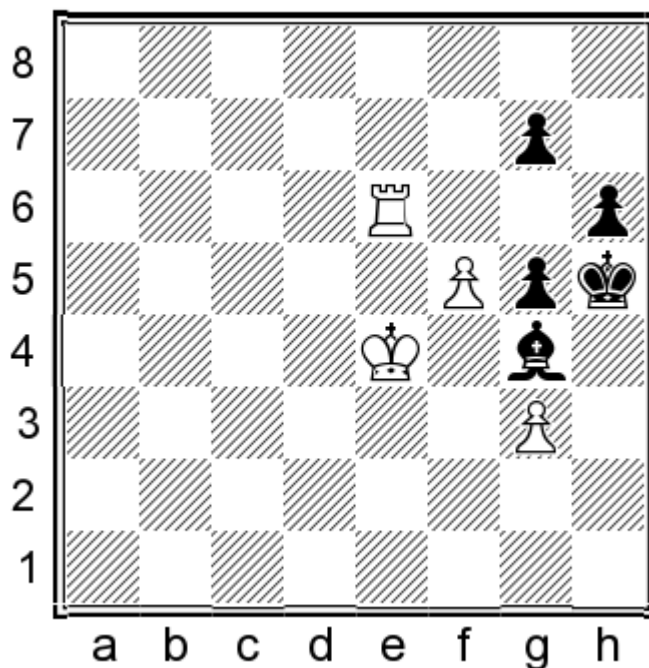
Accuracy till the end. White has to bring his rook to the second rank to control the a-pawn.

8...a2 9.Rd2! h1Q 10.Bxh1 Kb1 11.Be4+ Ka1 12.Bd5

White wins.

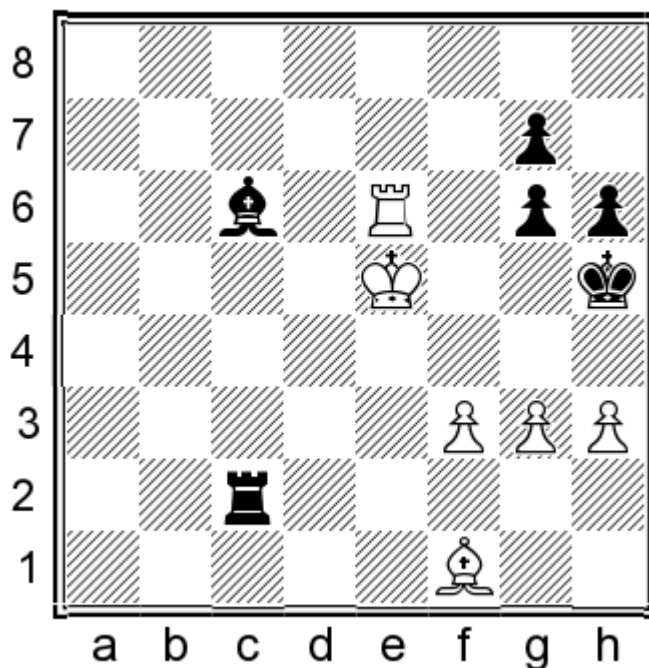
Israeli Grandmaster Emil Sutovsky is known to be well-disposed towards endgame studies. Together with Boris Gelfand, he has composed one magnificent study, published in New In Chess Magazine. During the closing ceremony of the third Inventi tournament in Antwerp he showed me an interesting idea for a finish.

Sutovsky



Black to move achieves a surprising draw with 1...g6! 2.Rxg6 Bxf5+! 3.Kxf5 g4, and in order to prevent stalemate White has to consent to playing a pawn ending that offers him no chances. Working backwards, I made the following study, which shows the idea in a slightly more pronounced way.

Sutovsky/Timman 2009



White to play and win

Material is depleted. White must exploit the exposed position of the black king.

1.f4!

Insufficient for the win was 1.Bd3 on account of 1...Rc5+ 2.Kd4 Rd5+ 3.Kc4 Rxd3! 4.Kxd3 Bxf3, and White does not have enough pawns.

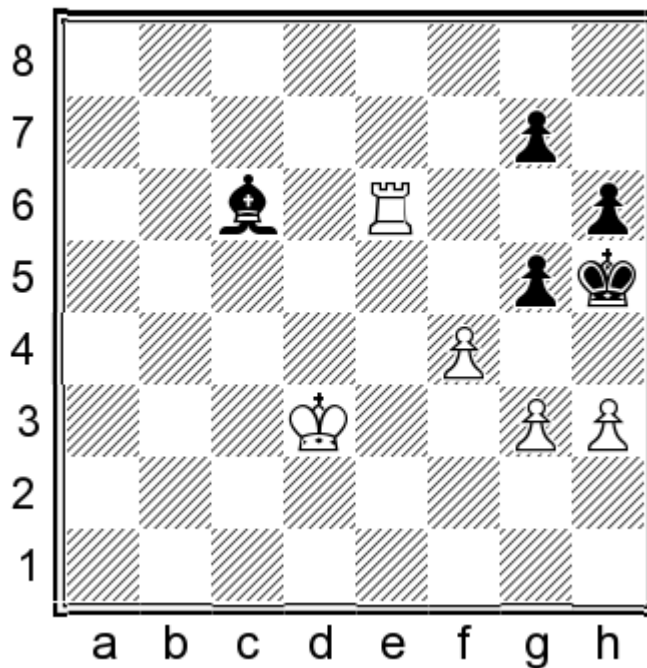
1...g5

With 1...Bg2 Black could have aimed for further simplifications. But then White liquidates to a winning rook ending: 2.g4+ Kh4 3.Bxg2 Rxg2 4.Rxg6 Kxh3 5.Rxg7, and the white f-pawn decides the battle.

2.Bd3 Rc5+

In order to avoid mate, Black has to give the exchange.

3.Kd4 Rd5+ 4.Kc4 Rxd3 5.Kxd3



5...Bg2

The bishop harasses the white pawns from behind.

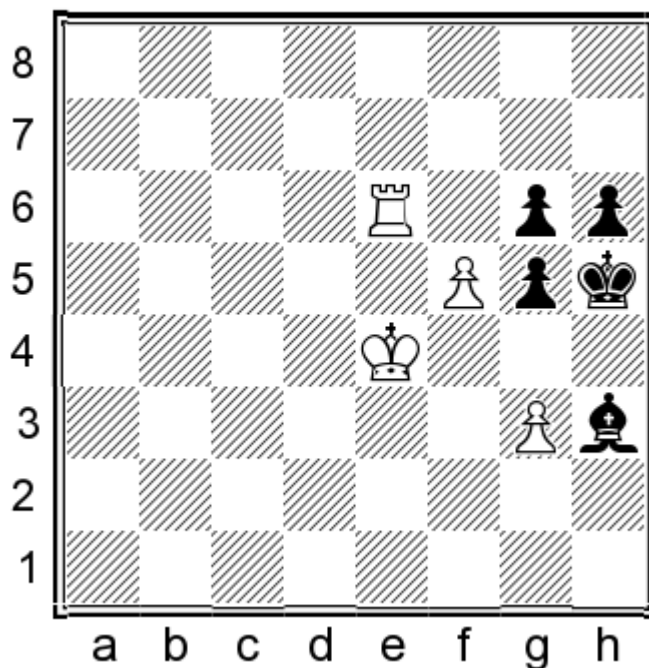
Inadequate was 5...Bd7 in view of 6.f5 g4 7.h4 g5 8.Re5! gxh4 9.gxh4 and again, the f-pawn decides.

6.f5!

White always has to strive to obtain a strong f-pawn.

6...Bxh3 7.Ke4 g6!

Here we have Sutovsky's clever discovery.



However, now that the black bishop is on h3 instead of g4, White has something up his sleeve.

8.g4+!

This little check eliminates the stalemate threat.

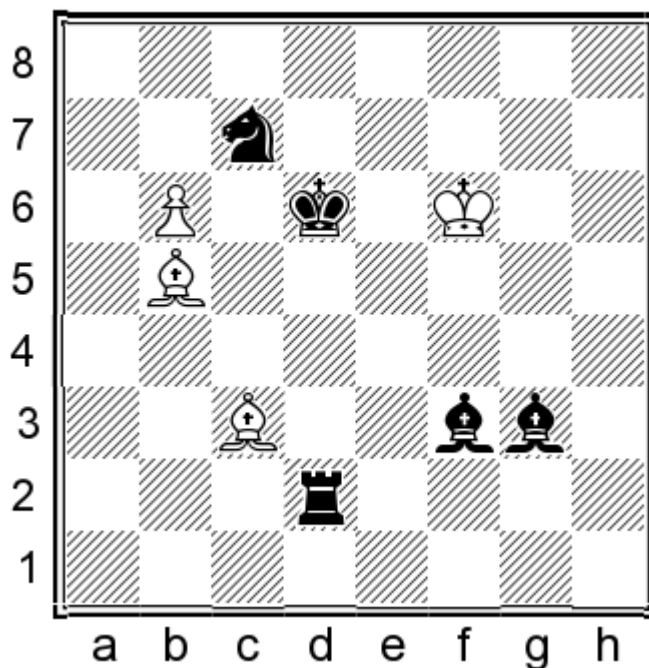
8...Bxg4 9.Rxg6

And wins.

2. Studies with no specific theme

In the following study, many themes are combined.

Timman 2010



White to play and draw

White cannot take on c7 immediately since after 1.bxc7 Bh4+ he cannot protect his king from rook checks.

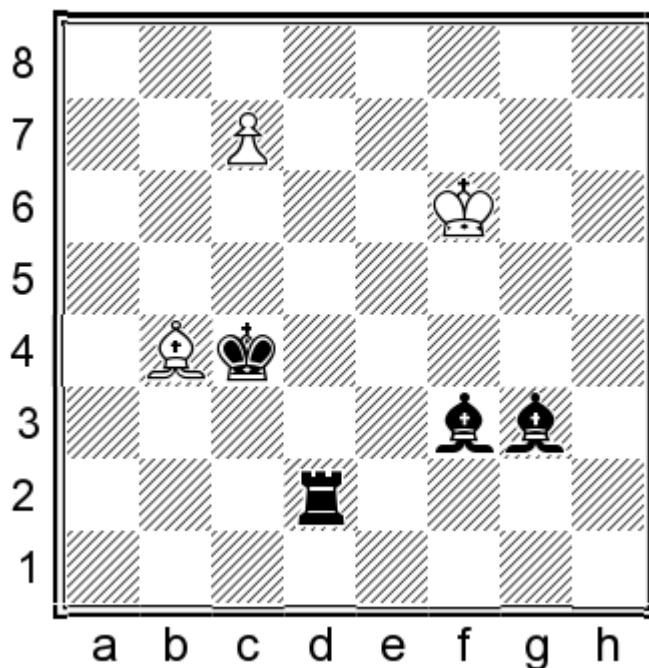
1.Bb4+ Kd5

The only square for the king.

2.Bc4+!

With this bishop sacrifice, White blocks the c-file for the black rook.

2...Kxc4 3.bxc7



Now Black has two bishop checks, which White has to play accurately to parry.

3...Bh4+

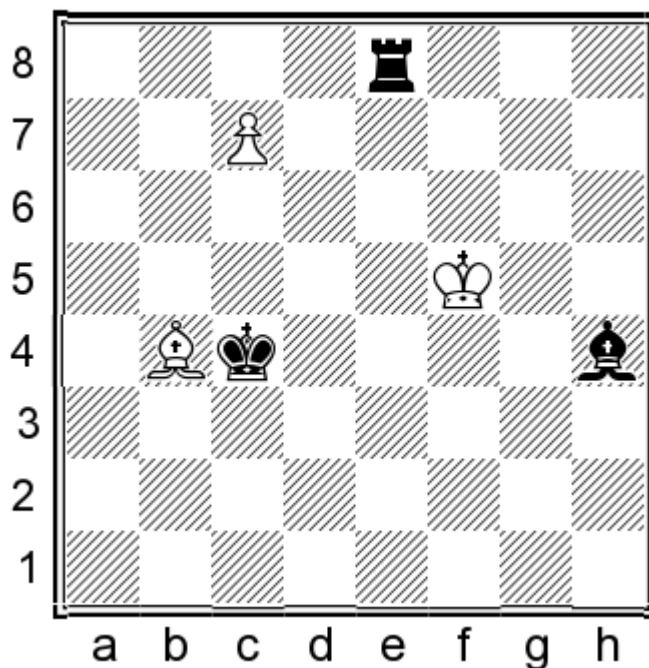
On 3...Be5+ White has to prevent Black from giving a winning rook check. The play continues as follows:

4.Ke7! Bd6+! 5.Kf6 Be7+ 6.Kf5! Rd5+ 7.Kf4! and it's a draw. The black rook blocks the long diagonal for the black queen's bishop, and so the white c-pawn cannot be stopped.

4.Kf5 Be4+

Without this bishop sacrifice it's impossible for Black to keep any winning chances. After 4...Rd5+ 5.Kf4 it would be an immediate draw.

5.Kxe4 Re2+ 6.Kf5 Re8



It looks as if Black will triumph. However, White has a beautiful finesse up his sleeve.

7.Be7!

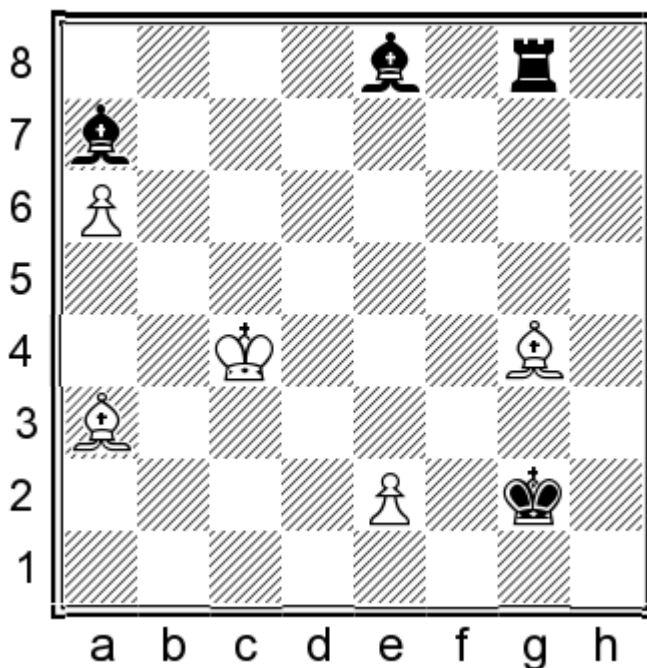
By sacrificing his second bishop, White conquers the e6-square for his king.

7...Bxe7 8.Ke6

Draw.

Sometimes a strong passed pawn can almost compensate for a rook, as in the following study.

Timman 2011



White to play and draw

White will have to lift the blockade on a7 by playing his queen's bishop to c5. But first he has to do something about the unprotected position of his other bishop.

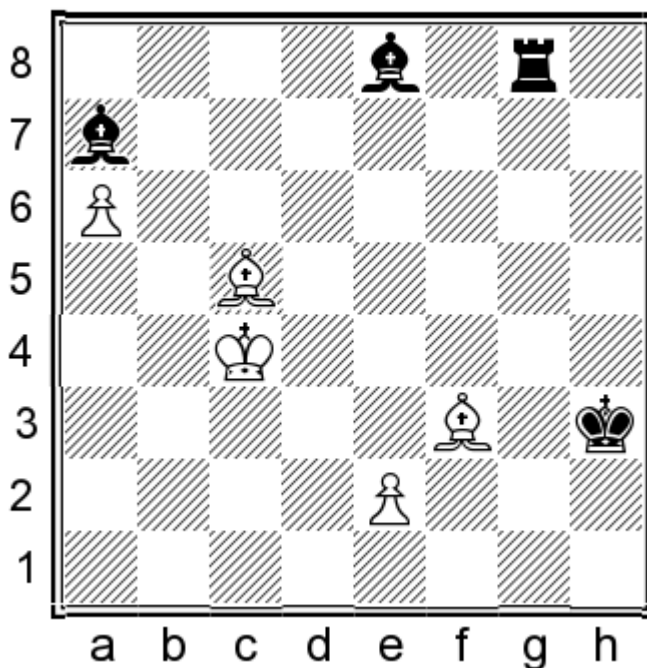
1.Bf3+ Kg3 2.Bd6+!

Before the bishop goes to c5, the black king has to be driven to a less favourable square. Later we will see why.

2...Kh4 3.Be7+!

This check is necessary too.

3...Kh3 4.Bc5



Only now. The king is not well placed on h3.

4...Bb5+!

Without this surprising finesse, White would attain the draw with ease.

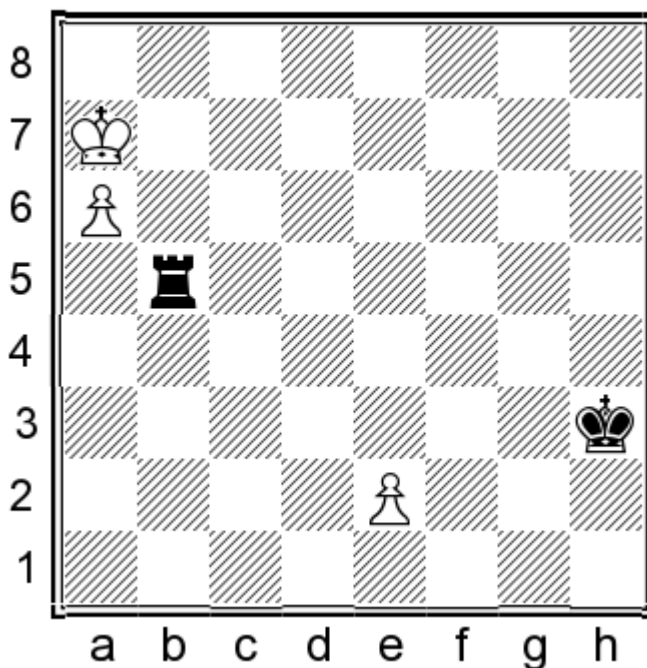
5.Kxb5 Rg5

An unpleasant pin. Now, however, it is White's turn to sacrifice a bishop.

6.Bd5! Rxd5 7.Kc6

The point of the bishop sacrifice. Black is forced to take on c5 with the rook, closing in the bishop on a7.

7...Rxc5+ 8.Kb7 Rb5+ 9.Kxa7



Without the white e-pawn it would be a draw without further ado. But the extra pawn may play tricks on White. Thus, Black would be winning if his king were on g3 or g4. Then he would succeed in blocking the e-pawn.

9...Kg4 10.e4!

Cutting off the king.

After 10.Ka8 Kf5 11.e4+ Ke5 12.a7 Kd6 13.e5+ Kc7 Black would have time to catch the white king in a mating net.

10...Kf4 11.e5!

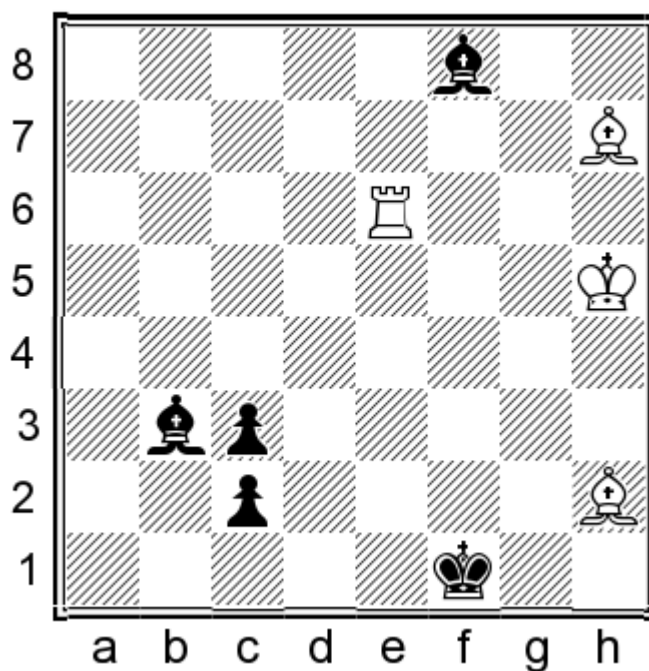
According to the same principle.

11...Kf5 12.e6

The last accurate move. After 12.Ka8? Ke6 13.a7 Kd7 14.e6+ Kc7 15.e7 Re5 White would get mated after all.

Draw.

In the Mario Garcia 75 Jubilee Tourney, the theme was: ‘Mate with a bishop in the central area of the board, from c3 to f3 and c6 to f6’. Not really a striking theme, but I had a study ready for this.

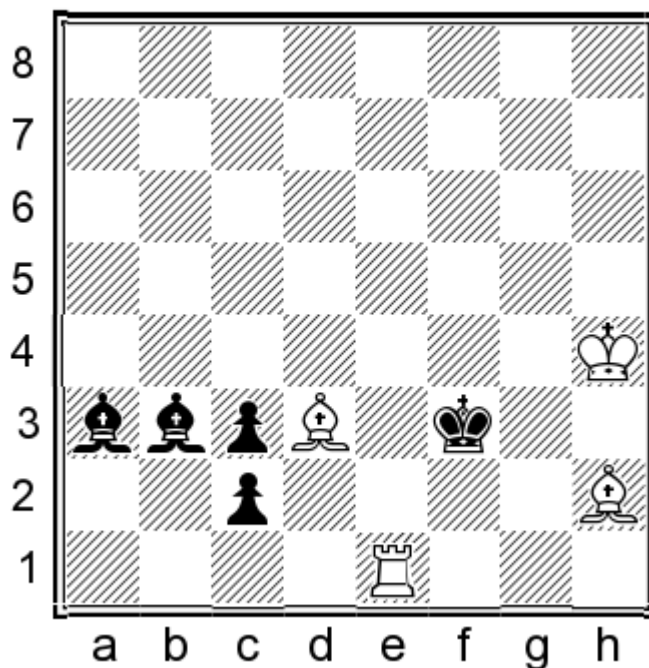


White to play and win

1.Bd3+

White has to force the black king to f3. After 1.Rf6+ Ke2 2.Bf4 Ba3 Black draws easily.

1...Kg2 2.Re2+ Kf3 3.Re1 Ba3 4.Kh4!



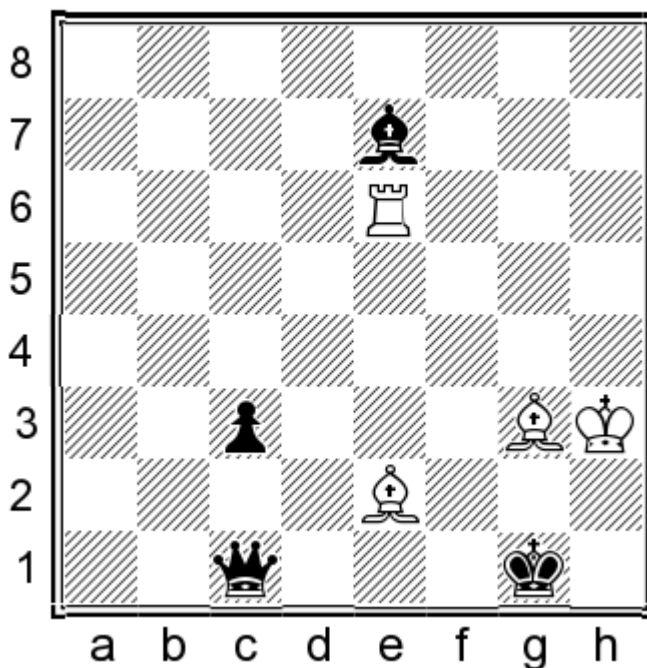
Suddenly the black king is trapped in a mating net.

4...Be7+

There is no time for promotion: 4...c1Q 5.Be4+ Kf2 6.Bg3#. So Black has to drive back the white king.

5.Kh3 Be6+ 6.Rxe6! c1Q 7.Be2+ Kf2 8.Bg3+ Kg1

The mating net has moved.



9.Bb8!

White has to use the far ends of the board to continue the hunt of the black king.

9...Qa1

Black could have prevented an immediate mate by 9...Qg5, but White's attack prevails anyway. After 10.Ba7+ Bc5 11.Rg6! Qxg6 12.Bxc5+ Kh1 13.Bf3+ mate follows.

10.Ba6!

Another long bishop move. White secures square a7 for the other bishop.

10...Kf2

The black king must flee, but it will not reach a safe zone.

11.Ba7+ Kf3 12.Be2+ Kf4 13.Be3+ Kf5 14.Bg4#

All the white pieces cooperate in the final mate.

The Art of the Endgame

My Journeys in the Magical World of Endgame Studies

All through his career Jan Timman has been captivated by the mystery and splendour of endgame studies. Even during his most successful and busy years as a world-class player, Timman continued to compose studies and admire those of others. For him there has never been any doubt that his journeys in this magical world helped him to grow as a player.

In this fascinating book, Timman has collected a wide range of the finest endgame studies by other composers and explains in his lucid style how they inspired him to create dozens of brand-new studies himself.

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