Studies for Practical Players



Improving Calculation and Resourcefulness in the Endgame

by Mark Dvoretsky and Oleg Pervakov

Foreword by Jan Timman


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by
Mark Dvoretsky
&
Oleg Pervakov

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Jan Timman



2009
Russell Enterprises, Inc.
Milford, CT USA

ISBN: 978-1-888690-64-4

Cover design by Janel Lowrance

Translated from Russian by Jim Marfia

Printed in the United States of America



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Foreword

Romanticism is in part an escape from modern realities. And if chess can be considered a romantic game, then endgame studies may be thought of as an escape within an escape. To put it another way, the world of endgame studies is a separate area in a secluded world, the game of chess.

In practice, chess mistakes are unavoidable. In chess studies, mistakes are not allowed.

Richard Réti's definition of endgame studies was: "Endgame studies are endgame positions with extraordinary content." This of course is a very general definition. It is characteristic of an endgame study that White's moves should be forced in the main line, whereas Black may have attractive alternatives, while at the same time White's play should be flawless in the effort to win or draw.

In practical play, one is accustomed to thinking ahead, taking into account the various directions in which the play may develop. Composing an endgame study is conducted in a different thinking environment: the composer starts with the final position that should contain hidden beauty. Then he starts thinking backwards about how the position might have arisen. This is called "retrograde analysis." In addition, endgame studies will have both scientific and artistic elements.

Unlike chess problems, endgame studies have definite value for the practical player. Nowadays, the study of endgames in general has been neglected. Most emphasis is on the openings.

Still, it is important to know what you are doing in the endgame. *Studies for Practical Players* by Mark Dvoretsky and Oleg Pervakov is of invaluable help in this respect. Dvoretsky is a renowned trainer, Pervakov a very skilled composer. They have one thing in common: They both are more than able to comment on endgame studies in a lucid, instructive way.

In this book, they have made a careful selection of studies. You will find hidden beauty revealed by technical tour de force. Both authors display a high level of analysis. They do not give too many variations that could scare the reader off. The influence of computers has made its impact: a lot of brilliant studies from the past have been proven to be incorrect.

In general such studies are discarded nowadays. In *Studies for Practical Players*, a different approach has been taken. Five incorrect studies are analysed, mainly because of their rich content. It is reasoned in a very clear way that these efforts by the composers are not fruitless. They just prove the richness of chess: the refutations of the studies are pieces of art in their own right.

The final chapter of the book deals with studies by world champions and strong grandmasters. Most of this material has additional practical value; over the board players like natural positions. And special attention us given to Smyslov who still composes studies, not being disturbed by his loss of sight. I was also impressed by the studies of relatively young grandmasters like Salov and Morozevich.

Among the various endgame study books that I have read, *Studies for Practical Players* is one of my favorites. I have spent countless hours studying the material and it has inspired me to compose new studies. The reader is well advised to take his time going through the book. After every diagram new finesses can be seen. The best way to study the material is to stop after seeing the diagram, trying to figure out what is going on. This will help your understanding of endgames in a significant way.

It is clear that the interest in endgame studies is not fading away...

Jan Timman
Amsterdam, July 2009

Introduction

Back in 1910, the classic study composer Alexei Troitsky wrote: "A study is the more valuable, the more complex it is – the richer in ideas. The most attractive aspect of chess is the struggle. This is what one must strive chiefly to depict, by leaving the defeated side as many defensive resources as possible in the course of the solution."

There are studies which are so close to actual play that it seems we are observing the ending of some actual game. Such studies have special value, and are rightly reserved a place in chess manuals. Their characteristic form makes them easier to remember; and in them, one may find together a whole row of interesting ideas and positions with great practical value.

Today's generation of chessplayers no longer knows what an adjourned game is. As a consequence, they no longer have the opportunity of thoroughly analyzing the endgame they have reached (middlegame positions do not often remain on the board for 40 moves) in a quiet setting. Now, when the outcome of a game is not infrequently decided under the constraint of extremely limited time, the ability to orient oneself unfailingly in the endgame has become practically a priceless quality for the chessplayer.

How do we develop habits of endgame play? There are lots of manuals, but this may be the first in which a famous practical player, a trainer with a world-renowned name, and a study composer with an International Grandmaster of Composition's title share their views in one and the same book.

Mark Dvoretsky has employed studies in his trainer's career for more than 30 years. Many grandmasters have achieved considerable success in their careers thanks to his methods. Oleg Pervakov came to the field of composition through practical play, whose principles he has always striven to follow in his creative work.

The impulse for writing this book was given by the article, "Studies From My Notebook," and the international composing tournament, "Studies For Practical Players," dedicated to Mark Dvoretsky's 60th birthday. The tournament was a success: 25 notable compositions were annotated by the arbiters, among whose ranks were the authors of this book.

The book itself consists of several chapters, united by the title, "Studies For Practical Players." Examples that most closely resemble "battlefield conditions," where both sides must resolve interesting tasks, are provided to serve as exercises for your own solving, or for playing out. Separate chapters are devoted to the creative work of the famous Austrian study-composer Alois Wotawa and to that of practical players, including the world champions.

Oleg Pervakov
Moscow, July 2009

Part I

International Composing Tournament "Studies for Practical Players" in Recognition of Mark Dvoretsky's 60th Birthday. Judges: The Celebrant and Oleg Pervakov

Chapter 1

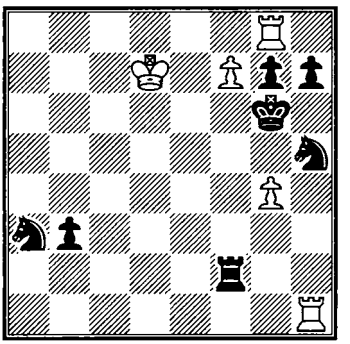
Studies From My Notebook
Mark Dvoretsky

The notebook of exercises of which I make constant use for training sessions with my students, as well as for writing books and articles, contains more than a thousand selected studies. I would like to talk a bit about my criteria for selecting these studies – a practical player/trainer's system of preferences. On the whole, "there is no accounting for taste." My tastes are mine alone, and might not be the same as those of other chessplayers and trainers – to say nothing of professional study-composers. But I really ought to talk about them, now that I have invited chess composers to participate in my own composing tournament, "Studies For Practical Players," in which I shall sit as judge, together with the noted composer Oleg Pervakov. And although Pervakov will undoubtedly not let a gifted composition slip by, even though it might not agree completely with the criteria set out in this article, nevertheless, my own tastes will more than likely have some influence on the process of judging excellence.

"A Small Genre"

Any chessplayer is bound to derive great pleasure from short studies with a clear and unusual idea. Here are a few examples.

A. Wotawa 1960

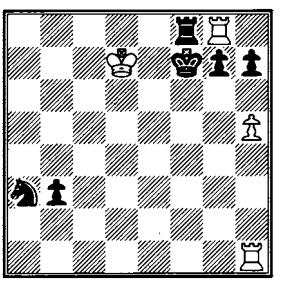


Win

The opening moves of the solution are obvious.

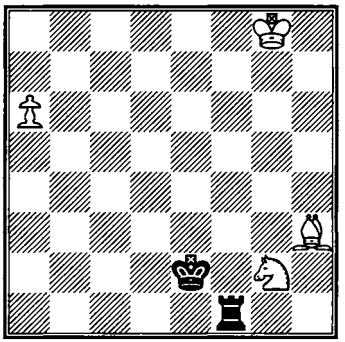
1 f8♕! ♖×f8 2 gh+ ♔f7

But here, instead of the obvious 3 ♖×f8+ ♔×f8 4 ♖f1+ ♔g8 5 h6 (the endgame after 5 ♔e7 h6 is drawn) 5...gh 6 ♔e7, allowing Black to save himself by 6...h5! 7 ♖g1+ ♔h8 8 ♔f7 h6, there comes an unbelievably quiet move, whose equal I cannot recall:



3 ♖h8!! ♖×h8, and only now does White play **4 ♖f1+ ♔g8 5 h6! gh 6 ♔e7**, with inescapable mate.

I. Schultz 1941



Win

White cannot win by "normal" means, which would grant Black enough time to attack the a-pawn with rook and king. For example: 1 ♗c8 ♔d3 2 ♗b7 ♖a1 3 ♘f4+ ♔c4, or 1 ♗d7 ♖a1 2 ♗b5+ ♔f3 3 ♘h4+ ♔e4, or 1 ♘h4 ♖a1 2 ♗c8 ♔d3 3 ♘f5 ♔c4.

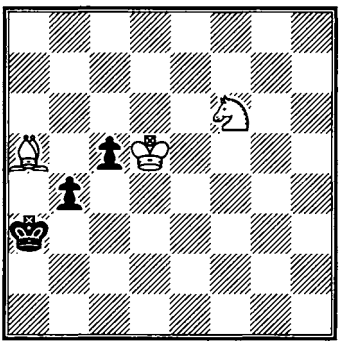
The solution is an unexpected knight sacrifice.

1 ♘f4+!! ♖×f4 2 ♗d7!

Our enjoyment here comes not so much from White's play, as from the paradoxical nature of the resulting situation. The rook has two full tempi to get to either the a-file or the eighth rank, but on an open board, it is unable to do this, as all roads are blocked (2...♖f3 3 ♗g4; 2...♖f1 3 ♗b5+; 2...♖f6 3 a7 ♖a6 4 ♗b5+). ***(D)***

These kinds of studies are most useful to chessplayers, since they develop an important habit: the ability to keep a close eye on the opponent's intentions.

R. Réti 1922



Win

Stopping the pawns would appear to be simple enough – in fact, it looks as though White could do so in several different ways. For example: 1 ♔c4 b3 2 ♘d5 b2 3 ♘c3. But here, White is in for a nasty surprise: 3...b1♕!! 4 ♘×b1+ ♔a4, and any retreat of the bishop is stalemate.

Another try: 1 ♘e4 b3 2 ♘c3, and on 2...b2?, 3 ♔e4! wins. But Black has 2...♔b2!, followed by 3...♔c2, and Black is safe.

There is only one move-order to neutralize every clever trap prepared by Black, and that is: **1 ♔e4!! b3 2 ♘d5 b2** (2...♔b2 3 ♔d3!) **3 ♘c3 ♔b3 4 ♔d3**.

I do not know if studies such as these could win a modern tournament of composition, but in our tournament, they would probably win one of our special prizes.

Endgame Studies

Many studies have furthered the development of endgame theory in their time. Today, such a thing would be practically impossible – that is, if you

mean those areas of theory which are of interest and use to practical players.

Let us suppose that a definite result was achieved in the study of a situation where there are two minor pieces battling a rook and piece or three minor pieces – so what? I have never faced such a balance of forces in my own practice, and the same goes for the overwhelming majority of chessplayers. And even if it should occur once or twice in one's lifetime, this is still not enough of a reason to immerse oneself in the corresponding theory (which is most likely fairly complex) – there is a lot to study, and not enough time for all of it.

(And by the way, it is precisely because of their practical uselessness that pawnless studies – or, say, studies based upon various nuances of the Troitsky "two knights vs. pawn" position, would not be very attractive to me.)

But showing a chessplayer important aspects of contemporary endgame theory, clearly formulated to help him better understand them – this is something study-composers do even today. And most often, the goal is achieved via paradox: the unexpected exception to a well-known rule.

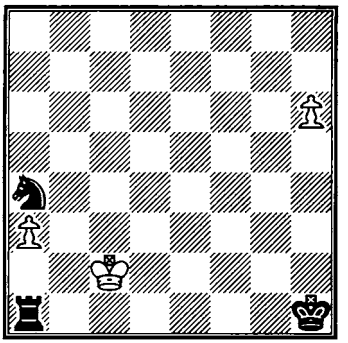
For me, one of the sharpest impressions I have received in the last few years has been my acquaintance with the following study. ***(D)***

As in the Wotawa study, the first few moves are obvious enough.

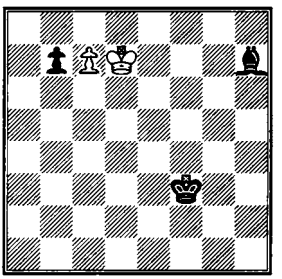
1 h7 ♖a2+ 2 ♔b3 ♖h2 3 ♔×a4 ♔g2!

Among study composers, it is accepted practice to lengthen the play as much as possible. When I put such studies in my notebook, sometimes I will simply eliminate this kind of introduction, and offer the critical position for solving. Apropos of this, I remember that the famous study by the Sarychev brothers,

H. van der Heijden 2001



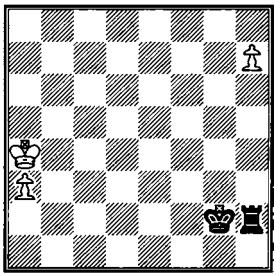
Draw



(1 ♔c8!!) also had introductory moves, which no one today even knows about.

However, my experience with the van der Heijden study was something I related in detail on the www.ChessCafe.com website, in an article entitled "Paradox." I shall repeat this story here, with minimal changes. ***(D)***

The first move is undoubtedly 4 ♔b5. It is easy to see that 4...♖×h7 5 a4 gives White a draw with no trouble. The immediate king march to the queenside is far more dangerous.



4...♔f3 5 a4 ♔e4 6 a5 ♔d5, and 7 a6 will lose, in view of 7...♖b2+! 8 ♔a5 (8 ♔a4 ♔c4!) 8...♔c5! 9 ♔a4 ♖h2 (9...♖b8 would be simpler still) 10 a7 ♔b6!. And on 7 ♔b6, Black wins by 7...♔c4! (an important endgame technique: "outflanking"!) 8 a6 ♖h6+ 9 ♔a5 ♖×h7 10 ♔b6 ♖h6+ 11 ♔b7 (11 ♔a5 ♔c5) 11...♔b5 12 a7 ♖h7+ 13 ♔b8 ♔b6 14 a8♘+ ♔c6.

Where can we improve White's play? Clearly, we need to make use of a well-known endgame technique: the "shoulder-block." Instead of 6 a5, White could play 6 ♔c5!?, and Black's king no longer has the d5-square.

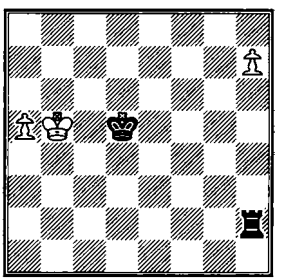
It is an attractive conclusion – but alas, it is refuted. Black responds 6...♖h5+! 7 ♔b6 ♔d5 8 a5 ♔c4! (another outflanking) 9 a6 ♖h6+ – we have already seen this position. And 6 ♔c6 ♔d4 7 a5 ♔c4 8 a6 ♖h6+ 9 ♔b7 ♔b5 does not help, either.

So that must mean that the starting position is lost – for have not we examined all the possibilities?!

No – in fact, we have only examined all the natural possibilities. We have operated in accordance with the usual rules of such positions: we have advanced our king as quickly as possible, while shoulder-blocking the enemy king. It turns out that, in this concrete situation, White should reject both those rules.

The key to the solution is the paradoxical conclusion that, with the kings at b5 and d5, the pawn on a5, and the rook on h2, we reach a position of mutual *zugzwang*. And in order to avoid falling into *zugzwang*, White must begin play by losing a tempo.

4 ♔b4!! ♔f3 (4...♖×h7 5 a4) **5 a4 ♔e4 6 a5!** (but not the "shoulder-block" 6 ♔c5? ♖h5+!) **6...♔d5 7 ♔b5**



We already know how White loses when it is White's turn to move in this position: 8 a6 ♖b2+! or 8 ♔b6 ♔c4!. But now it is Black to move, so what should be done?

The a6-square is free now, so Black gets nowhere with **7...♖b2+ 8 ♔a6 ♖b8 9 ♔a7 ♖h8 10 ♔b6!** (here is where White does need to employ the "shoulder-block") **10...♔d6 11 a6 ♖b8+ 12 ♔a7 ♔c7 13 h8♕ ♖×h8** – stalemate. This is the study's main variation.

If 7...♔d6, then 8 ♔b6 (the outflanking via c4 is no longer possible) 8...♔d7 9 ♔b7 ♔d8 10 a6 ♖×h7+ 11 ♔b8! ♖h1 12 a7 ♖b1+ 13 ♔a8.

It is amazing that Black cannot find a waiting move for the rook. On 7...♖h1 8 a6 ♖b1+ 9 ♔a5, 9...♔c5?? does not work: 10 h8♕, and the a1-square is controlled. The drawback of 7...♖h3 shows up in the line 8 a6 ♖b3+ 9 ♔a4! (Black no longer has the reply 9...♔c4)

9...♖b8 10 a7 ♖a8 11 ♔b5 ♔d6 12 ♔b6 ♖h8 13 ♔b7. And finally, 7...♖×h7 leads to a drawing finale which has been seen many times in practice: 8 a6 ♔d6 9 ♔b6 ♖h1 10 ♔b7! (but not 10 a7? ♖b1+ 11 ♔a6 ♔c7 12 a8♘+ ♔c6 13 ♔a7 ♖b2, and the knight is lost) 10...♖b1+ 11 ♔c8! (the "shoulder-block") 11...♖a1 12 ♔b7 ♔d7 13 a7 ♖b1+ 14 ♔a8!.

The paradoxical nature of this position certainly does not stem from the fact that White needs to lose a tempo in order to avoid *zugzwang* himself and put his opponent into *zugzwang* – we have seen this technique in the endgame often enough. What amazes us is the mere possibility of *zugzwang* in an endgame with this kind of material (I do not know of any other examples – this one is unique). In the battle of rook-versus-pawn, it always comes down to one question: who will win the race, who will achieve his goal first. Well, now we have one more illustration of the theme: "never say never" (or, as in this instance, "never say always") – there is no such thing as an absolute rule in chess!

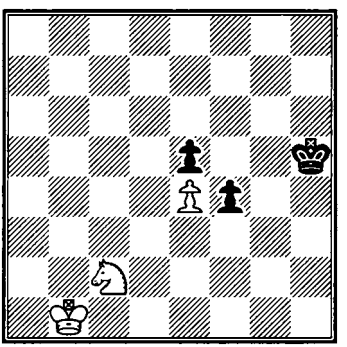
Van der Heijden's study considerably enlarges a chessplayer's horizons, simultaneously helping one to remember several standard techniques for playing rook-versus-pawn endgames.

Here, we should touch on a delicate question. I am certain that this unique endgame position was discovered with the help of the well-known Thompson endgame database. Is this a "fault" which reduces the study-composer's achievement?

Yes, a database is an instrument, which in our day is available to everyone. From it, one may undoubtedly extract many more amazing constructions – there are some chess composers who do so regularly. The criterion for evaluation here ought to be the result that is achieved. Thus, miracles based upon complex computer analysis, and containing no clear composition of ideas, are probably only interesting to a few aesthetes.

Had van der Heijden's position arisen in the course of a practical game, I think that not even the world champion could have found the saving line. He simply would not have even begun thinking about it, and automatically played 4 ♔b5?. At the same time, the solution's clear-cut logic is entirely understandable even to average players.

D. Blundell 1995



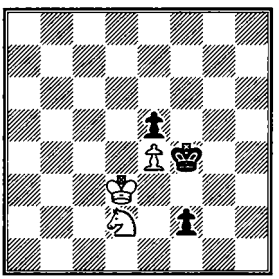
Win

Of course, the fantastic first move, **1 ♘a1!!**, serves to embellish this study: instead of sending the king, or at least the knight, after the pawns, White sends the piece in the diametrically opposite direction.

In my *Endgame Manual*, I laid out a number of considerations which can lead us to this solution.

First, let us look at White's most natural plan: getting the king closer to the pawns.

1 ♔c1? ♔g4 2 ♔d2 f3 3 ♘e3+ (3 ♔e3 f2! 4 ♔×f2 ♔f4) 3...♔f4 4 ♔d3 f2 5 ♘f1 ♔f3 6 ♘d2+ ♔f4!



This is the most important position of this ending: one of mutual *zugzwang*. Black to move would lose: 7...♔g3 8 ♔e2. But it is White to move here, and 7 ♔e2 is met by 7...f1♕+! 8 ♔×f1 ♔e3 9 ♔e1 ♔d3 10 ♔d1 ♔e3 11 ♔c2 ♔d4, with a draw.

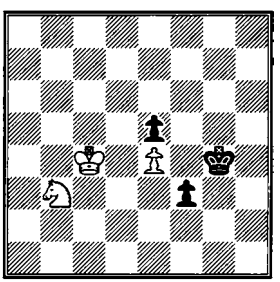
Let's try 1 ♘a3? f3 2 ♘c4. Now, the natural 2...♔g4? leads to a loss: 3 ♔c2 ♔g3 4 ♔c3! (*zugzwang*) 4...♔g4 (4..f2 5 ♘d2 ♔f4 6 ♔d3; 4...♔f4 5 ♔d3 f2 6 ♘d2) 5 ♘×e5+! ♔f4 6 ♔d4.

White succeeded, but only because, with the king at c3, the e5-pawn was captured with check. Black can avoid this by playing 2...♔g5(h4)!! 3 ♔c2 ♔g4! 4 ♔c3!? ♔g3! (4...♔g5!? could also be played, for example: 5 ♔d2!? f2 6 ♘e3 ♔f4 7 ♔d3 ♔g3! 8 ♘f1+ ♔f3! 9 ♘d2+ ♔f4). Here we have yet another position of mutual *zugzwang*, this time with White to move. On 5 ♘d2, Black plays 5...♔f4 6 ♔d3 f2 (the main *zugzwang*); equivalent lines are 5 ♔d2 f2 6 ♔e2 ♔f4 7 ♘d2 (7 ♘d6 ♔g3) 7...f1♕+!, or 5 ♔d3 f2 6 ♘d2 ♔f4!.

By the way, this variation we just examined brings us to a surprising conclusion: both players must maneuver so as to avoid being the first to approach the other. Should White play ♘d2 or ♔d3, White falls into *zugzwang*; and if Black is too hasty with the moves f2 or ♔f4, then the *zugzwang* position arises when it is Black's move. So we are dealing here with "mined squares" (a technique we studied in Chapter One of my *Endgame Manual* – the chapter on pawn endings). But this is the only example I know of in which squares are mined for four pieces at once, instead of the usual two.

And now, to the solution. We must act similarly to the last variation, but place the knight on b3, instead of c4, leaving the c4-square open for the king.

1 ♘a1!! f3 2 ♘b3 ♔g4 3 ♔c2 ♔g3 4 ♔c3! ♔g4 5 ♔c4!



The point! Black cannot wait any longer: on 5...♔g3, White wins by 6 ♔d5 f2 7 ♘d2 ♔f4 8 ♘f1. So Black must be the first to set foot on the mined square, which of course leads to *zugzwang*.

5...♔f4 6 ♔d3! (6 ♔d5? ♔e3; 6 ♘d2? ♔e3) **6...f2 7 ♘d2** (*zugzwang*) **7...♔g3 8 ♔e2** (8 ♔c4 ♔f4 9 ♔d5? would be a mistake, in view of 9...♔e3 10 ♘f1+ ♔f4) **8...♔g2 9 ♘f1 ♔g1 10 ♘e3**

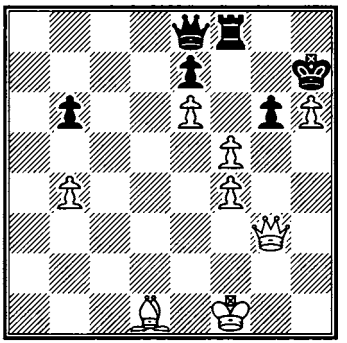
Blundell's study is quite complex. But still, in my view, its complexity does not overstep the boundary after which a difficult calculation, but one which is, in principle, within the capabilities of a strong player, turns into the analytical foundation of the correctness or incorrectness of some continuation. Nevertheless, if it were not for this study's brilliant introduction, it would probably have been taken as purely analytical, and would not have made such a strong impression.

There are some articles and books dedicated to composition in which you will find the assertion that practical players "love" complicated endgame analyses, and therefore, analytical studies are meant primarily for them. Nothing could be further from the truth! Excess complexity and overly detailed analysis only frighten people away, and reduce the aesthetic impression left by the study to a considerable extent. Chessplayers find it interesting to solve tasks similar to those they have to resolve in a practical game (sometimes a little more complex, and if possible, a little prettier).

A Difficult Choice

The difficulty of the examples seen above was that you had to uncover an unusual, well-hidden basic idea. There is a different type of problem, no less valuable for the practical player: to choose the only correct path from two or more tempting continuations.

O. Pervakov 1997



Win

I must say right off that such a position is a pleasant one to solve, because everything in it is natural. Just as in a practical game, the white king is located in the lower half of the board, the black king in the upper half; and both the pawn structure and the material balance are absolutely normal. White waged an assault on the short-castled position, sacrificed an exchange, and must now show that he can get more than equal chances out of his attack.

On 1 ♗c2? ♔×h6 2 fg ♔g7 3 ♕c3+ ♖f6, his opponent keeps the pawns securely blockaded – which means chances are about even.

But 1 fg+ ♕×g6 (1...♔×h6 2 ♕h4+ clearly does not work) 2 ♗c2! looks attractive, even considering the possible counterblow 2...♖×f4+! – since White does not have to take the rook.

If this were the only promising line, a practical player would take it without immersing himself in calculations (let me repeat: in a training session, there is no sense in trying to solve problems

which we would not spend time thinking about in a practical game). But still, before making a move, we ought to cast an attentive eye on the position, to see whether or not we have missed anything substantive. Such an approach reveals one of the most important principles of calculating variations and making decisions: the "candidate-moves" principle.

We see an interesting tactical try: 1 ♗a4. The bishop is taboo, but we find the defense 1...b5, when 2 ♗×b5?? is impossible, as the bishop would be recaptured with check. On the other hand, if we return the bishop to c2 or continue with 2 fg+ instead, we reach familiar positions, but with a black pawn at b5. For now, it is unclear whether the Black pawn structure on the queenside will be of any significance, with the major events occurring on the other side of the board. Nevertheless, White now has a choice – which means we cannot make a move yet. We need to calculate the variations, remembering that, if we choose, the pawn can be on either of two squares.

1 ♗a4!! b5! 2 fg+! ♕×g6!

2...♔×h6 would be altogether bad: 3 ♕h4+ ♔g7 4 ♕h7+ ♔f6 5 g7 ♖g8 6 ♗c2 ♖×g7 7 ♕f5#.

2...♔g8 leads to a more complex variation: 3 g7! ♖×f4+ 4 ♕×f4 ba. Here, the position of Black's pawn at b5 worked against us; but this is not a reason to reject 1 ♗a4, since White can still eke out a win: 5 ♕f5! a3 6 h7+ ♔×g7 7 ♕f7+ ♕×f7 8 ef.

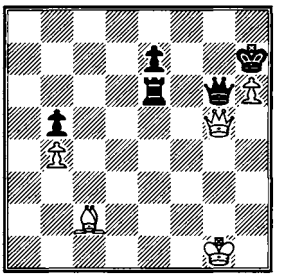
3 ♗c2! ♖×f4+! 4 ♔g1!

The only way to keep playing for the win (4 ♔g2?? ♕×c2+; 4 ♔e1? ♖e4+; 4 ♕×f4? ♕×c2 5 ♕f7+ ♔×h6).

4...♖f6! 5 ♕g5!

White parries the threat of 5...♔×h6. If 5...♔h8 now, then 6 ♕×g6!.

5...♖×e6!



6 ♔f1!

Time to get the king off the g-file, otherwise the rook on the sixth rank can attack White's bishop in perpetuity. Black can only defend against the threat of 7 ♗×g6+ by chasing the enemy king.

6...♖f6+ 7 ♔e1 ♖e6+ 8 ♔d1 (8 ♔d2? ♖e2+!) **8...♖d6+ 9 ♔c1! ♖c6! 10 ♕c5!!**

And here, finally, is the reason why White had to induce b6-b5: so the queen could occupy the c5-square! After 10...♔×h6 11 ♗×g6 ♖×c5+ 12 bc ♔×g6 13 c6, the white pawn goes on to queen.

Not a simple calculation; still, it was all quite within reach, considering the small number of variations aside from the main line.

Playing Out Studies

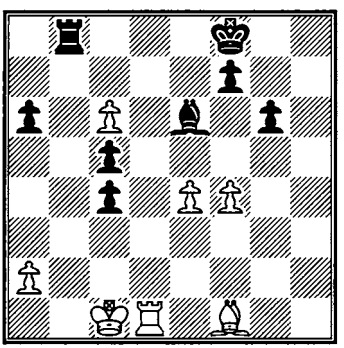
How can a trainer make use of studies in which it makes no sense (and is sometimes downright impossible) to calculate the variations all the way to the end? By insisting on complete

calculations, the trainer is, in effect, impressing upon the student an irrational algorithm for decision-making, leading inevitably to terrible time-scrambles, in which important points will be lost.

Such studies should not be solved, but played out: under a time-limit, students should resolve the tasks that come up, making one move after the other for White, and taking the opposing side's responses from the text of the book or the article (this works even better when the player faces the trainer, or a friend, who knows the solution).

I have used this training method regularly, and have seen practical proofs of its enormous effectiveness (owing, to a great extent, to its resemblance to the realities of tournament play). I shall demonstrate a few studies I like which would be suitable for playing out.

V. Smyslov 1938



Win

Once again, the naturalness of the starting position gladdens the eye. Clearly, White is striving for advantage here, with hopes resting on the passed pawn at c6. But there is nothing in the straightforward 1 c7 ♖c8 2 ♖d8+ ♔e7; and 1 ♗×c4 ♗×c4 2 c7 ♖e8 3 f5 (3 ♖d8 ♗e6) fails to 3...a5!?.

After trying a few other things, we find the only way to set problems for our opponent.

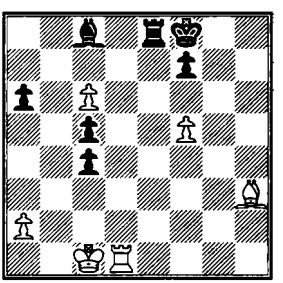
1 f5! gf 2 ♗h3

Black cannot take on e4, in view of the exchange of bishops, followed by c6-c7. Nor can 2...♖c8 be played because of 3 ef. This is not a bad outcome for White – having nothing better – should play this, without making things more difficult by further analysis.

2...♖e8

Black prepares to retreat the bishop to c8. Now we see that on 3 c7? ♗c8 4 ♗×f5 ♔e7!, or 4 ef f6!, White achieves nothing; however, capturing on f5 immediately retains more of those resources which could make trouble for the opponent.

3 ef ♗c8



But here, we should stop and think a while. Once again, we see that after 4 c7? f6!, Black defends successfully. So we have two gambit lines to consider: 4 f6!? and 4 ♖d7!?. Now we cannot proceed without accurate calculation.

We must either find a clear-cut refutation of one of them, making sure that the other one retains winning chances (the "exclusionary method," by whose aid we selected our first moves), or having guessed the correct continuation, we must calculate it through to a win.

Smyslov, in his annotations, did not look at 4 ♖d7, although it is very difficult to cast doubt on this move. 4...♗×d7? is hopeless: 5 cd ♖d8 6 f6 ♔g8 7 ♗f5! – and Black's pieces are restricted to the eighth rank, while White's king advances unhindered.

The move 4...♔g7? meets an interesting refutation. White continues 5 c7! ♖e1+ (5...♗×d7 6 f6+ ♔×f6 7 ♗×d7) 6 ♔d2 ♖h1 7 ♗g4! (7 ♖d8? is a mistake: 7...c3+ 8 ♔c2 ♖h2+, and the king cannot advance to the third rank; 7 f6+? also leads to a draw after 7...♔g6! 8 ♗g4 ♖h4 9 ♖d8 ♗×g4 10 ♖g8+ ♔×f6 11 ♖×g4 ♖h8=) 7...♖g1 (7...♖h4 8 ♖d8) 8 f6+! (8 ♖d8!? is also strong) 8...♔×f6 (8...♔g6 9 ♖d8 ♗×g4 10 ♖g8+ ♔×f6 11 ♖×g4) 9 ♖×f7+ ♔×f7 10 ♗×c8, and wins.

After 4...f6?! 5 ♖c7 a5 6 a4, White keeps a sizable advantage. This would probably not be a proper conclusion for a study-composer: he would need a more definite assessment; but for the practical player, this is often sufficient basis for choosing a variation.

Black can only gain a secure draw by 4...♖e3! 5 ♖c7 (5 f6? does not work, because of 5...♔e8!) 5...♖×h3 6 ♖×c8+ ♔e7.

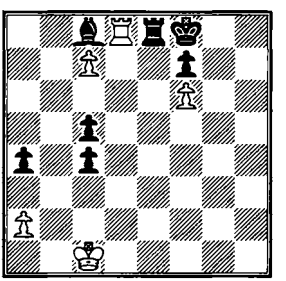
4 f6!! ♗×h3 5 c7 a5

If 5...♗f5, then 6 ♖d8 c3 7 ♔d1 (or 7 a4 a5 8 ♔d1) 7...a5 8 a4! c2+ 9 ♔c1! c4 10 ♔d2, and Black is in *zugzwang*. This is the kind of *zugzwang* that was White's main goal in undertaking the bishop sacrifice. But there is more work to do, in order to ensure that when the *zugzwang* position is reached, it will be the opponent's turn to move.

6 ♖d8

White must restrict the mobility of the enemy pieces: 6 ♔b2? would be a mistake, owing to 6...♖e2+, followed by 7...♔g8. 6 a4? is also inaccurate: 6...♔g8 7 ♖d8 ♖f8 (or 7...♔f8) 8 ♔c2 ♗g4 9 ♔c3 ♗e6, when it is White who has fallen into *zugzwang*.

6...a4



7 ♔b2!

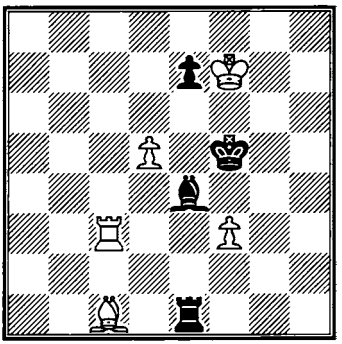
But not 7 ♔c2? a3.

7...♗e6 (7...♗f5 8 ♔c3 ♗e6 9 a3) **8 ♔c2! ♗f5+** (8...a3 9 ♔c3) **9 ♔c3 ♗e6 10 a3**

Zugzwang now costs Black his pawns, after which the invasion of the White king is decisive. ***(D)***

This appears to be a normal endgame, where White will have no trouble achieving material superiority – although it will be a much more

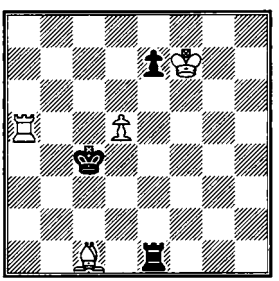
Y. Bazlov 2003



Win

complicated task to hold on to it. There is an important choice to make on the very first move. White can win a piece, not only by taking the bishop, but also by means of 1 ♖c5, which threatens 2 d6+. White can hardly calculate the correct path all the way to the end; he would have a better chance to refute one of those continuations in the process of testing them out. Let's begin with the bishop capture.

1 fe+ ♔×e4 2 ♖c5 (2 ♔e6 ♔d4+ 3 ♖e3 ♖×c1 would be useless) 2...♔d4 3 ♖a5 ♔c4 (of course not 3...♖×c1? 4 ♔×e7)



White can ward off the threatened 4...♖e5 by playing either 4 ♗f4 or 4 ♗b2. But in either case, any attempt to make progress leads to the loss of the d5-pawn, which means the game would then be a positional draw!

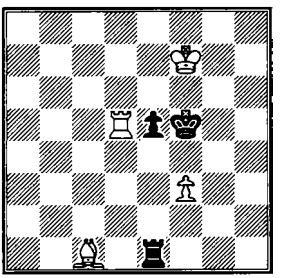
a) 4 ♗b2 ♖e2 5 ♗g7 ♖e1 6 ♗f6!? ♖e2! 7 ♗×e7 ♖e5;

b) 4 ♗f4 ♖e4 5 ♗c7 ♖e1 6 ♗h2 ♖e2 7 ♗g1 ♖e5 8 ♖c5+ ♔b4 9 ♔e8 ♖e1 10 ♗f2 ♖e2 11 ♖c7 ♖e5.

1 ♖c5!! ♗×d5+!

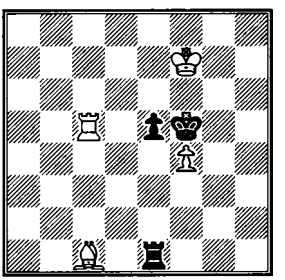
The only defense to the deadly threat of 2 d6+.

2 ♖×d5+ e5



3 ♗d2!

The seemingly equivalent 3 ♖c5? would allow Black to save himself by 3...♖e3!! 4 f4 (4 ♗×e3 is stalemate) 4...♖e1, and White is in *zugzwang*.



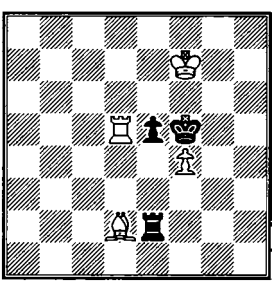
On 5 ♔e7, 5...♖×c1! 6 ♖×c1 ef 7 ♖f1 ♔e5! is a mutual *zugzwang* position, known since Richard Réti's famous 1928 study, in which Black's king "shoulder-blocks" its rival, preventing it from getting close to the pawn: 8 ♔f7 (8 ♔d7 ♔e4 9 ♔e6 f3) 8...♔f5! 9 ♔g7 ♔g5!. And after 5 ♗d2 ♖e2, White can

extract nothing, either from 6 ♖d5 ♖×d2! 7 ♖×d2 ef 8 ♖f2 (here it is Black to move, but this is of no importance, since the rook at f2 is too close to the king) 8...♔e4 9 ♔g6 f3 10 ♔g5 ♔e3, or from 6 ♔e7 ♖×d2 7 fe ♖a2! 8 e6+ ♔g6 – this position is drawn, since Black's rook controls the "long side," and is ready to begin checking from the side.

The analysis of this variation was based on some endgame ideas – and these are not exceptions, but basic rules, of importance to every chessplayer. So we are training not just your calculation, but also your knowledge of endgame theory.

Let's examine one more false lead, the move 3 ♗h6?. Black replies 3...♖a1!, and the rook now occupies the "long side," allowing it to give many checks; this will also prove handy in a rook endgame, if it comes to that. After 4 f4 ♖a7+ 5 ♔e8 ♖a8+ 6 ♔d7 ♖a7+ 7 ♔d8 ♖a8+ 8 ♔c7, the simplest is 8...♔g6 9 fe ♔×h6, although Black could also play 8...♖a7+ 9 ♔b6 ♖e7 10 ♔c5 ♖e8.

3...♖e3!! (3...♖e2 4 ♖d6 is just bad) **4 f4 ♖e2**



Threatening 5...♖×d2.

5 ♗c1!

With the king at f7, 5 ♖a5? ♖×d2 6 fe does not work, in view of 6...♖d7+.

5...♖e1 6 ♖c5

With the same position as after 3 ♖c5? – this time, however, it is Black to move, so he is the one who falls into *zugzwang*.

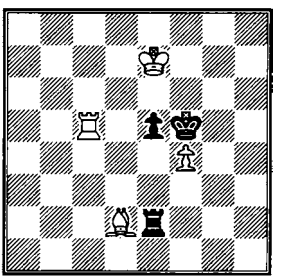
6...♖e4

After 6...♖×c1 7 ♖×c1 ef 8 ♖f1, we reach Réti's position with Black to move, and he is forced to give way to the opposing king: 8...♔e4 9 ♔g6(f6) or 8...♔g4 9 ♔e6(f6).

7 ♔e7! ♖e1 8 ♗d2!

8 ♔d6? is a mistake: 8...♖d1+ 9 ♔c6 (9 ♔e7 ♖×c1! 10 ♖×c1 ef 11 ♖f1 ♔e5!, and now, in the Réti *zugzwang* position, it is White to move) 9...♖e1 10 ♗d2 (10 ♔b5 ♔e6) 10...♖e2 11 ♖d5 ♔e6!.

8...♖e2!



9 ♖a5!!

Of course not 9 ♖d5? ♖×d2!=. The rook goes to the a-file, so as not to allow the enemy rook on the long side (9 ♖b5? ♖×d2 10 fe ♖a2! 11 e6+ ♔g6 is a draw).

9...♖×d2

9...♖e4 10 ♖d5 ♖e2 11 ♔d6 is hopeless too.

10 fe ♖b2 11 e6+

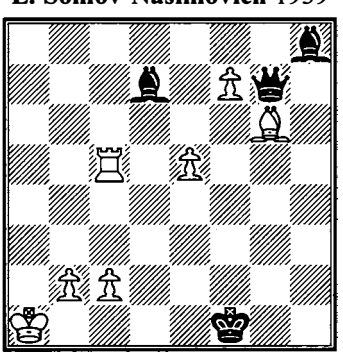
On the b-file, the Black rook is insufficiently distant from the e-file (in order for the flank attack to succeed, Black needs at least three files), so White wins.

This might be a bit too complex (I had three different grandmasters play this out against me, and all of them stumbled, either on the first or the third move). But despite that circumstance, its esthetic and instructive value is indisputable.

Two-sided Play-outs

I place a high value on compositions in which both sides demonstrate unusual resourcefulness and accuracy over the course of many moves. Such studies are suitable to offer for playing-out between two players. Both sides would be on equal footing – well, nearly equal, since with absolutely correct play, White always achieves his goal. On the other hand, if the struggle goes on long enough, and each side must, under a tournament-style time-limit, resolve a number of different tasks, then their chances are practically equalized.

E. Somov-Nasimovich 1939



Draw

I found three versions of this study in van der Heijden's study database. Before, I only knew of one of them, and used it – there, the play is one move shorter (the starting position being the one we reach after the first move).

We have already noted that in studies meant for solving, the trainer should sometimes get rid of the introductory moves, if they do not present any new ideas. Matters stand otherwise with studies meant for playing-out: it is even a good thing to make a player sometimes start out by calculating some technical variations (if they are not too complicated), as this allows us to conceal the moment the combinative shot becomes necessary.

1 ♖c7!

1 ♖d5? loses to 1...♗e6, for example: 2 ♖d8 ♗×f7 3 ♗×f7 ♕×e5!, or 2 ♖d6 ♗×f7 3 ♖f6+ ♕×f6 4 ef ♗×g6.

1...♗e6!

Black has no real chance of succeeding by 1...♕f8 2 ♖×d7 ♗×e5 3 ♖d1+ ♔f2 4 c3, or 3...♔e2 4 ♗h5+ ♔e3 5 c3: the strong f7-pawn restricts the possibilities of the Black pieces, preventing them from exploiting their material superiority.

The same assessment holds true for 1...♕h6 2 ♖×d7 ♗g7, when White has either 3 ♗d3+ or 3 ♖d6 ♔f2 4 ♗e4, threatening 5 ♖f6+.

2 ♖e7

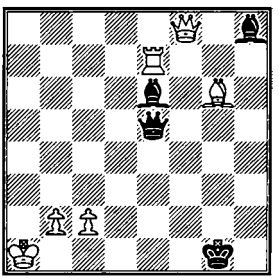
2 c3? ♕h6 leads to the loss of the e5-pawn, and White's position would be hopeless: 3 ♗b1 ♗×e5 4 ♖e7 ♗g7.

But now, the bishop is attacked, and on 2...♗d5, White had prepared 3 ♖e8! – the point being that, after 3...♗×f7 4 ♗×f7 ♕×f7 5 ♖×h8, the rook cannot be prevented from getting to the third rank (via either a8 or h3), when White sets up the invulnerable fortress with rook and pawn on the second rank (one pawn is enough) against the queen, known since the time of Philidor.

So Black switches from the attempt to exploit the material superiority over to a combinative attack against the enemy king.

2...♔×e5!? 3 f8♕+ ♔g1!

This is the best square for the king to hide from the checks.



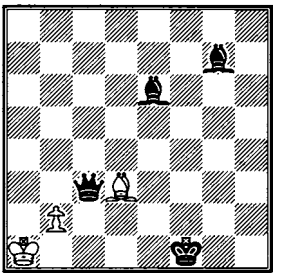
Threatening mate from b2 or e1. White has no choice.

4 c3 ♕e1+ 5 ♗b1 ♕×c3!

The queen is taboo, and it might seem that White must resign here. But now come the sacrificial fireworks.

6 ♖g7+!! ♗×g7 7 ♕f1+!! ♔×f1 8 ♗d3+! ***(D)***

Taking the bishop is stalemate; and otherwise, White takes on c3. But this engrossing struggle is not yet over.

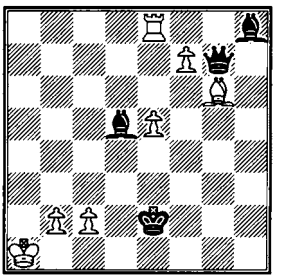


8...♔e1! 9 bc ♔d2

Now the bishop is attacked, while Black is also threatening 10...♔c1, forcing mate. White needs to make one more effort, in order to break up the mating net for good.

10 ♗c2! ♔c1! (10...♔×c2 would be stalemate) **11 ♗b3!**, and taking the bishop is stalemate, while after 11...♗×c3+ 12 ♔a2, the bishop is defended, so it is a draw.

Alas, as grandmaster Yuri Yakovich advised me, the composer's spectacular idea is unfortunately refuted. Instead of a raging attack, Black should be content with the restrained **2...♗d5!**, and on **3 ♖e8**, not 3...♗×f7?, but **3...♔e2!**.



4 f8♕? ♕a7+ leads to mate. I have examined **5 b3 ♗×f7 6 ♗×f7**, and after 6...♕×f7? 7 ♖×h8 ♕g7, White constructs a fortress out of rook and two pawns versus queen by 8 ♖c8! or 8

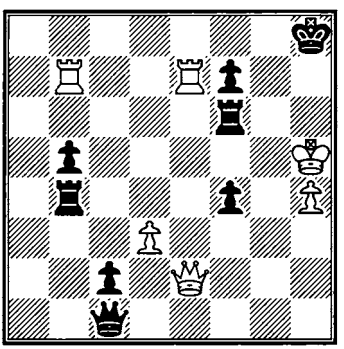
♖h4! (but not 8 ♖d8? ♕c7!, and not 8 ♖h3? ♔d2! 9 ♔b2 ♕×e5+ 10 c3 ♕e2).

Yakovich correctly pointed out that Black does not need to take White's bishop – it is more important for him to retain the black dark-squared bishop. With **6...♕g3!**, Black begins a decisive attack on the dark squares.

White's situation is not improved after 5 c4 (instead of 5 b3) 5...♗×f7 6 ♗×f7 – once again, Black does not take the bishop, but plays instead for the attack, with 6...♔d2!.

Despite the fact that the study is cooked, it is still useful for two-handed play. In the last section of the chapter "Challenge To A Duel," you will find several more examples of cooked studies, which may still be used for training purposes.

N. Riabinin 2003



Draw

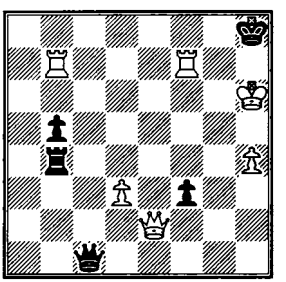
1 ♖×f7

It is not hard to see that White has nothing better. On 1 ♕e5?, Black mates: 1...♕d1+ 2 ♔g5 ♕g1+ 3 ♔×f6 ♕g6. The desperate 1 ♖e8+? ♔h7 2 ♖h8+ ♔×h8 3 ♕e8+ is senseless, as the checks run out almost immediately: 3...♔g7 4 ♖×f7+ ♔×f7 5 ♕e5+ ♔h7. But now, Black has to come up with a combination of his own. Well, let him do the sacrificing, and we'll try to find the hole in his idea.

1...♖h6+! 2 ♔×h6 f3+ 3 ♔h5 ♕h6+!!

Black cannot succeed by sacrificing the other rook: 3...♖×h4+? 4 ♔×h4 ♕h6+ 5 ♔g4 loses. But what is the point of giving away the queen (or, if you want to be technical, not the queen, but the strong passed pawn at c2)?

4 ♔×h6 c1♕+



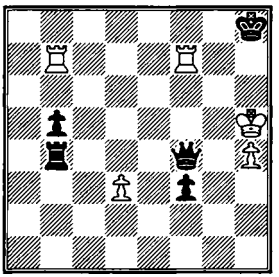
The point is that, after 5 ♔h5?, the queen now has another way to give check: 5...♕c5+ 6 ♔g6 ♖g4+ (from this square, the rook protects the king against the back-rank mate) 7 ♔f6 fe, and Black wins. We find the only defense: to deflect the enemy queen from the c-file.

5 ♕d2!! ♕×d2+ 6 ♔h5

Now Black can give perpetual check by 6...♖×h4+ 7 ♔×h4 ♕h2+ 8 ♔g4 ♕g2+ 9 ♔h4, etc., but correctly plays on for the win.

6...♕f4!

From here, the queen guards both squares from which White intended to mate: b8 and f8.



It is not hard to establish that the only chance to resist lies in trading on f4, followed by ♔g6. But note: the principle of uncovering every candidate-move, which we spoke of when we looked at the Pervakov study, helps us to find an additional resource, the pawn sacrifice d3-d4. Why the pawn should be given up is unclear right now, since on the next move, White will still have to take the queen. But if you have a choice, that means you should not be in a hurry to make your move – first, you should make an accurate calculation of the variations.

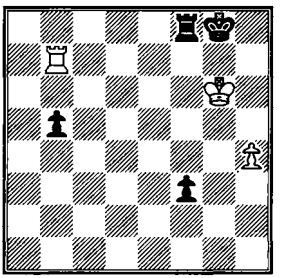
7 d4!! ♖×d4

7...♕d6 is not dangerous: 8 ♖bd7 ♕×d7 9 ♖×d7 ♖a4 (in order to meet 10 ♔g6 with a check on the 6th rank) 10 ♖f7.

8 ♖×f4 ♖×f4 9 ♔g6 ♔g8

If Black protects the king by moving the rook to the g-file, then White's rook can stop the f-pawn: 9...♖g4+ 10 ♔h6! ♖×h4+ 11 ♔g6 ♖g4+ 12 ♔h6 f2 13 ♖f7, and draws.

10 ♖b8+ ♖f8 11 ♖b7!



Threatening perpetual check on g7 and h7. The only way Black can avoid the repetition is to sacrifice the rook.

11...♖f6+! 12 ♔×f6 f2 13 ♔g6! f1♕ 14 ♖b8+ ♕f8 15 ♖×f8+ ♔×f8 16 ♔f5 b4 17 ♔e4 b3 18 ♔d3

This is why White sacrificed the pawn on move 7: to clear the d3-square for the white king, as otherwise, White would not have been able to stop the b-pawn.

Chapter 2

Tourney Results
Oleg Pervakov

(Comments by Mark Dvoretsky in italics)

64 composers, from Austria,. Azerbaijan, Argentina, Armenia, Byelorussia, Hungary, Germany, Holland, Georgeia, Israel, Spain, Italy, Moldova, Russia, the USA, Ukraine, France and the Czech Republic, submitted 115 studies for the birthday tourney "Mark Dvoretsky – 60."

My sincere gratitude to all the composers who responded to the invitation to take part in the tourney. Thanks also for the congratulations and warm wishes addressed to me, found in many of your letters.

We were pleased at the high level of the studies. Unfortunately, some of them did not quite fit the thematic task, "Studies for Practical Players," even though, from their exceptional quality, they could certainly compete for the highest prizes in other tourneys. I will note that, prior to the judging, I showed what were, in our opinion, the best compositions to several grandmasters. This gave us a better feel for the preferences of strong practical players, which in turn had some bearing on the final prize distribution.

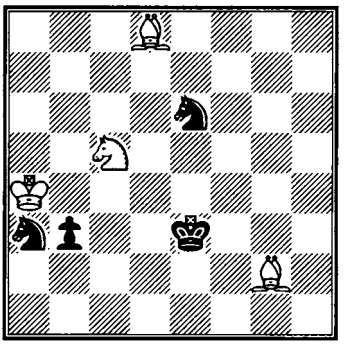
Looking over the studies which were sent in, it became clear to me that most composers were making active use of computer programs and of endgame tablebases, which nowadays can give accurate analyses of any five- or six-piece position, and even of some pawnless seven-piece endgames. One could only rejoice at this use of modern-day technology – if the result turned out to be a sharp composition. But the result is not always positive – sometimes, we see purely computer-generated studies. Sometimes the outcome of the thematic variations is not determined by clever conclusions or exacting logic – it is just that the computer analysis "turns out that way." In my view, such studies possess no esthetic value. And sometimes, even in quality studies, the supporting analysis of either White's alternative tries, or of Black's defensive possibilities, becomes so complex and impenetrable, that it could not possibly have been carried out without computer assistance. How, then, would a practical player solve a study: how is the player to determine which is the main line, and which the alternative, if rejecting the alternative is not one bit easier than following the basic solution to its conclusion?

Unfortunately, we did not get through the process without losses: in 21 of the studies, we discovered cooks or insolubilities.

The circle of candidates for distinction turned out to be rather sizable: here, in the arbiters' opinion, are the 25 best compositions. ***(D)***

To begin with, we note that according to the latest computer researches, the ending of "two bishops + knight versus two knights" is a win for the stronger side.

N. Rezvov, S. Tkachenko (Ukraine)
1st Prize



Win

Such reliance upon an evaluation, unknown to practically any player, could have become a serious esthetic defect (in any case, considering the theme of this tourney), were it not for two circumstances.

In the first place, this evaluation has almost no influence on the decisions of either side, and remains merely an unobtrusive background element.

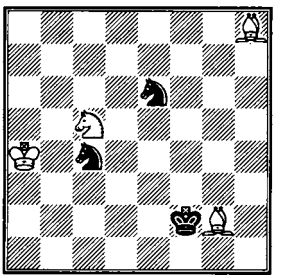
And second, any practical player would be able to guess the proper evaluation of a position with this material relationship, if he were aware of the following general principle: "In pawnless positions, the addition of another pair of pieces increases the chances for the stronger side." For example, two knights cannot mate a lone king; but the endgame of "three knights vs. one" is a win. The fact that two bishops will always beat a knight is well-known nowadays; starting from the principle given above, it is not hard to see that adding a knight to both sides cannot decrease the stronger side's winning chances.

1 ♗f6! (1 ♘×e6? is bad: after 1...b2 2 ♗g5+ ♔f2, White would have to give up the bishop for the pawn) **1...b2!** (1...♘×c5+? 2 ♔×a3+−) **2 ♗×b2 ♘c4** Getting the knight away from attack with gain of time.

Where should the bishop go? Unfortunately, tempo play by White does not work: 3 ♗c1+? ♔f2! 4 ♗d5 ♘×c5+ 5 ♔b5 ♘d3, and the knights will reunite next move. 3 ♗a1? is also a mistake: 3...♘×c5+ 4 ♔b4 ♘d2(a5)=. Ah, these knights and their forks! Let's just stuff the dark-squared bishop in the far corner.

3 ♗h8!! ♔f2!

Black is in no hurry – the knight on c5 is not going anywhere...



4 ♗h1!!

Not the automatic 4 ♗a8?! (analogous to 3 ♗h8!!) – after 4...♘×c5+ 5 ♔b5 ♘d7! 6 ♗d4+ ♘e3! 7 ♗e4 ♘f8! 8 ♔c6 ♘e6, the agile black knight successfully wins its way to freedom. Nor does 4 ♗h3? ♘×c5+ 5 ♔b4 ♔g3! win – the bishop is unable to escape the knight.

4...♔g1!

But now, the bishop cannot even be caught in the corner: 4...♘×c5+ 5 ♔b5 ♘e3 6 ♔×c5 ♘g2 7 ♗d4+!.

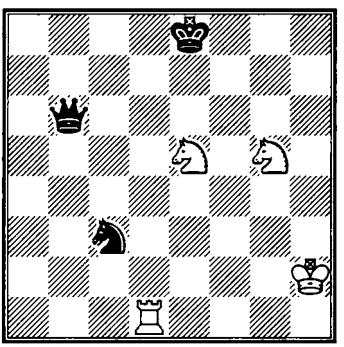
5 ♗a8!!

Now it is the light-squared bishop's turn to perform its long-distance travel.

5...♘×c5+ (5...♘b6+ 6 ♔b5(a5) ♘×a8 7 ♘×e6+–) **6 ♔b5! ♘d7 7 ♗d4+!**, and it turns out that by driving the black king from f2 to g1, White has rendered the previous saving move, ♘e3, impossible. White wins.

An engrossing battle of bishops and knights (with an element of logic: 4 ♗h1!!), waged across the entire expanse of the board. Three times, White's long-range pieces were forced to hide themselves in the corners (which appears to be a record for play-to-win studies)!

Y. Bazlov (Russia)
2nd Prize



Draw

The material balance on the board is in Black's favor; but if play were to proceed normally, White could defend successfully. True, in the starting position, White does not have all the elements of the "defensive complex" working in harmony, and Black hopes – not without reason – to be able to increase the advantage.

For example, 1 ♖d2? ♕h6+ 2 ♘h3 ♕×d2+ or 1 ♖d3? ♕f2+ 2 ♔h3 ♕f5+ would lose immediately.

1 ♖f1 ♕b2+

1...♕h6+ does not win: 2 ♘h3 ♕d6 (2...♘e4 3 ♘g4) 3 ♖f5 ♕e6 4 ♖h5 ♘e4 5 ♘f4 ♕a2+ 6 ♘g2=.

2 ♔h3 (2 ♔g3? ♘e2+) **2...♕e2 3 ♖f5**

One would think everything was defended now, but –

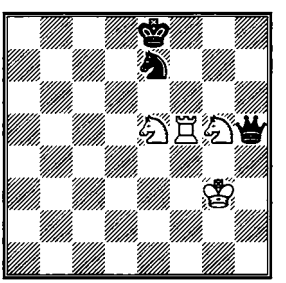
3...♕h5+ 4 ♔g2 (4 ♔g3? ♘e2+ 5 ♔g2 ♘d4 6 ♘e4 ♕e2+, winning one of the white pieces) **4...♘d5**

4...♘e4? is inferior: after 5 ♘×e4, Black cannot play 5...♕×f5 in view of 6 ♘d6+. Now Black is the one threatening a fork with ♘e3+.

5 ♔g3!

A picturesque position! The two kings face each other, across a fence made out of their own and their opponent's pieces. 5 ♘e4? is bad, because of 5...♘e3+ 6 ♔g1 ♕d1+ and 7...♘×f5, as is 5 ♘d7? ♕g4+.

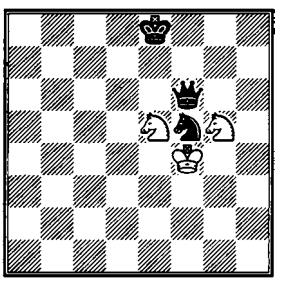
5...♘e7



6 ♘g4!!

Totally unexpectedly, and with no compensation whatever, White offers to sacrifice what one would think would be the only hope for a peaceable outcome – the strongest piece. And yet, there was no point in seeking to cut losses: 6 ♔f4 ♕h2+ (6...♘×f5? 7 ♔×f5=) 7 ♔g4 (7 ♔e4 ♕c2+) 7...♕g2+ 8 ♔f4 ♘d5 is mate in mid-board!

6...♘×f5+ 7 ♔f4 (attacking the knight, and also threatening a fork with ♘f6+) **7...♕g6 8 ♘e5 ♕f6**

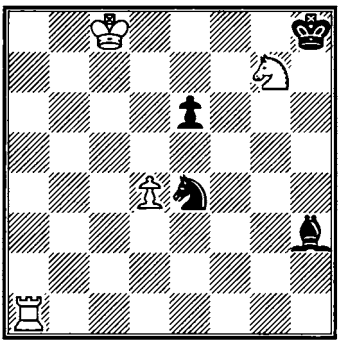


9 ♘g4 (of course not 9 ♘e4? ♕e6 10 ♘g5 ♕c8–+) **9...♕f8 10 ♘e6 ♕f7 11 ♘g5 ♕g6 12 ♘e5 ♕f6 13 ♘g4 ♕f8 14 ♘e6 ♕f7 15 ♘g5**, and Black must accept the positional draw.

A unique final position, presaged by the stunning sacrifice 6 ♘g4!!.

Exceptionally spectacular: the rook is given up with check, after which White battles successfully for several more moves, having only a lone knight against the queen on an open board! What saves White is the fact that the queen's mobility is hampered by the need to protect the knight. Losing it would bring about the "two knights vs. queen" standoff, which in most cases (including this one) is drawn.

S. Didukh (Ukraine)
3rd Prize



Win

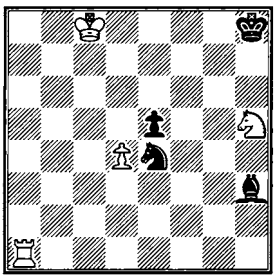
1 ♘h5!

White could easily go wrong on the very first move: 1 ♖h1? ♔×g7! (but not 1...♘f2 2 ♖h2 ♔×g7 3 ♔c7) 2 ♖×h3 ♘d6+! 3 ♔d7 ♘f5 4 ♖d3 ♔f6, with a drawing fortress. *Here, we do not even need to verify this with the computerized tablebase: Black's knight occupies an ideal position, tying one of White's pieces to the defense of the d4-pawn. White's sole hope of winning lies in attacking the e6-pawn with two pieces, which could never be accomplished in these circumstances.*

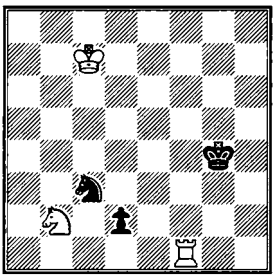
1 ♘e8? e5+ 2 ♔d8 ed 3 ♖h1 ♘g5= would also be a mistake; and according to the tablebases, 3 ♖d1 ♔h7 4 ♖×d4 is a drawn position. *In this instance, adding a pair of knights to the well-known drawing configuration of "rook vs. bishop" does not alter the assessment of the situation, even though it will probably complicate the defense. It is amusing that, with White to move, there is a win not only by taking the bishop, but also after 5 ♖a4!! for some reason (the computer quietly insists that it is mate in 127 moves!)*

1...e5+!

1...♔g8 2 ♔d8 leaves Black no chance at all: White gradually realizes the advantage of the exchange by purely technical means. For example: 2...♔f7 3 ♖a7+ ♔f8 4 ♖a3 ♗g4 5 ♖e3 ♘d6 6 ♘g3 ♘c4 7 ♖e1 ♔f7 8 ♔c7 ♔f6 9 ♘e4+ ♔e7 10 ♘c5 ♔f7 11 ♘d7 ♗f5 12 ♘e5+.



Now White has a difficult choice: where does the king go? One would think it would need to be closer to the black pawn. Let's try it: 2 ♔c7? ed 3 ♖h1 ♗g2 4 ♖h4 ♔g8 5 ♖g4+ ♔h7! 6 ♖×g2 d3 7 ♖g1 d2 8 ♖d1 ♔g6 9 ♘f4+ ♔f5 10 ♘d3 ♔g4 11 ♖f1 ♘c3 12 ♘b2 – are we there yet?



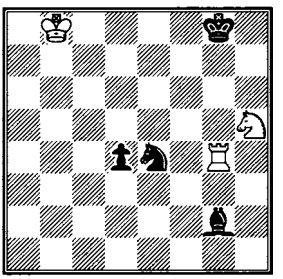
Apparently not: 12...♘d5+!! 13 ♔d6 ♘e3, draw! On c7, the king stumbled across a mine!

A different mine awaits on d8: 2 ♔d8? ed 3 ♖h1 d3! 4 ♖×h3 ♘f2 5 ♖g3 d2, and White has no time to deliver mate, since after 6 ♘f6, the black pawn promotes with check!

All that is left is the bizarre-looking **2 ♔b8!! ed** (2...♗g4 3 ♖e1!) **3 ♖h1 ♗g2**

Now the variation 3...d3 4 ♖×h3 ♘f2 5 ♖g3! d2 (5...♔h7 6 ♘f6+ ♔h6 7 ♘g4+!) 6 ♘f6 d1♕ contains no check, so White continues with 7 ♖g8#.

4 ♖h4 (now White has constructed a threatening-looking battery) **4...♔g8 5 ♖g4+**, and now the play subdivides:



(A) 5...♔h7! (5...♔f7?! 6 ♖×g2 d3 7 ♖g7+ ♔e6 8 ♘f4+ +–) **6 ♖×g2 d3 7 ♖g1! d2 8 ♖d1 ♔g6 9 ♘f4+ ♔f5 10 ♘d3! ♔g4 11 ♖f1!** (the cutoff for the black king) **11...♘c3 12 ♘b2 ♔g3** (unfortunately, there is no longer enough time to bring the knight over)

13 ♘d1!, and wins.

Considering the far-off position of the white king, the other way looks promising as well:

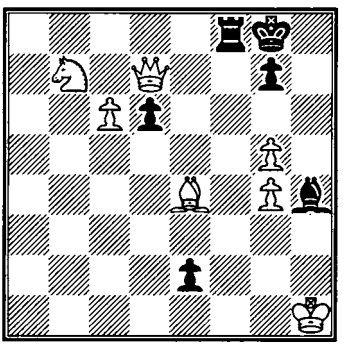
(B) 5...♔f8 6 ♖×g2 d3 7 ♖g1 d2

The variation 7...♘f2 (7...♘c3 8 ♖f1+! ♔e7 9 ♖f2) 8 ♖f1 d2 9 ♖×f2+ is like an echo-variation of the mainline finale coming up.

8 ♖d1 ♔e7 9 ♘f4 ♔d6 10 ♘d3 ♔d5 (10...♔c6 11 ♘e5), and **11 ♘f2! ♘×f2 12 ♖×d2+**.

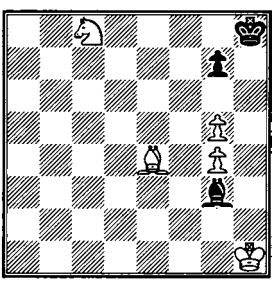
A difficult study! White wins one of the opposing pieces by force, leaving him with an extra rook. But White cannot let his great advantage in material render him complacent: he must discover his opponent's counterplay, based upon the strength of his only remaining pawn, see it and calculate the main variation carefully. This is the only way to arrive at the brilliant second move – the king retreats to the side, away from the main events.

V. Vlasenko (Ukraine)
4th Prize



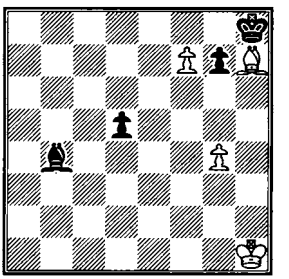
Win

After the obvious **1 ♕e6+ ♔h8** (1...♖f7? 2 ♕e8+ ♖f8 3 ♗d5+ leads to mate), one is tempted to play 2 ♗f5?!. What could be simpler? After 2...e1♕+ 3 ♕×e1 ♗×e1 4 c7 ♖a8 5 ♘×d6 ♗g3 6 c8♕+ ♖×c8 7 ♘×c8, White comes out a piece and a pawn ahead!



Yet, what we have here on the board is a fortress: Black's bishop moves to the a1-h8 diagonal, and the king cannot be driven out of the h8-corner. Nor does the attempt to sacrifice the knight on f6 accomplish anything.

What preserves the concept is playing for mate: **2 ♗h7!! e1♕+ 3 ♕×e1 ♗×e1 4 g6 ♗b4** (4...♗g3 5 c7 d5 6 ♘d8 ♗×c7 7 ♘f7+ ♖×f7 8 gf leads to the same result) **5 c7 ♖c8 6 ♘d8 ♖×c7 7 ♘f7+ ♖×f7 8 gf d5**



9 ♗g6!

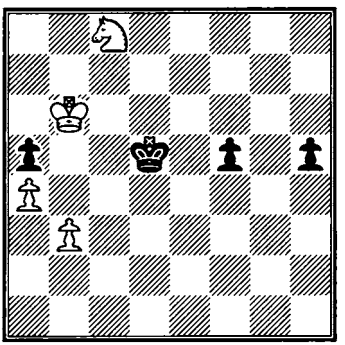
The white king easily deals with the d-pawn, after which it can quietly march down to e8.

In 1977, almost exactly the same fortress as in the try came up in a game Kremenetsky – Vulfson (although there was only one white pawn, instead of two). Vladimir Vulfson published his notes to the endgame; that was where I saw this idea, and showed it to my students. A few years later, in the 7th game of the Candidates' Final Match between Sokolov and Yusupov (Riga 1986), Artur had a chance to save himself by setting up just such a fortress (this time, with two white pawns); but with his flag about to fall, he missed this chance and lost. (You'll find the story in my book, School of Chess

Excellence 1 – Endgame Analysis, *in the chapter entitled: "The Fortress") And now, I found it very pleasant to recall these old analyses once more.*

This study pleased both arbiters. Why was it not placed higher? Because Vlasenko had already used the idea of this fortress before; nor was the mating construct anything new. But taken together, everything looks just great!

E. Sutovsky (Israel)
5th Prize



Draw

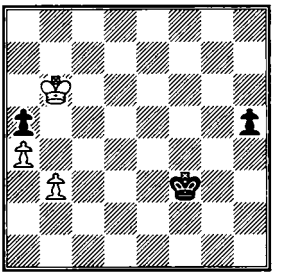
1 ♘e7+!

White does not have the time to pick up the a-pawn: 1 ♔×a5?h4!(on 1...f4? 2 ♔b4! ♔e6 3 a5 f3 4 a6 f2 5 a7 f1♕ 6 a8! ♕f4+, Black is saved by a perpetual) 2 ♘b6+ ♔e6 3 ♔b5 h3 4 a5 h2 5 a6 h1♕ 6 a7 f4! 7 a8♕ ♕×a8 8 ♘×a8 f3 –+. And 1 ♔c7? h4 2 b4 h3 3 ♘b6+ ♔d4 4 ba h2 5 a6 h1♕ 6 a7 f4! 7 a5 ♔c5! –+ is also bad.

1...♔e4 2 ♘g6!

An important point. The knight will have to be sacrificed for the f-pawn in any case, but it must happen on the f3-square.

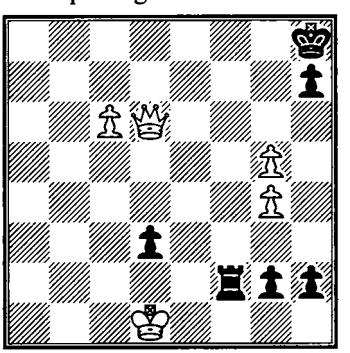
2...f4 3 ♘h4! f3 4 ♘×f3 ♔×f3



And here, the amazing move **5 ♔c7!!** leads to the draw. The solution is as quick as it is pretty: after **5...h4 6 b4 h3** (6...ab 7 a5 b3 8 a6 b2 9 a7 b1♕ 10 a8♕+=) **7 ba h2 8 a6 h1♕ 9 a7**, Black's king prevents the queen from jumping to a8. It is a draw!

An elegant study, composed by a strong over-the-board grandmaster, in which we see a harmonious blend of all its composite elements: the choice of where to sacrifice the knight for the f-pawn, the fine king move, and the fact that the concluding position is drawn in spite of the presence on the board of an additional a-pawn.

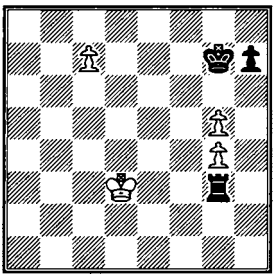
D. Gurgenidze (Georgia)
1st Special Prize
For a package of three studies



Win

Before taking the h2-pawn, we lure Black's king to the g-file.

1 ♕b8+! ♔g7 2 ♕×h2 ♖f1+ 3 ♔d2 g1♕ 4 ♕×g1 ♖×g1 5 c7 ♖g2+ 6 ♔×d3 ♖g3+

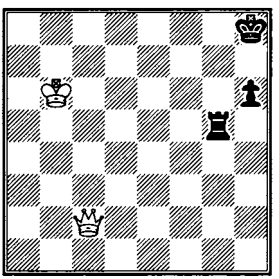


Now the *zwischenschach* on the first move makes sense: it was important to deny Black's rook access to the g8-square.

7 ♔c2!!

There is a try: 7 ♔d4? ♖×g4+ 8 ♔d5 ♖×g5+ 9 ♔d6 h6! 10 c8♕ ♔h7! 11 ♕c2+ ♔h8, and after the unstoppable 12...♖g7, we reach a known drawing position by B. Guretzky-Kornitz.

7...♖g2+ 8 ♔b3 (or 8 ♔c3) **8...♖g3+ 9 ♔b4 ♖×g4+ 10 ♔b5 ♖×g5+ 11 ♔b6 h6 12 c8♕ ♔h7 13 ♕c2+! ♔h8** (threatening 14...♖g7=)



14 ♕c6!!

With the king at d6, White would not have had this move.

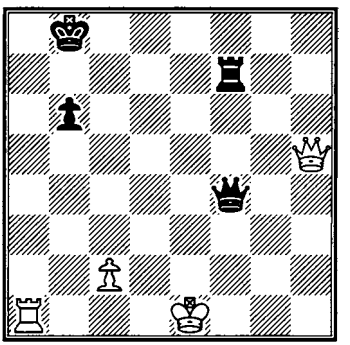
14...♔h7 15 ♕e4+ ♔h8 16 ♕e6!

Triumphantly completing the c8-c2-c6-e4-e6 shuffle.

16...♔h7 17 ♔c7, and Black has no perpetual check, since the queen controls the g8-square.

In order to solve this study, one must first be aware that the position "queen vs. rook + h6-pawn" is normally a draw; and second, one must understand the basic springboard of this defense: that one must never, under any circumstances, allow the white king to occupy either the f7- or the f8-square. To this end, the black rook must sometimes be on g7. The point of White's strategy here is not to permit Black to set up this drawing position.

D. Gurgenidze



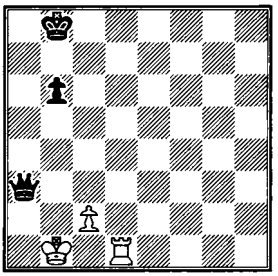
Draw

The try 1 ♕×f7? ♕×f7 2 0-0-0 ♕a2! 3 ♖d3 ♕a1+ leads to a theoretical win for Black.

1...♖f8 2 ♕×f8+ ♕×f8 3 0-0-0! ♕a3+ 4 ♔b1 ***(D)***

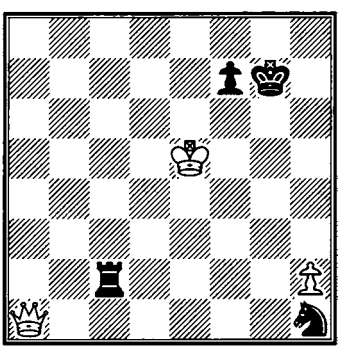
But now, it is a draw!

White places the rook on d3, reaching Derdle's known drawing position. But



in the try, there is no draw, because of the white king's unfortunate position (it needs to be in front of the enemy pawn). Black advances the king to a4, the pawn to b4, and then turns the queen loose, preparing to sacrifice it for the rook on either the b3- or the d3-square. With White's king at b1, this queen sacrifice is no longer a threat.

D. Gurgenidze



Win

Try: 1 ♔d6+? ♔g8 2 ♕×h1 ♖d2+! 3 ♔c5 ♖c2+ 4 ♔d4 ♖d2+ 5 ♔e3 ♖d6 6 ♕a8+ ♔g7 7 ♕a1+ ♔g8=.

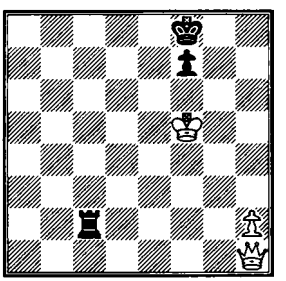
This drawing position, with rook on the sixth rank and pawn at f7 versus queen and h-pawn, was first published in 1948 by the great study composer Genrikh Kasparyan. Later, a 1917 analysis of this position was found in the notes of Nikolai Grigoriev.

White's task is to prevent the construction of this position. To that end, White must either prevent the rook from getting to the sixth rank, or get the queen to one of the vital back-rank squares in the enemy position.

Grandmaster Motylev drew my attention to yet another try: 1 ♔f5+? (from here, the king cannot attack the rook after the check from f2 – and this nuance is enough to cost White the win) 1...♔f8 (1...♔g8 2 ♕g1+ ♔f8 is the same thing).

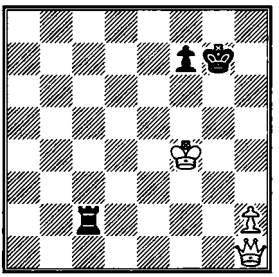
(A) If 2 ♕a8+ ♔g7 3 ♕×h1, then 3...♖f2+! (not 3...♖e2? immediately, in view of 4 ♕g1+ ♔f8 5 h4 ♖e6 6 h5+– – in order to draw such a position, Black's king must be on h7 or h8) 4 ♔g5 ♖e2! 5 ♕a1+ ♔g8!= – the rook inevitably gets to e6.

(B) The immediate 2 ♕×h1 is subtler.



Here 2...♖f2+? is useless: 3 ♔g5 ♖e2 4 ♔h6+– and the king penetrates the enemy camp. Another way to lose would be 2...♖e2? 3 ♕a8+ ♔g7 4 ♕a1+! ♔g8 5 ♕g1+ ♔f8 6 h4, transposing into variation A. The elegant 2...♖a2!! is the saving move, intending 3...♖a6 while preventing the check from a8. For example, 3 ♔g5 ♖a6=, or 3 h4 ♖a6 (3...♖a5+!?) 4 h5 ♖h6!=, or 3 ♕b7 ♖f2+! 4 ♔g5 ♖e2!=, and Black will have a fortress.

1 ♔f4+! ♔f8! 2 ♕a8+! (it is too early for 2 ♕×h1? ♖e2 3 h4 ♖e6=) **2...♔g7 3 ♕×h1**



3...♖f2+

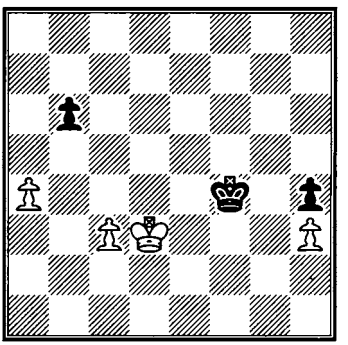
Other defenses do not help: 3...♖e2 4 ♕g1+ ♔h7 5 ♕c5 ♖×h2 (5...♖e6 6 ♕f8+–; 5...♔g7 6 ♕g5+ ♔f8 7 h4+–) 6 ♕a7! ♔h8!? (6...♔g7 7 ♕g1+) 7 ♔f5+–.

4 ♔e3! (after 4 ♔e4? ♖e2+ or 4 ♔g3? ♖e2, the rook moves unstoppably to e6) **4...♖f6 5 ♕a1! ♔g6 6 ♔d3! ♖d6+ 7 ♔c4 ♖e6** (7...♔h7 8 ♕a3! and ♕f8) **8 ♕h8!**, and wins.

It is a shame that David Gurgenidze did not compose these studies earlier – I should unfailingly have included them in my Endgame Manual*! They are excellent exercises for strong chessplayers who are studying the "queen vs. rook" endgame. Most importantly, all three studies are based upon important theoretical fortresses, which should be added to one's endgame arsenal of knowledge, and not upon accidental positions, taken from reference books or tablebases.*

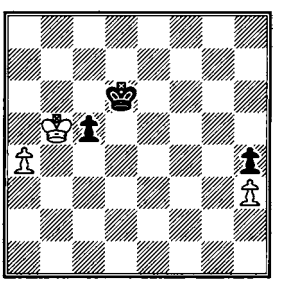
For the process of learning endgame theory, it is not enough to acquaint oneself with these or other conclusions – one must gain practice in their use by solving concrete problems. And Gurgenidze's studies could serve as an excellent framework for such training. To solve them, a player is obliged to calculate variations accurately, relying on known theoretical conclusions. Additionally, he should commit to memory, or else correct on his own some specific details of the basic holding positions, circumstances which might render a familiar fortress insecure.

Y. Afek (Israel-Holland)
2nd Special Prize
For a package of two studies



Win

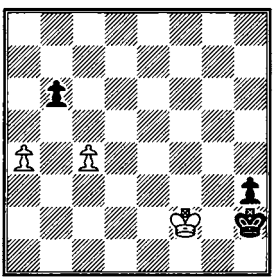
How does White realize the extra pawn? 1 c4? ♔e5 2 c5! (2 ♔c3 ♔d6=) 2...bc 3 ♔c4 ♔d6 4 ♔b5 suggests itself – is it a win?



No, it is a mirage! With 4...♔d5!! (4...♔c7? 5 ♔×c5+–; 4...c4? 5

♔×c4 +–) 5 a5 ♔d6! 6 a6 (6 ♔b6 c4=), Black uses a nice-looking shuffle to force White's pawn to advance two squares. Now after 6...♔c7 7 ♔×c5 ♔b8=, the king will be able to catch it (unless, of course, White prefers to stalemate the king at a8), and then run back to the kingside, to meet the h-pawn full-on.

But what if it is the White king that carries out this exercise? Let's check: 1 ♔d4? ♔g3 2 ♔e3 (2 c4 ♔×h3 3 c5? bc+ –+) 2...♔×h3 3 ♔f3 (3 ♔f2 ♔g4 4 c4 h3 5 c5 bc=) 3...♔h2 4 ♔f2 h3 5 c4.



It appears to have worked: 5...♔h1? 6 c5 +– (6 a5 +–), but now Black is saved by 5...b5!!.

Waiting tactics do not work either: 1 ♔d2? ♔e4! (1...♔g3? 2 c4!) 2 ♔c2 ♔d5! 3 ♔b3 ♔c5 4 ♔a3 ♔c4 5 ♔b2 ♔d5! 6 ♔b3 ♔c5=.

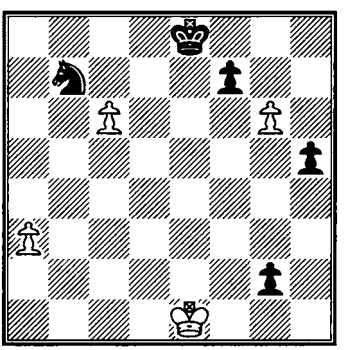
The winning move is difficult to find: **1 ♔c2!!** Now going after the h-pawn brings the black king nothing but disappointment: **1...♔g3 2 c4 ♔×h3 3 c5**, and Black cannot venture onto the g-file: **3...♔g4 4 c6!+–; 3...♔g3 4 cb+–** (3...bc 4 a5 +–). And **1...♔e5** is no better: **2 ♔b3 ♔d5 3 ♔b4! ♔c6 4 ♔c4**, and wins.

This study stands out for its tries and its unexpected introduction.

This study was entered into my notebook of exercises a full decade ago, in 1998. At that time, I was a more or less a regular visitor to the Dutch city of Apeldoorn for training sessions with young players. The noted Israeli problemist Yochanan Afek was also invited there, for the same purpose (I knew his studies, and marveled at many of them). We met, and became friends. One day, Afek showed me this pawn endgame, which seemed, from a trainer's standpoint, to be an excellent exercise to develop a sense of awareness of the opponent's counterchances. In fact, it is quite easy to be seduced by one of the first two tries, since the refutations are not at all obvious.

The only shortcoming of this study is that the main solution is practically nothing but that fine opening move – White's continuation is obvious. It was probably for just this reason that for years Yochanan never sent it to tourneys. But now he properly decided that for a tourney with the theme "Studies for Practical Players" it was quite appropriate.

Y. Afek

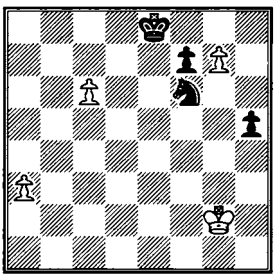


Draw

1 ♔f2

After 1 gf+? ♔×f7 2 ♔f2 ♘d6 3 ♔×g2 ♔e7 4 ♔h3 ♘f5, White cannot reach the h5-pawn, while the black king easily deals with the white pawns.

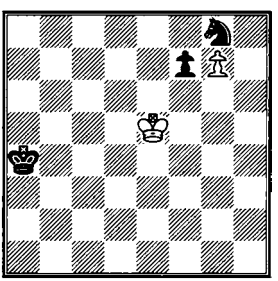
1...♘d6 2 g7 ♘e4+ 3 ♔×g2 ♘f6



4 ♔h3!!

The beginning of an elegant battle of plans.

In reply to 4 a4?, the king would immediately head over to start gobbling pawns: 4...♔d8 5 ♔g3 ♔c7 6 ♔h4 ♔×c6 7 ♔g5 ♘g8 8 ♔×h5 ♔b6 9 ♔g5 ♔a5 10 ♔f5 ♔×a4 11 ♔e5.



Now 11...♔b4? would let slip the win, since White takes the opposition, preventing the king from outflanking him: 12 ♔d4! ♔b3 13 ♔d3! ♔b2 14 ♔d2! ♔b1 15 ♔d1! ♘e7 16 ♔d2 – the knight's position on e7 grants White an extra tempo for attacking the f7-pawn.

So Black plays 11...♔b3!!, and after 12 ♔d6, the black king has enough time to return to defend the kingside: 12...♔c4 13 ♔d7 ♔d5 14 ♔e8 ♔e6−+. And on 12 ♔d5, there follows 12...♔c3 13 ♔c5 ♔d3 14 ♔d5 ♔e3 15 ♔e5 ♔f3 16 ♔f5 ♔g3 17 ♔g5 ♔h2!! 18 ♔h4 f6! 19 ♔g4 ♘e7−+.

But on 4 ♔g3 or 4 ♔h3, the same plan does not work: it will take the king too long to reach the a3-pawn, and it will not get back in time. So Black employs a different idea: bringing the knight to e7.

In the variation 4 ♔g3? ♘g8! 5 a4 (the try 5 ♔h4 will be dealt with later) 5...♘e7! 6 a5 Black finds an important check: 6...♘f5+ 7 ♔f4 (7 ♔h3 ♘×g7 8 a6 ♘e6 9 a7 ♘c7 10 ♔h4 ♔e7 11 ♔×h5 ♔d6 12 ♔g5 ♔e5−+) 7...♘×g7 8 a6 ♘e6+ −+.

4...♘g8!

It is easier for White to defend after 4...♔d8 5 ♔h4 ♔c7 6 ♔g5 ♘g8 7 ♔×h5 ♔×c6 8 ♔g5 ♔b5 9 ♔f5 ♔a4 10 ♔e5 ♔×a3 11 ♔d6 ♔b4 12 ♔d7 f5 13 ♔e6 f4 14 ♔f7 ♘h6+ 15 ♔g6 ♘g8 16 ♔f7=, or 4...♔e7 5 ♔h4 ♔d6 6 ♔g5 ♘g8 7 ♔×h5 ♔×c6 8 ♔g5=.

5 a4!

An immediate attack on the pawn by 5 ♔h4? is refuted by 5...f6! 6 ♔×h5 ♘e7! 7 a4 ♔f7! (it is important to draw the white king further in – it has nothing to do on the kingside) 8 ♔h6 ♔e6!−+. Therefore, White advances the pawn, forcing the enemy king to d8.

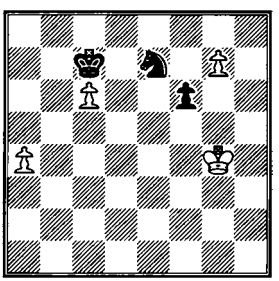
5...♔d8 6 ♔h4 f6!

6...♔c7 7 ♔×h5 is harmless – compared to the 4 a4? ♔d8 variation, White has saved a tempo (there, before taking the h5-pawn, White had to play ♔g5), and now the black king will not have time to get back to defend the f7-pawn: 7...♔×c6 7 ♔g5 ♔c5 9 ♔f5 ♔b4 10 ♔e5 ♔×a4 11 ♔d6 ♔b5 12 ♔d7 f5 13 ♔e6 f4 14 ♔f7 ♘h6+ 15 ♔g6 ♘g8 16 ♔f7=.

7 ♔×h5 ♘e7!

Black has executed the idea: the white king has been blockaded on the kingside. So we must go around.

8 ♔g4 ♔c7



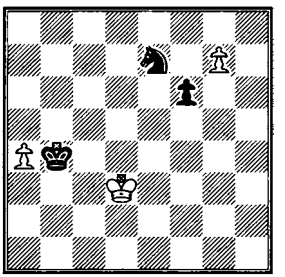
9 ♔f3!

A key move in the mutual *zugzwang* struggle! On 9 ♔f4? ♔×c6 10 ♔e4 ♔c5 11 ♔d3 ♔b4, it is White to move, and he loses: he cannot play 12 ♔d4 because of 12...♘f5+, and otherwise, the king must abandon the key c4-square.

9...♔×c6 10 ♔e2! (but not 10 ♔f2? ♔b6! 11 ♔e2 ♔a5 12 ♔d3 ♔b4, with the familiar outcome) **10...♔c5**

Sending the king after the g7-pawn is useless, as the passed a-pawn would become too powerful: 10...♔d5 11 ♔d3 ♔e6 12 ♔c4 ♔f7 13 a5 ♔×g7 14 a6 ♘c8 15 ♔c5=.

11 ♔d2! ♔b4 12 ♔d3

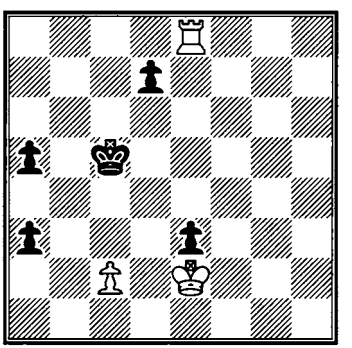


Now we have a mutual *zugzwang*, but with Black to move!

12...♔×a4 13 ♔c4 ♔a5 14 ♔c5 ♔a6 15 ♔d6, draw.

A deep strategic study, based upon the conflict between the plans and counterplans of both sides. Its only relative shortcoming, in my view, is its excessive complexity – hardly any grandmasters would be able to work their way, by means of exact calculation over the board, through all the twists and turns of this encounter created by the skill of the composer.

V. and L. Katsnelson (Russia)
3rd Special Prize



Win

Above all, White must stop the a3-pawn. But 1 ♖h8? ♔c4 2 ♖h1 ♔c3 3 ♖a1 ♔b2–+ would be weak. The main

plan, involving sacrificing the rook at a1 and shutting in the black king there, is easy to find. But in each of our first two tries, White lacks one tempo to make it work.

1 ♖×e3?! (the most natural of three apparently equivalent rook moves) 1...♔b4 2 ♔d2 a2 3 ♖e1 ♔a3 4 c4 (4 ♔c3 d5 5 ♖d1 a4! and 6...d4+=) 4...♔b2 5 ♖a1! d6! 6 ♔d1 a4, and draws, since the white pawn cannot get to c5 in time.

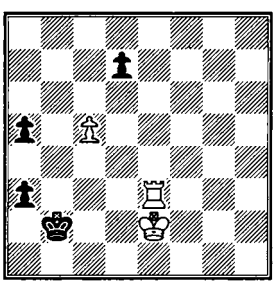
Or 1 ♖e5+? ♔b4! (1...d5? 2 ♖×e3 ♔b4 3 ♔d3 a2 4 ♖e1 ♔a3 is bad, in view of 5 c4! dc+ 6 ♔c3+−) 2 ♖e4+ ♔c3 3 ♖×e3+ ♔b4! (but not 3...♔b2? 4 ♖b3+!+−), transposing into the drawn position from the first try, 1 ♖×e3?.

The solution reveals a hard-to-find maneuver, with a forced advance of the white pawn to c5.

1 ♖e4! (threatening ♖a4) **1...♔b5 2 c4+ ♔b4**

On 2...♔c5 there follows 3 ♖×e3 ♔b4 4 ♔d2 a2 5 ♖e1 ♔b3 6 c5! (6 ♖a1? d6!=) 6...♔b2 7 ♖a1! a4 8 ♔d1, transposing back into the main line.

3 c5+ ♔c3 4 ♖×e3+ (4 ♖a4? ♔b2=) **4...♔b2**



5 ♔d3!

The first two ranks must be kept free for the rook.

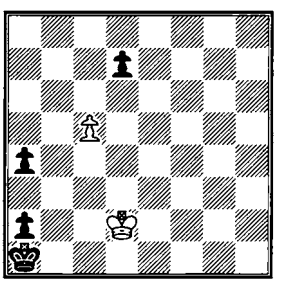
5...a2 (5...♔b1 6 ♔c3+−) **6 ♖e2+** (6 ♖e1? a1♕) **6...♔b3 7 ♖e1 ♔b2 8 ♖a1!**

This is the position White was aiming for. It is won, only because the pawn was able to get to c5 – not all that far from the prize c8-square.

8...a4

Holding off on the rook capture as long as possible. On the immediate 8...♔×a1 9 ♔c2 d5 10 c6 d4 11 c7 d3+ 12 ♔c1! d2+ 13 ♔×d2 ♔b2 14 c8♕ a1♕, White wins by accurate queen play: 15 ♕c3+! ♔a2 16 ♕×a5+ ♔b1 17 ♕f5+! ♔a2 18 ♕d5+ ♔b2 19 ♕b5+ ♔a3 20 ♕a5+ ♔b2 21 ♕b4+ ♔a2 22 ♔c2+−.

9 ♔d2 ♔×a1



10 ♔c1!

Inviting the black pawn to advance to a3. It is too early for 10 ♔c2? d5! 11 c6 (11 cd a3=) 11...d4 12 c7 d3+ 13 ♔×d3 ♔b2! 14 c8♕ a1♕=.

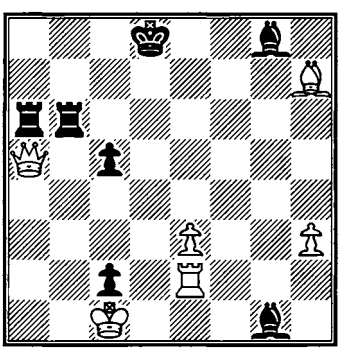
10...a3 (10...d5 no longer works, because of 11 c6 – White has an extra tempo) **11 ♔c2 d5 11 c6 d4 12 c7 d3+ 14 ♔×d3** (14 ♔c1 d2+ 15 ♔×d2 is only an artificial extension of the

play) **14...♔b2 15 c8♕ a1♕ 16 ♕c2#**.

A logical study, with a choice of opening moves. The White c-pawn executes an "excelsior," in competition with its opposite number, the d-pawn; and once it gets to be a queen, it delivers an epaulet mate to the black king.

The basic idea of sacrificing the rook at a1 has been known for eons – from the very first chess books! But setting it up properly here is no easy task. First we must assess the importance of advancing the pawn to c5; then we must find the rook play that guarantees this intermediate goal will be achieved; and finally, we must maneuver the king correctly. In sum – a good exercise for training play.

A. Vysokosov (Russia)
1st Honorable Mention



Win

1 ♖d2+!

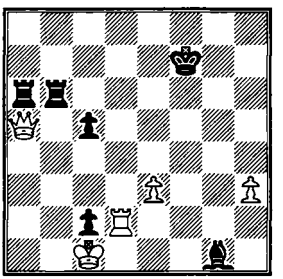
The rook must be activated. 1 ♕d2+? would be a mistake: 1...♖d6 2 ♕c3!? ♖a1+! (2...♗×h7? 3 ♕h8+ ♔c7 4 ♕×h7+ ♖d7 5 ♕×c2+–) 3 ♕×a1 ♖d1+ 4 ♔×c2 ♖×a1 5 ♗×g8 ♖a3 6 ♗b3 ♗×e3 7 ♖×e3 (7 ♔b2 ♗c1+!=) 7...c4=.

1...♔e8! (otherwise, the queen can join in the attack: 1...♔e7? ♕×c5+; 1...♔c7? ♕×c5+) **2 ♗g6+! ♗f7!**

Accepting the sacrifice allows a forced mate: 2...♖×g6 3 ♖d8+! ♔e7 4 ♕c7+ ♔f6 5 ♖f8+ ♔e6 (5...♔g5 6 ♕f4+ ♔h5 7 ♖f5+) 6 ♖e8+ ♔d5 7 ♖e5+ ♔c4 8 ♕×c5+ ♔b3 (8...♔d3 9 ♕×c2#) 9 ♕b5+ ♔a3 10 ♕b2+ ♔a4 11 ♖e4+ ♔a5 12 ♕b4#.

3 ♗×f7+ ♔×f7

Black's king is in the open, but the obvious 4 ♕×c5? is only a thematic try,



and is met by 4...♗×e3! 5 ♕×e3 ♖a1+ 6 ♔×c2♖a2+ 7 ♔d1 ♖a1+ 8 ♔e2 ♖e6! 9 ♖d7+ ♔f6 10 ♖d6! ♖a2+! (10...♖×d6? 11 ♕c3+) 11 ♔f1!, and now only 11...♖a1+!! (but not 11...♖×d6?, because of 12 ♕c3+!! ♔e7 13 ♕g7+ ♔e6 14 ♕g8+ ♔e7 15 ♕×a2+–) 12 ♔g2 ♖a2+ 13 ♔g3 ♖×d6 (now this move is made possible by the fact that the g3-square is blocked by the white king!) 14 ♕h6+ (the rook is also not lost after 14 ♕c3+ ♔g6!=, or 14 ♕f4+ ♔e7!=) 14...♔e5! 15 ♕f4+ ♔d5! (15...♔e6 16 ♕c4+) 16 ♕f7+ ♖e6!, with equality.

Only after this difficult analysis can we see that we must refrain from capturing the c5-pawn.

4 ♕c3!! ♗×e3!

Making White's winning task as difficult as possible. The other variations are simpler:

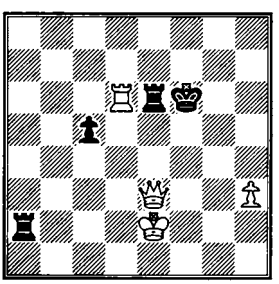
4...♖a1+ 5 ♕×a1 ♖b1+ 6 ♕×b1 cb♕+ 7 ♔×b1 ♗×e3 8 ♖g2+–;

4...♖e6 5 ♖d7+! ♔e8 6 ♕g7! ♗×e3+ 7 ♔×c2 ♖a2+ 8 ♔b3 ♖f2 9 ♖b7! ♖b6+ 10 ♖×b6 c4+ 11 ♔×c4 ♗×b6 12 ♕g6+ ♖f7 13 ♕×b6+–;

4...♖a7 5 ♕c4+! ♖e6 (5...♔f6 6 ♕f4+) 6 ♖d3! ♖ae7 7 ♔×c2 ♗h2 8 ♖d5!+–;

4...♖b1+ 5 ♔×c2 ♖ba1 6 ♕c4+ ♔f6 7 ♕f4+ ♔e6 8 ♕h6+ ♔f7 9 ♕h7+ ♔f6 10 ♕h8+ ♔e6 11 ♕c8+ ♔f6 12 ♕d8+ ♔e6 13 ♕d7+ ♔f6 14 ♖d6++–.

5 ♕×e3 ♖a1+ 6 ♔×c2 ♖a2+ 7 ♔d1 ♖a1+ 8 ♔e2 ♖e6! 9 ♖d7+ ♔f6 10 ♖d6! ♖a2+ (10...♖×d6 11 ♕c3+)



11 ♔f3!!

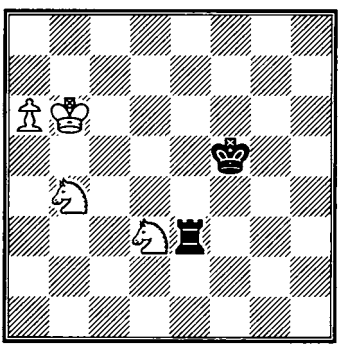
Unexpectedly, White radically alters the direction of the attack. The careless 11 ♔f1? ♖×d6 12 ♕c3+ ♖d4! would have cost the win.

11...♖×d6 12 ♕h6+! (12 ♕f4+? ♔e7!=) **12...♔e5** (12...♔e7 13 ♕g7+ ♔e6 14 ♕g8+ ♔e7 15 ♕×a2+–) **13 ♕f4+** (13 ♕g5+ ♔d4 14 ♕f4+ would only put off the inevitable) **13...♔d5** (13...♔e6 14 ♕c4+ ♔e7 15 ♕×a2+–) **14 ♕e4#**.

A powerfully logical study. The pure mate in mid-board is the consequence of White's far-seeing choice on move 4! However, in our view, the first three introductory moves do little to advance his idea.

Indubitably an excellent, high-class composition, worthy of a prize. The final prize-giving was influenced by the opinions of the grandmasters to whom Oleg Pervakov showed the top compositions (as we indicated at the beginning of this piece) – they preferred the prizewinning studies. Considering the thematic nature of the tourney, we decided that the esthetic preferences of practical chessplayers must be taken into account.

M. van Essen (Holland)
2nd Honorable Mention



Win

1 ♘c6! (1 a7? ♖e8 2 ♔b7 ♖e7+=) **1...♖e8**

Black cannot break through on the a-file: 1...♖×d3? 2 a7 ♖b3+ 3 ♔a6 ♖a3+ 4 ♘a5+–.

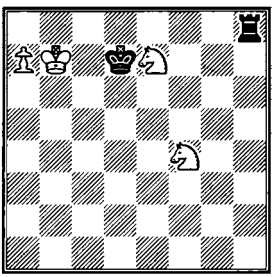
2 ♔b7 ♖h8!

The black rook is trying to find an opening to the seventh rank. 2...♖e2?? would lose right away, to 3 ♘d4+: so would 2...♖e4? 3 ♘c5; or 2...♖f8? 3 ♘de5! ♖h8 4 ♘e7+.

3 ♘e7+!

White stays alert. 3 ♘c5? would have been weak, in view of 3...♖h7+ 4 ♔b6 ♖h8=.

3...♔e6 4 ♘f4+! ♔d7! (4...♔×e7? 5 ♘g6+) **5 a7**



5...♖h1!

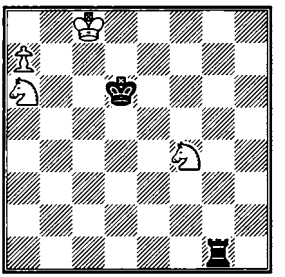
A fine defense! If 5...♖h2?, the rook would be unable to reach the important g2-square later on.

6 ♘c6! (6 a8♕? ♖b1+; 6 ♘d3? ♖b1+!) **6...♖a1 7 ♘b8+ ♔d6 8 ♘a6 ♖b1+ 9 ♔c8 ♖g1**

The rook transfer to the g-file described above is now complete. 9...♖h1? would lose to 10 ♘g6; while on 9...♖c1+ 10 ♔d8 ♖g1, we have the same maneuver: 11 ♘g6! ♖×g6 12 ♘c7+–. ***(D)***

10 ♘e6!

The time has come for this knight sacrifice, gaining White more space in which to maneuver the king, and luring

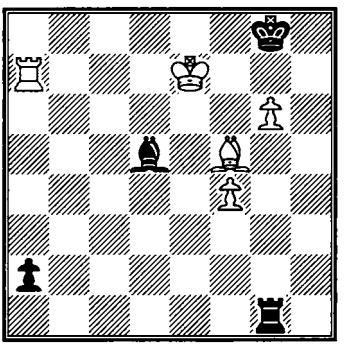


the opponent's king onto an unfavorable square.

10...♔×e6 11 ♔b7! ♖g8 (11...♖b1+ 12 ♔c6 ♖c1+ 13 ♘c5+; 11...♖g7+ 12 ♘c7+ ♔d6 13 a8♕ ♖×c7+ 14 ♔b6+–) **12 ♔b6!** (threatening 13 ♘b8) **12...♖a8 13 ♘c7+,** and wins.

A very clean study, with an extended war of maneuver and numerous knight sacrifices. The fact that the position can easily be analyzed, front to back, with the aid of the 6-piece endgame tablebase, does not mar the impression in this case. For not all the tasks resolved by the opponents here are analytical – they are quite amenable to human understanding and calculation.

R. Sabitov (Russia)
3rd Honorable Mention



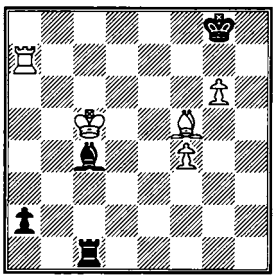
Draw

The black pawn stands on the verge of queening. White's only chance lies in pursuit of the bishop defending the passed pawn at a2.

First, we examine the try 1 ♗e4? ♖e1! 2 ♔d6 ♗c4 3 ♗d3 ♖d1! (the check with 3...♖e6+? would spoil everything: 4 ♔c5 ♗a6 5 ♗c4=) 4 ♔c5 ♗b3 5 ♗c2 (5 ♖a8+ ♔g7 6 ♖a7+ ♔f6 7 ♖a6+ ♔e7 8 ♖a7+ ♔d8−+) 5...♖c1 6 ♔b4 ♗d5! (6...♗e6? 7 f5 ♗d5 8 ♔c5=) 7 ♔c5 ♗e6 8 ♔d6 ♗c4 – finally, the bishop can breathe easy. All that remains is 9 ♖a8+ ♔g7 10 ♖a7+ ♔f6 11 ♖f7+ ♗×f7 12 gf – but here, 12...♔g7! (not 12...♔×f7? 13 ♗b3+=) 13 ♔e7 ♖e1+ ends matters in Black's favor.

The correct line is **1 ♔d6! ♗c4** (1...♗b3 2 ♗c2=; 1...♖d1 2 ♗c2=) **2 ♔c5** (concerning 2 ♗d3? ♖d1, see the try 1 ♗e4?) **2...♖c1!**

This move sets White the maximum amount of problems. After 2...♗b3, there is a draw by 3 ♔b4! (3 ♗c2? ♖c1−+ leads to a position from the try 1 ♗e4?; White also loses after 3 ♖a8+? ♔g7 4 ♔b4 ♗d5! 5 ♖a7+ ♔f6 6 ♗e4 ♗g8! 7 ♖a6+ ♔g7 8 ♖a7+ ♔h6−+)



3 ♗g4!!

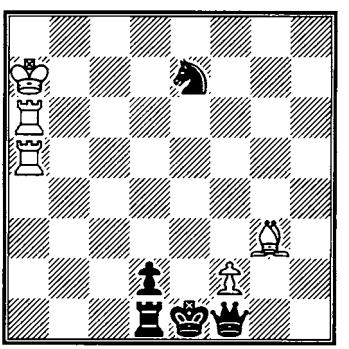
The point of the study! 3 ♔b4? ♗d5 4 ♗e4 ♖c4+−+ or 3 ♔d4? ♗b3−+ would be mistaken.

3...♔f8! (3...♗a6+ 4 ♔d6 a1♕? 5 ♗e6+ ♔f8 6 ♖f7+ ♔g8 7 ♖d7+ ♔f8 8 g7+ ♕×g7 9 ♖d8#) **4 ♔b4 ♗d5 5 ♗f3 ♖b1+ 6 ♔c3!** (6 ♔c5? ♗b3−+) **6...♗e6** (6...♖b3+ 7 ♔d4=) **7 ♗g4!** (7 f5? a1♕+ 8 ♖×a1 ♖×a1 9 fe ♖a3+ −+; 7 g7+? ♔g8 8 f5 ♗f7−+) **7...♗g8 8 g7+ ♔e8 9 ♗h5+ ♔d8 10 f5 a1♕+ 11 ♖×a1 ♖×a1 12 f6** (threatening 13 f7) – draw.

In both the try and the solution, we see alternating pursuit of the black bishop by White's bishop and king. A similar idea has been seen before, but the unexpected and pretty point 3 ♗g4!! lends this study some novelty.

A highly professional study, in which everything is very accurately and competently put together; but it is not very sharp, to my taste.

V. Vlasenko
4th Honorable Mention



Win

1 ♖e5+!

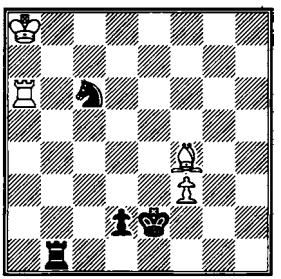
1 ♖e6+? would be a mistake because of the possible consequence of a knight fork on c6.

1...♕e2

Black's queen is *en prise*; but the impulsive 2 ♖×e2+? would be just a thematic try. After 2...♔×e2 3 ♗f4, White intends to trade the bishop for the last enemy pawn, but now comes the icy shower: 3...♘c6+! 4 ♔a8 ♖b1! 5 ♖a2 ♔f3 6 ♖×d2 ♔×f4, and White is doomed: White's own pawn at f2 betrays him.

A keen eye detects a flaw in the black king's march – the f3-square. And so:

2 f3+! ♔f1 3 ♖×e2 ♔×e2 4 ♗f4 ♘c6+ 5 ♔a8 ♖b1



6 ♖a2! ♔×f3

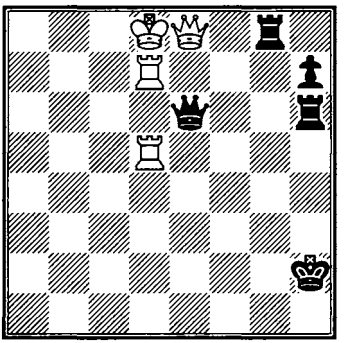
White's "fifth column" – his own treacherous pawn – has been eliminated, and **7 ♖×d2** makes an obvious draw: taking the bishop makes the white rook "go berserk."

*An appealingly logical study. Almost from the very beginning, one needs to envision the stalemating structure that arises on the board, and find a means of removing White's own pawn to bring it about. **(D)***

1 ♖d2+ ♔g3 2 ♖7d3+!

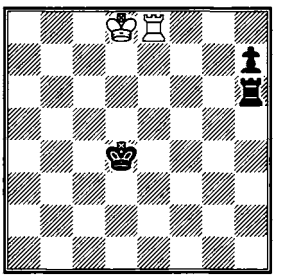
The thematic try 2 ♖2d3+? is met with

D. Gurgenidze
5th Honorable Mention



Draw

2...♔f4 3 ♖7d4+ ♔e5 4 ♖e3+ ♔×d4 5 ♖×e6 ♖×e8+ 6 ♖×e8

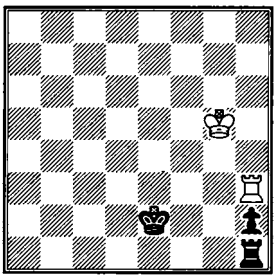


6... ♖h5!! (an amazing move) 7 ♖h8 ♖a5! 8 ♔e7 ♔e5 9 ♔f7 (if Black's rook were on, e.g., the first rank, 9 ♖b8 would draw; but now this would be met decisively by 9...h5) 9...♖a7+ 10 ♔g8 ♔f6 11 ♖×h7 ♖a8#.

2...♔f4 3 ♖f2+ ♔e4 4 ♖e2+ ♔×d3 5 ♖×e6 ♖×e8+ 6 ♖×e8 ♖h1 7 ♖h8 h5 8 ♔e7 h4 9 ♔f6 h3 10 ♔g5 h2 11 ♖h3+! ♔e2 *(D)*

12 ♔h6!!

The final touch. After 12 ♔h4? ♔f2!, the mutual *zugzwang* is in Black's favor: 13 ♔h5 ♔g2–+. There is also an echo-(mutual) *zugzwang* on 12 ♔h5?



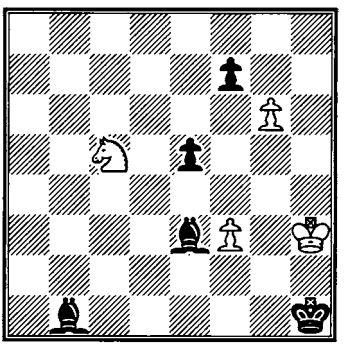
♔f1!! (12...♔f2? 13 ♔h4!=) 13 ♖h4 ♔f2 (13...♔g2 14 ♖g4+ ♔f2) 14 ♖f4+ ♔e3 15 ♖h4 ♔f3 –+.

12...♔f2 13 ♖h5 ♔g3 14 ♖g5+, draw.

This study is composed of two sharp episodes in the forcibly generated rook endings: a wild and hard-to-explain rook move in the trial play, and a pretty retreat by the white king in the main solution. It is unfortunate that no logical tie-in can be found between them.

I will not comment on the following studies. I will only note that each is interesting, in its own way, and would probably have been in the running for a prize in many tourneys.

N. Kralin (Russia)
6th Honorable Mention



Draw

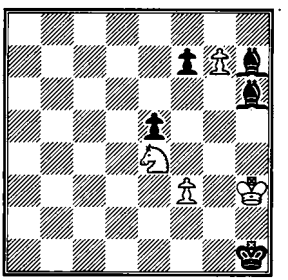
1 g7 ♗h7

Checking with 1...♗f5+ only helps White: 2 ♔g3 (2 ♔h4 ♗h7 3 ♘d7 is also possible) 2...♗h7 3 ♘e4 ♗f4+ 4 ♔f2 ♗h6 5 ♘f6 ♗×g7 6 ♘×h7 f5 7 ♘g5=.

2 ♘e4!

While heading for the f6-square, White must also keep the g5-square under control. 2 ♘d7? would be a mistake: 2...♗g5 3 ♘×e5 f5 4 ♘d7 ♗g8 4 f4 ♗d8 6 ♔g3 ♗d5 7 ♔h3 (7 ♔f2 ♔h2 8 ♔e3 ♔g3 9 ♔d4 ♗g8 10 ♔e5 ♔g4 –+) 7...♔g1 8 ♔g3 ♔f1 –+.

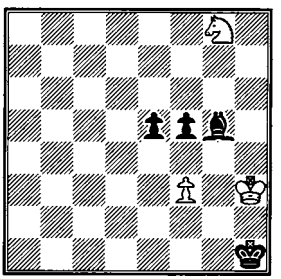
2...♗h6 (2...f5 3 ♘f6 ♗h6 4 ♘×h7 ♗×g7 5 ♘g5=)



3 g8♕!

3 ♘f6? would be premature, in view of 3...♗f5+ 4 ♔h4 ♗×g7 5 ♘h5 ♔g2 (5...♗h8 6 ♘g3+ ♔g2 7 ♘×f5 ♔×f3 8 ♘d6 e4 wins too) 6 ♘×g7 ♗e6 –+.

3...♗×g8 4 ♘f6 ♗g5 5 ♘×g8 f5



6 f4! (but not 6 ♔g3? ♔g1 7 ♔h3 ♔f2−+) **6...ef 7 ♘e7! f3**

7...♗×e7 results in Stalemate No. 1.

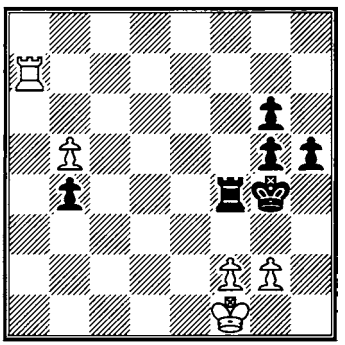
8 ♘×f5 f2 9 ♘g3+ ♔g1 10 ♘e2+ ♔f1 11 ♘g3+,

Leading to another familiar stalemate:

11...♔e1 12 ♔g2 ♗f4 13 ♘f1 ♔e2 14 ♔h1 ♔f3 15 ♘g3! ♗×g3

A synthesis of two so-called clear stalemates (when all the squares around the white king remain unoccupied).

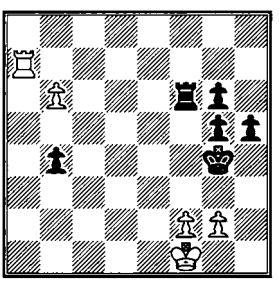
V. Katsnelson
7th Honorable Mention



Draw

After **1 b6** (1 ♖a4? b3−+; 1 g3? b3−+), 1...b3? does not work: 2 b7 ♖b4 3 ♖a4!+−. Now the play immediately subdivides.

(A) 1...♖f6!?



2 ♖a6!

Not 2 b7? ♖b6 3 ♖a6 ♖×b7 4 ♖f6 h4 5 ♖f8 ♖b5 6 ♔g1 ♖f5 7 ♖b8 ♖f4−+. And 2 ♖a8? ♖×b6 3 ♖f8 b3 4 ♔g1 ♔h4 5 ♔h2 g4−+ would also be a mistake. But now the threatened 3 b7! forces Black to lose a vital tempo.

2...♖f5 3 b7

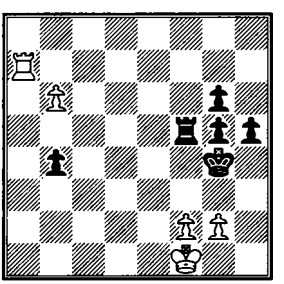
It is too early for 3 ♔g1? ♖b5 4 b7 ♔f4! (but not 4...♔f5? 5 ♖a5+−), and Black's king escapes.

3...♖b5 4 ♖f6! ♖×b7

After 4...b3 5 ♔g1 b2 (5...♔h4 6 ♔h2 g4 7 ♖×g6+−) 6 ♔h2, White threatens 7 f3+ ♔h4 8 g3#, so 6...h4; but then 7 ♖f8 ♔h5 8 ♖h8+ ♔g4 9 b8♕ b1♕ 10 f3+, and White wins.

5 ♔g1! (5 ♖f8? ♖b6 6 ♔g1 ♔h4!−+) **5...h4 6 ♖f8! ♖b5** (6...♖h7 7 ♖b8=; 6...h3 7 ♔h2!) **7 ♔h2** (7 ♖f7? ♖f5) **7...♔h5 8 ♖h8+ ♔g4 9 ♖f8 ♖f5**, avoiding the positional draw, but losing the passed pawn: **10 f3+ ♔f4 11 ♖b8=.**

(B) 1...♖f5



In variation A, Black played 1...♖f6 first, and then was forced to play 2...♖f5, losing a tempo. So perhaps it

is better to put the rook on f5 right away? Indeed, after 2 ♖a6? ♔f4, Black would win.

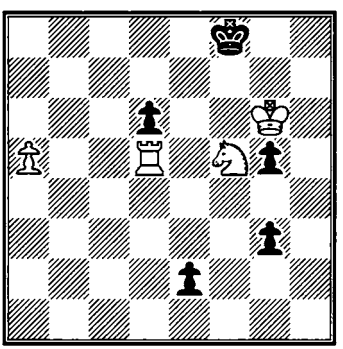
The saving grace is **2 ♖c7!**, putting the rook as far from the black king as possible, in anticipation of the checks; thus, 2 ♖d7? with the same idea, would not be as good.

2...♖b5 3 b7! (creating the threat of 4 ♖c4+ ♔f5 5 ♖c5+) **3...♖b6** (3...♔h4 4 ♔g1 g4 5 ♔h2 ♖b6 6 ♖c6!+−) **4 ♖f7! ♔h4** (4...h4 5 ♔g1 h3 6 ♔h2!=) **5 ♔g1!**

The hasty 5 ♖f6? would lose to 5...♖×b7 6 ♔g1 ♖c7 7 ♖b6 ♖c1+ 8 ♔h2 ♖b1 9 ♖×g6 ♔g4 10 ♖f6 ♖b2 11 f3+ ♔h4 12 ♖f8 g4! 13 fg hg 14 ♖h8+ ♔g5 15 ♖g8+ ♔f4 16 ♖f8+ ♔e3 17 ♔g3 ♖c2.

5...g4 6 ♖f6! ♖×b7 7 ♖×g6, and on 7...♖f7 (the only defense against the threat of 8 ♔h2 and 9 g3#), the simplest is 8 ♖b6, with a draw.

M. Kroitor (Moldova)
1st Commendation



Win

The e2-pawn cannot be stopped, so White must prepare properly for the study's second phase.

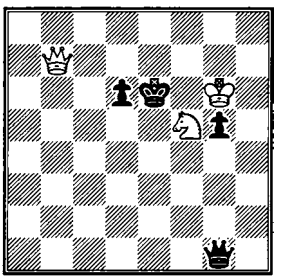
1 ♖b5!

The d6-pawn is poisoned – 1 ♖×d6? e1♕ 2 ♖d8+ ♕e8+ 3 ♖×e8+ ♔×e8 4 a6 g2 5 a7 g1♕ 6 a8♕+ ♔d7 7 ♕b7+ ♔e6, and White cannot win. It is also a draw after 4 ♘×g3 ♔d7 5 ♘e2 g4 6 ♔f5 g3 7 ♔e4 g2 8 ♔d5 ♔c7 9 ♔c5 ♔b7 10 ♔b5 ♔a7 11 a6 ♔a8 12 ♔b6 ♔b8.

1...e1♕ 2 ♖b8+ ♕e8+ 3 ♖×e8+ ♔×e8 4 a6!

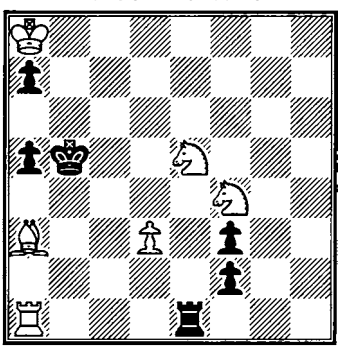
Once again, not 4 ♘×g3? ♔d7 5 ♘e2 g4=.

4...g2 5 a7 g1♕ 6 a8♕+ ♔d7 7 ♕b7+ ♔e6 (7...♔d8 8 ♕e7+ ♔c8 9 ♘×d6+ ♔b8 10 ♕b7#)



Now the d6-pawn remains on the board, so **8 ♘d4+! ♕×d4** (8...♔e5 9 ♘f3+) **9 ♕f7+ ♔e5 10 ♕f5#** works, with an epaulet mate. A pleasingly logical study, winding up with a known, but still beautiful finish.

G. Amann (Austria)
2nd Commendation

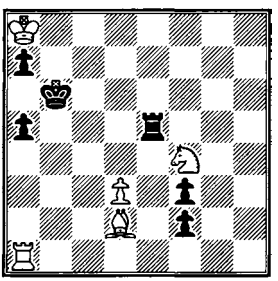


Draw

A material shortfall (a queen must unavoidably appear at f1) can be compensated by the creation of mating threats. Well, let's get to work, then:

1 ♗c1 f1♕!

The queen must appear at once: 1...♖×e5 2 ♗d2 ♔b6

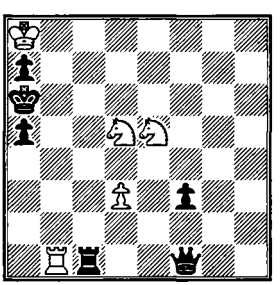


3 ♗×a5+ (but not the obvious 3 ♗e3+? ♔a6 4 ♔b8 ♖×e3 5 ♖f1 ♖e2 6 ♘h3 ♔b6! 7 ♔c8 a4 8 ♘×f2 a3−+) 3...♖×a5 4 ♖f1 ♖e5 5 ♖b1+! ♔c5 6 ♖f1 ♔d4 (6...♖e2 7 ♘h3 ♔d4 8 ♘×f2=) 7 ♔×a7 ♔e3 8 ♘h3 ♖h5 9 ♘×f2 ♔e2 10 ♖h1!=.

2 ♖b1+ ♔a6

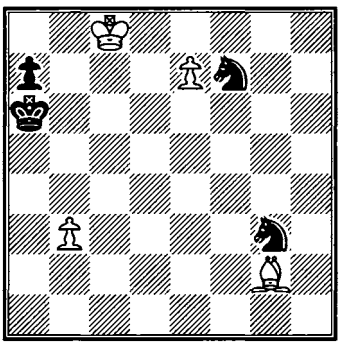
On 2...♔c5 3 ♗a3+ ♔d4 4 ♖×e1, the fork on f3 saves White. And after 2...♔a4 3 ♘d5 ♖×c1, it is the check at c3, 4 ♘c3+.

3 ♘d5 (but not 3 ♘e6? ♖×c1 4 ♘d7 ♖c8+) **3...♖×c1**



Here, things look really bad for White, but a little combination saves the half-point: **4 ♘c4! ♖×c4** (4...♖×b1 5 ♘c7#) **5 ♖b6+! ab 6 dc b5** (6...a4 7 ♘b4+ ♔a5 8 ♘c6+; 6...♕×c4 7 ♘c7+ ♕×c7 is stalemate) **7 c5 a4 8 ♘b4+ ♔a5 9 ♘c6+,** with perpetual check.

G. Amann
3rd Commendaton



Win

1 ♔c7!

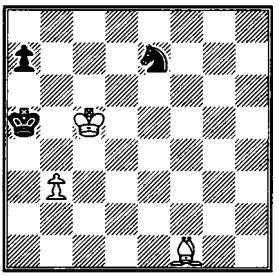
For just a moment, White steals the b6-square away from the black king. The "capitalizing" 1 ♔d7? would not achieve White's aim: 1...♘d6 (1...♘h5 2 ♗d5 ♘g7 3 ♗×f7 ♔b5 4 ♔c7 ♔b4 5 ♔c6+−) 2 ♗h3 (2 ♗f1+ ♔b6!=; 2 ♔×d6 ♘f5+ 3 ♔d7 ♘×e7 4 ♔×e7 ♔b5=) 2...♘ge4 3 ♔c6 ♔a5 4 ♗f5 (4 ♗g2 ♘g3 5 ♔×d6 ♘f5+ 6 ♔c5 ♘×e7=) 4...♘g3 5 ♗g6 ♘e8! 6 ♗×e8 ♘f5 7 ♔c5 ♘×e7 8 ♗b5 ♘d5=.

1...♘d6 2 ♗f1+!

Black meets White's sacrifice with a counter-sacrifice!

2...♔a5 3 ♔×d6 ♘f5+ 4 ♔c5 ♘×e7 ***(D)***

In contrast to the 1 ♔d7? try, here White's bishop has the e2-square.

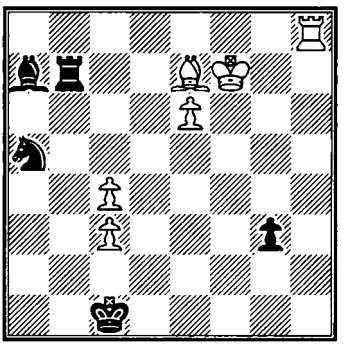


5 ♗e2!

We have already disposed of 5 ♗b5? ♘d5=. And 5 ♗c4? ♘c6 6 ♔×c6 ♔b4 or 5 ♗d3? ♘d5 6 ♔×d5 ♔b4 7 ♗c2 ♔c3= are false leads as well.

5...♘d5 6 ♔×d5 ♔b4 7 ♗d1! and wins.

E. Eilasyan (Ukraine)
4th Commendation



Draw

Black has an extra piece and a dangerous passed pawn. But the chief threat is to win the pinned bishop.

1 ♔f6!

1 ♔f8? g2 2 ♖g8 ♖b8+ and 1 ♖h1+? ♔c2 2 ♔f8 ♗f2! both lose quickly.

1...g2

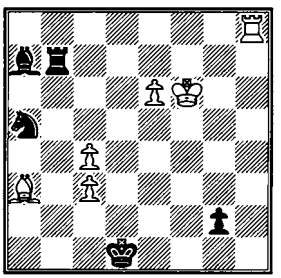
1...♘×c4 2 ♖g8 ♗b8 3 ♗d8 ♗e5+ 4 ♔f5 ♖g7 5 ♖×g7 ♗×g7 is not dangerous in view of 6 ♗h4! g2 7 ♗f2 ♗h6 8 ♔e4 ♗e3 9 ♔f3 g1♕ 10 ♗×g1 ♗×g1 11 ♔e4 ♘b6 12 e7 ♘c8 13 e8♘=.

2 ♗a3+!

A necessary *zwischenschach*. White executes a logical maneuver, the point of which is to limit the opponent's possibilities. On 2 ♖g8? g1♕ 3 ♖×g1+ ♗×g1 4 ♗a3+, the black king may go to any of four squares, 4...♔c2 being the one that wins.

2...♔d1!

Black makes the opponent's choice as difficult as possible. 2...♔c2(d2)? 3 ♖h2= would be too simple. And 2...♔b1 3 ♖g8 g1♕ 4 ♖×g1+ ♗×g1 5 e7 ♖b8 6 ♗d6, etc., leads back into the main line.

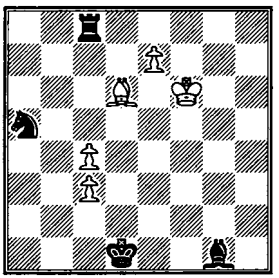


3 ♖g8!

Resisting temptation: 3 ♖d8+?! ♔c2! 4 ♖g8 g1♕ 5 ♖×g1 ♗×g1 6 e7 ♖b8 7 ♗d6 (7 ♔f7? ♘×c4−+) 7...♖h8!, and now neither 8 c5 ♘c6! 9 ♔e6 ♔d3 10 ♔d7 ♘×e7 11 ♔×e7 ♔c4 12 c6 ♔d5 13 c7 ♔c6−+, nor 8 ♔g7 ♖c8 9 ♔f7 ♘b7! (9...♘×c4? 10 ♗f4=) 10 c5 (10 ♗b4 ♘d8+!) 10...♗×c5 11 ♗×c5 ♖×c5! 12 ♔e6 ♖c6+ 13 ♔d7 ♖d6+ 14 ♔c7 ♖e6 15 ♔d7 ♘c5+ 16 ♔d8 ♖d6+ 17 ♔c8 ♖a6−+ would save White.

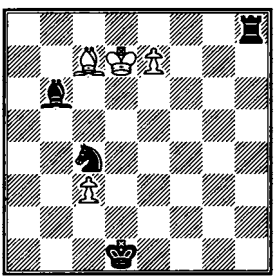
3...g1♕ 4 ♖×g1+ ♗×g1 5 e7 ♖b8 6 ♗d6 ♖c8!

With the king at d1, the move 6...♖h8 no longer has any force as in the 7 c5 ♘c6 variation, the king cannot support both the rook and the bishop.



7 ♔e6 ♘×c4 8 ♔d7, and now there is a division, with some accurate play by the white bishop on move 10:

(A) 8...♖h8 9 ♗c7 ♗b6

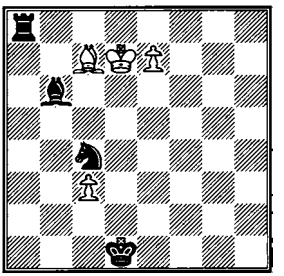


10 ♗g3!

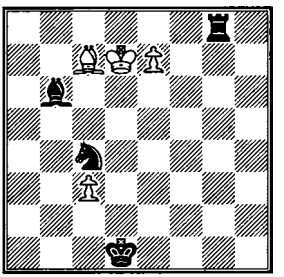
10 ♗d8? ♘e5+! 11 ♔e6 ♗×d8 12 ed♕+ ♖×d8−+; 10 ♗h2? ♖h7! 11 ♔e6 ♖×h2 12 e8♕ ♖e2+; 10 ♗f4? ♗a5! 11 e8♕ ♘b6+ 12 ♔e7 ♘d5+ 13 ♔f7 ♖×e8 14 ♔×e8 ♘×f4−+.

10...♗c5 11 e8♕ ♘b6+ 12 ♔d8, draw.

(B) 8...♖a8 9 ♗c7 ♗b6



(C) 8...♖g8 9 ♗c7 ♗b6



10 ♗h2!

10 ♗d8? ♘e5+! 11 ♔e6 ♗×d8 12 ed♕+ ♖×d8−+; 10 ♗g3? ♖g7! 11 ♔e6 ♖×g3 12 e8♕ ♖e3+−+; 10 ♗f4? ♗a5! 11 e8♕ ♘b6+ 12 ♔e7 ♘d5+ 13 ♔f7 ♖×e8 14 ♔×e8 ♘×f4−+.

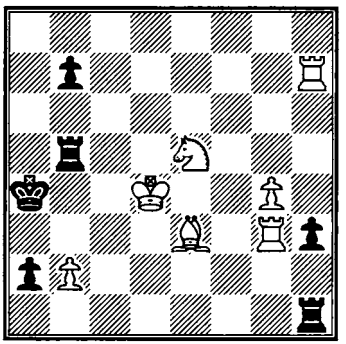
10...♗c5 11 e8♕ ♘b6+ 12 ♔d8, draw.

A deep and fine study, which unfortunately does not stir the emotions. ***(D)***

1 ♗d2!

Other bishop retreats are useless: 1 ♗g1? ♖×b2 2 ♖h8 ♖b4+ 3 ♔d5 ♖b5+ 4 ♗c5 a1♕−+; 1 ♗f4? ♖b4+! 2 ♘c4 ♖d1+ 3 ♔e5 a1♕ 4 ♖a3+ ♕×a3 5 ♘×a3 ♖e1+ 6 ♔d5 ♖×f4 7 ♖×h3 ♖d1+ 8 ♔e5 (8 ♔c5 ♖f6!−+) 8...♖×g4−+.

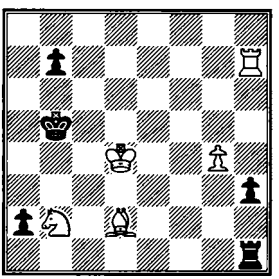
M. Prusikin (Germany)
5th Commendation



Draw

1...♖×b2 2 ♖a3+! ♔×a3 3 ♘c4+ ♔a4 4 ♘×b2+, and the play divides:

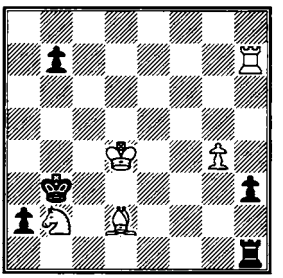
(A) 4...♔b5



5 ♖h5+ (5 ♖×b7+? ♔a6 6 ♖b8 ♔a7 7 ♖b5 a1♕ 8 ♖a5+ ♕×a5 9 ♗×a5 ♖b1−+) **5...♔c6 6 ♖c5+** (6 ♖a5 ♖f1! 7 ♖×a2 h2−+) **6...♔d7 7 ♖d5+ ♔e6 8 ♖e5+ ♔f7 9 ♖f5+ ♔g6 10 ♖g5+ ♔h7 11 ♖h5+** (but not 11 ♖a5? a1♕ 12 ♖×a1 ♖×a1 13 ♗f4 ♖f1 14 ♗b8 ♖g1 15 ♘d3 ♖×g4+−+) with perpetual check.

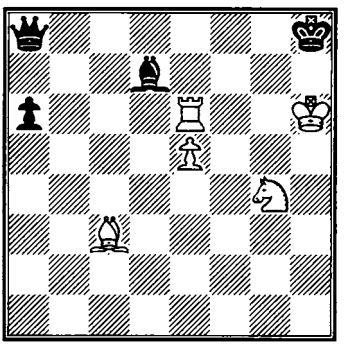
(B) 4...♔b3 *(D)*

5 ♔d3! (5 ♖×b7+ ♔c2 6 ♖a7 a1♕ 7 ♖×a1 ♖×a1 8 ♗f4 ♔×b2−+) **5...a1♕ 6 ♖×b7+ ♔a2 7 ♖a7+ ♔b1 8 ♘a4!** (8 ♖×a1+ ♔×a1 9 ♗c3 ♔a2 10 ♗e5



♖e1!−+) **8...♖c1! 9 ♖b7+! ♔a2 10 ♗×c1 ♕×c1** (10...h2 11 ♘c3+ ♕×c3+ 12 ♔×c3 h1♕ 13 ♖a7+ ♔b1 14 ♗e3=) **11 ♘c3+ ♔a1 12 ♖a7+ ♔b2 13 ♖b7+ ♔a3 14 ♖a7+ ♔b3 15 ♖b7+** and once again, perpetual check.

B. Sidorov (Russia)
6th Commendation



Win

White's chances lie in a furious attack.

1 ♖e8+!!

Right into the crossfire! 1 ♖g6? ♕h1+ 2 ♔g5 ♕c1+ or 1 ♖e7? ♕f8+ are equally bad.

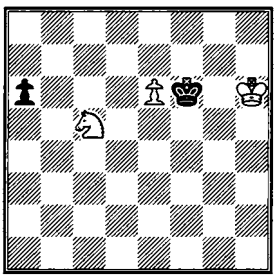
1...♕×e8

After 1...♗×e8, Black gets mated: 2 e6+ ♔g8 3 ♘f6+ ♔h8 (3...♔f8 4 ♗b4#) 4 ♘×e8+ ♔g8 5 ♘f6+ ♔h8 6 e7! ♕h1+ 7 ♘h5+ ♔g8 8 e8♕#.

2 e6+ ♔g8 3 ♘f6+

It would be a mistake to play 3 ed? ♕f8+ 4 ♔g6 ♕f7+ 5 ♔g5 ♕e7+, or 5...♕d5+, with equality.

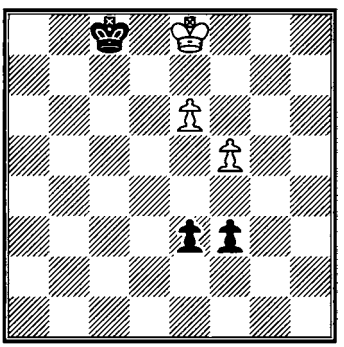
3...♔f8 4 ♗b4+! ♕e7 5 ♘×d7+ (5 ♗×e7+? ♔×e7 6 ed a5=) **5...♔e8 6 ♗×e7 ♔×e7 7 ♘c5 ♔f6!**



With one last hope – the a-pawn – but...

8 ♔h7! a5 9 ♔g8 ♔e7 (9...a4 10 ♔f8 a3 11 e7 a2 12 ♘b3+–) **10 ♔g7 a4 11 ♔g6 a3 12 ♔f5 a2 13 ♘b3+–**

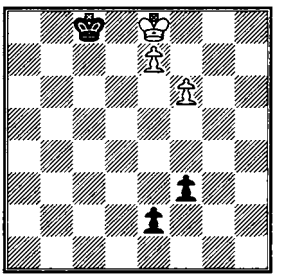
Z. Hornecker (Germany)
7th Commendation



Draw

1 f6!

There is a surprise! The e-pawn has two moves to make before queening, while its f-file colleague has three. So one would naturally wish to play 1 e7 e2! (1...f2? 2 ♔f8 f1♕ 3 e8♕+=), and now 2 f6! anyway (in view of the variation 2 ♔f7 e1♕ 3 e8♕+ ♕×e8+ 4 ♔×e8 f2 5 f6 f1♕ 6 f7 ♕b5+ 7 ♔f8 ♕g5 8 ♔e8 ♕d8#).

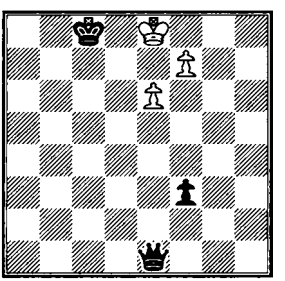


Black, however, has a no less impressive "illusion" of his own: 2...f2!! (2...e1♕? 3 f7 f2 4 f8♕ f1♕ 5 ♕×f1 ♕×f1=) 3 f7 f1♕ 4 f8♕ ♔b7! –+.

1...e2

1...f2 leads to the complete extinction of all forces: 2 f7 f1♕ 3 f8♕ ♕×f8+ 4 ♔×f8 e2 5 e7 e1♕ 6 e8♕+.

2 f7 (once again, not 2 e7? f2!! 3 f7 f1♕ 4 f8♕ ♔b7! –+) **2...e1♕**



3 e7! f2 (3...♕b1 4 f8♕ ♕g6+ 5 ♕f7 ♕c6+ 6 ♔f8) **4 f8♕ f1♕ 5 ♕×f1 ♕×f1**, stalemate.

An amusing pawn discovery by the German composer!

In conclusion, I would like to thank, once again, all those who participated in the tourney, and to underscore the high quality of the compositions that were sent in. I hope that if not all, then at least many of these 25 prize-winning studies appealed to chess lovers; there were also a number of interesting studies among those for whom there simply was not sufficient room on the "pedestal of honor."

Part II

Two Study Themes

Chapter 3

Left Bank, Right Bank
Oleg Pervakov

The idea for this chapter came to me during the FIDE World Championship in Moscow 2001. In that match, Peter Svidler and Boris Gelfand were playing in the quarterfinal. After two draws in the "main event," the players deferred their battle for supremacy to the tie-breaker. And in the first "rapid" game, Svidler was unable, for a full fifty moves, to find the way to win with queen against rook. I remember how, in the interval between games, we stood and talked about this episode with Mark Dvoretsky, until Pyotr, "separated" only a little way from our circle, brought clarity to the situation: "For some reason, I had decided that Borya was bound to hang his rook. I tried to find a winning *zugzwang* position, but it never worked out..."

When Fischer invented his revolutionary chess clock (revolutionary for that time – now, we are all used to it), his number-one goal was that a technically winning position would always reach its logical conclusion. But even now, although the time-control may be shorter, still there are a few seconds added with each move made; yet everywhere you look, it is precisely in the realization of simple technical positions that even the top-class grandmasters commit unforgivable lapses.

Of course, to recall a theoretical position and, hopefully, to remember as well the narrow path to convert it into a full-valued point or half-point – especially in the fifth or sixth hour of play – is a complex job. And here, a knowledge of the basic techniques of playing such endings, coupled with his own experience, would serve a player well. One does not have to remember *all* the simple theoretical positions, if one would just pay a little closer attention to the broad legacy of *study positions*.

Of course, studies lack a positional evaluation – one cannot but agree with Mikhail Botvinnik's observation. It is either a win, a loss or a draw – nothing else. "One misses the enormous wealth of semi-tones and intermediate assessments" – this, too, is a true observation by Mark Dvoretsky. But such things are not needed in simple endgames – such as the ending cited above, from the game Gelfand-Svidler.

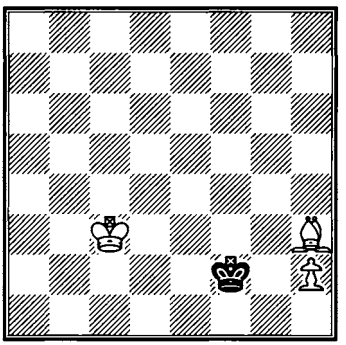
A high-class study owes its rating to the fact that one may find in it a number of theoretical positions. This makes it easier to remember than an endgame from practice. By the way, a very interesting and instructive book was recently published in Georgia on the chess compositions of David

Gurgenidze, entitled *The Study and the Theoretical Endgame*, wherein the material is arranged in just this fashion.

The parameters of the chapter do not, of course, allow us to give an exhaustive treatment of this problem. This is more likely to become a theme for a separate and thorough book. For now, I restrict myself to one concrete case: one rook pawn, with a bishop that does not control its queening square.

Let's begin with a classic example:

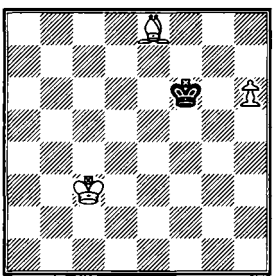
O. Frink 1923



Win

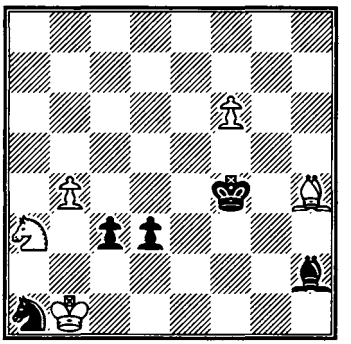
The simple task – to keep the black king away from the saving square h8 – is resolved by means of an accurate bishop move.

1 ♗d7! ♔e3! 2 h4 ♔e4 (2...♔f4 3 ♔d4+–) **3 h5 ♔e5 4 h6** (4 ♗e8+–) **4...♔f6 5 ♗e8!** +–



This technique is the most basic one in this kind of ending. In order to drive the lesson home, we shall now employ it twice over:

B. Gusev, K. Sumbatyan 1994

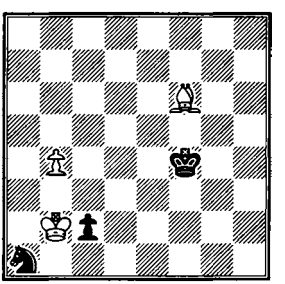


Win

1 f7 c2+ 2 ♘×c2 dc+ 3 ♔b2! (3 ♔c1? ♘b3+ 4 ♔×c2 ♘d4+ 5 ♔d3 ♘e6) **3...♔g4**

3...♔e4 4 f8♕ ♗f4 5 ♕a8+ ♔f5 6 ♕c8+ ♔e4 7 ♗f6; the continuation 3...♔f3 4 f8♕+ ♗f4 5 ♕×f4+ transposes back into the main line.

4 f8♕ ♗f4 (4...♗e5+ 5 ♔c1 ♗f4+ 6 ♕×f4+ ♔×f4 7 ♗f6; 4...♔×h4 5 ♕h8+ ♔g3 6 ♔c1) **5 ♕×f4+ ♔×f4 6 ♗f6!** (6 ♔c1? ♔e5 7 ♗g5 ♔d5)

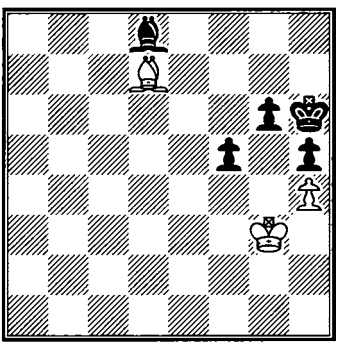


Now, depending on which way the Black king goes, we have:

(A) 6...♔e4 7 ♔c1 ♘b3+ 8 ♔×c2 ♘a5!? 9 ba ♔d5 10 a6 (once again, as in the previous example, White may transpose moves: 10 ♗d8! ♔c6 11 a6) **11...♔c6 11 ♗d8!+−**

(B) 6...♔f5 7 ♗c3! ♔e4 8 ♔c1 ♘b3+ 9 ♔×c2 ♘a5!? 10 ba ♔d5 11 a6 ♔c6 12 ♗a5!+−

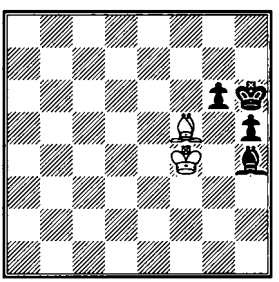
Anand – Karpov
Monte Carlo 1994 (blindfold)



Incorrectly assessing the endgame we are now studying, Anand sacrificed a piece:

70 ♔f4? ♗×h4 71 ♗×f5

Now, on the natural 71...gf? 72 ♔×f5, White's king gets back to the saving square h1 in time. Unfortunately...



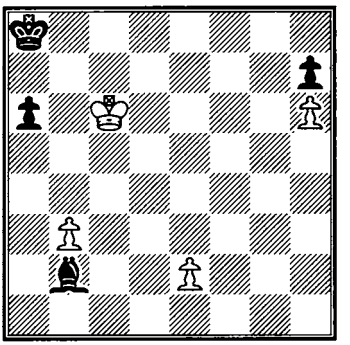
71...♗g3+!

A decisive interpolated check.

72 ♔e4 gf+ 73 ♔×f5 ♗b8 74 ♔e4 h4 75 ♔f3 h3 76 ♔f2 ♗h2 and White resigned.

Let's look at some more complicated examples, involving a step-by-step realization of the basic idea.

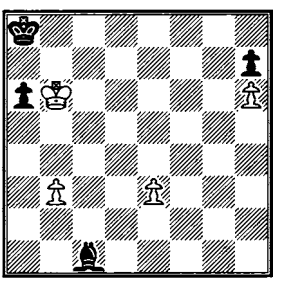
J. Buzandian 1961



Draw

1 ♔b6 ♗c1! (1...♔b8 2 e3! ♔c8 3 ♔×a6 ♔d7 4 ♔b5 ♔e6 5 ♔c4 ♔f5 6 ♔d3 ♔g4 7 ♔e2 ♔g3 8 ♔f1 ♔h2 9 ♔f2=) **2 e3!!**

Clearing the road from a6 to e2 for the white king.

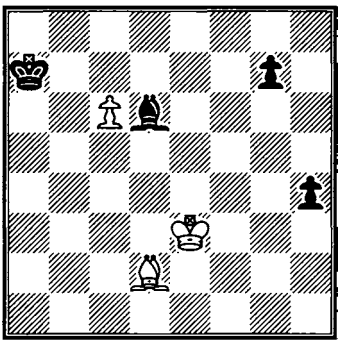


2...♗×e3+ 3 ♔×a6 ♗×h6

The variation 3...♗a7! 4 b4! ♔b8 5 b5! ♗c5 6 b6 ♗g1 7 ♔b5! (but not 7 b7? ♗a7), drawing, is not without interest, either.

4 ♔b5 ♗g5! 5 ♔c4 h5 6 ♔d3 h4 7 ♔e2! h3 8 ♔f2= (8 ♔f3? ♗h4!; 8 ♔f1? ♗e3!)

O. Pervakov 1987



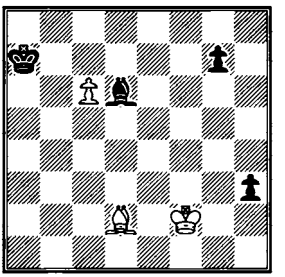
Draw

Sooner or later, Black will snap off the c-pawn, and the g- and h-pawn tandem will secure the victory. How can White resist such unsubtle plans?

Now, if White could bring the king to g4 or h3, with Black's pawn at h4 – then, the draw would be obvious. Unfortunately, this is impossible: after 1 ♔f3? h3!, and, e.g., 2 ♗a5 g5 3 c7 ♔b7 4 ♗d2 g4+, Black has an easy win.

But what if we exploit the tactical trick 2 ♗h6!?, just to bring the g-pawn a little closer (for now, true, we are doing it "just-in-case"). However, then Black has 2...gh! 3 ♔f2 ♗h2 4 ♔f3 h5–+.

So let's play **1 ♔f2! h3!**, taking away the g2-square from the king. ***(D)***



And now, **2 ♗h6!! g6**

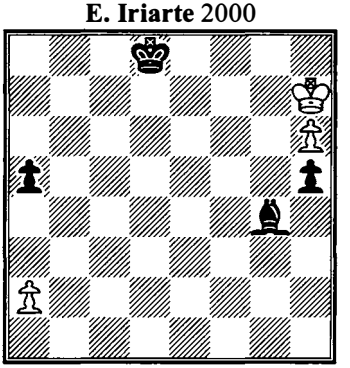
White's plan takes shape: move thebishop to g1, and use the king to attack the pawn on g6. But if White plays the immediate 3 ♔f3? ♔b6! 4 ♗e3+ ♔×c6 5 ♗g1 ♔d5 6 ♔g4 ♔e4! 7 ♔×h3 ♔f3 8 ♗d4 (8 ♔h4 ♗f4–+) 8...g5 9 ♗f6 g4+ 10 ♔h4 g3 11 ♗d4 g2 12 ♔h3 (12 ♗g1 ♗f4 13 ♔h5 ♗g3 14 ♔g5 ♔e2 15 ♔g4 ♔f1–+) 12...♗g3 13 ♗g1 ♗f2 14 ♗h2 ♗e1 15 ♗g1 ♗g3, Black wins. Where can we "find" another tempo?

3 ♗e3+! ♔a6 4 ♔f3 ♔b5 5 ♗g1! (5 ♗f4 ♔×c6 6 ♗×d6 ♔×d6 7 ♔g3 ♔e5 8 ♔×h3 ♔f4–+) **5...♔×c6** (5...h2 6 ♗×h2 ♗×h2 7 ♔g4=) **6 ♔g4 ♗c5 7 ♗h2!**

Draw (but not 7 ♔×h3? ♗×g1 8 ♔g4 ♗e3!–+)

A non-trivial win of tempo also rescues White in our next example.

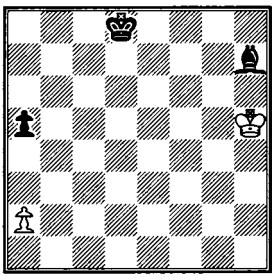
E. Iriarte 2000



Draw

1 ♔g6! (1 ♔g7? ♗f5 2 ♔f6 ♗h7 3 ♔g5 ♔d7 4 ♔×h5 ♔d6) **1...♗d1 2 h7!** (2

♔g5? ♗c2 3 ♔×h5 ♔d7 4 ♔g5 ♔d6 5 ♔f4 ♔c5 6 ♔e3 ♔b4 7 ♔d2 ♗h7 8 ♔c1 ♔a3) **2...♗c2+ 3 ♔×h5 ♗×h7**



Did he make it? 4 ♔g5? ♔d7 5 ♔f4 ♔d6 6 ♔e3 ♔c5 7 ♔d2 ♔b4 8 ♔c1 ♔a3, and the black king proves faster than the white counterpart.

The right way is **4 ♔h6! ♗b1** (4...♗g8 5 ♔g5 ♗×a2 6 ♔f4; 4...♔d7 5 ♔×h7 ♔d6 6 ♔g6=) **5 ♔g5**

And do not turn off the high road: 5 a4? ♔d7 6 ♔g5 ♔d6 7 ♔f4 ♔c5 8 ♔e3 ♔b4 9 ♔d2 ♗h7 10 ♔c1 ♔a3; 5 a3? ♔d7 6 ♔g5 ♔c6 7 ♔f4 ♔b5.

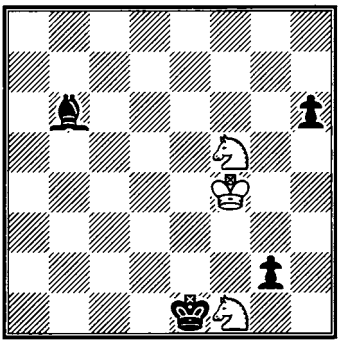
5...♗×a2 (5...♔d7 6 ♔f4 ♔d6 7 ♔e3 ♔c5 8 ♔d2 ♔b4 9 ♔c1 ♗×a2 10 ♔b2) **6 ♔f4** (6 ♔f5? a4 7 ♔e4 a3 8 ♔d3 ♗b3 9 ♔c3 ♗d1) **6...a4 7 ♔e3 a3 8 ♔d2! ♗b3** (8...♔c7 9 ♔c3!; 8...♗b1 9 ♔c3!) **9 ♔c1! ♗a2 10 ♔c2 ♔c7 11 ♔c3 ♗c4 12 ♔c2=** ***(D)***

Playing for *zugzwang* is another widely-used technique. Here are two sharp examples.

1 ♘d2 ♔×d2 2 ♘h4 ♗e3+!

Beginning the struggle to reach a position of mutual *zugzwang*.

G. van Brekelen 1969



Draw

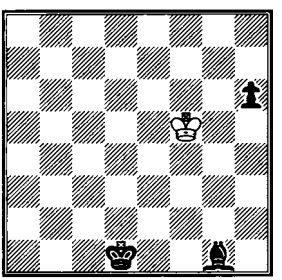
3 ♔f5!

Whereas the natural 3 ♔e4? loses, in view of 3...g1♕! (the coquettish 3...g1♘? 4 ♔f5 ♗g5 5 ♔g4! ♔e3 6 ♘f5+ ♔e4 7 ♔h5! ♔×f5 ends in stalemate) 4 ♘f3+ ♔e2 5 ♘×g1+ ♗×g1.

3...g1♕ 4 ♘f3+ ♔d1!

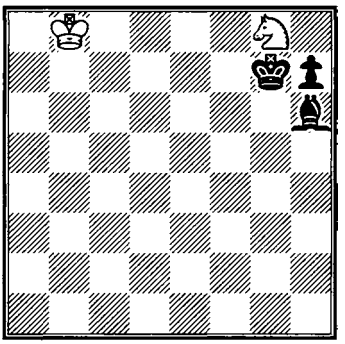
Or 4...♔e2 5 ♘×g1+ ♗×g1 6 ♔g4!, and Black is in *zugzwang*: 6...♔f1 7 ♔g3 is a draw.

5 ♘×g1 ♗×g1



And in conclusion, a short struggle for the corresponding squares: **6 ♔f4! ♔e2 7 ♔g4! ♔f1 8 ♔g3=**

Y. Rezvov, V. Chernous 1991

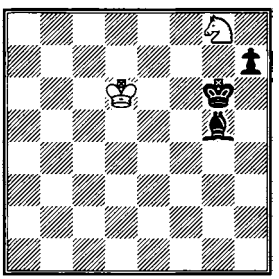


Draw

1 ♔c7!

The king appears to have but one goal: the little corner at h1, glimmering on the horizon. The knight could be saved, but then the pawn marches unstoppably to the queening square: 1 ♘e7? ♗f4+ 2 ♔b7 ♔f6 3 ♔c6 ♔e5 4 ♔c5 ♗g5 5 ♘d5 h5–+.

1...♗g5! 2 ♔d6 ♔g6



Now the knight is under arrest, and it looks like the king will not reach its destination, either: 3 ♔e5? ♔h5 4 ♔f5 ♔h4 5 ♔e4 ♔g4.

Eureka! Let's bring in Réti's maneuver to help us – our pair of "rabbits" will be the squares e5 and g8.

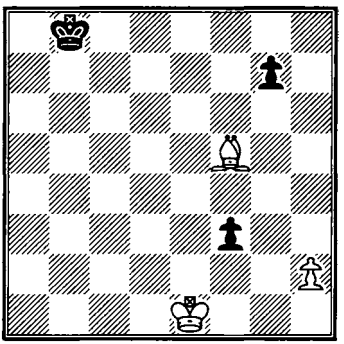
3 ♔e6!! ♔h5

3...h5 4 ♔e5, and the pawn has blocked off the h5-square the king needs so badly – it is a draw.

4 ♔f7! ♔g4 5 ♘h6+! ♗×h6 6 ♔g8=

And now, what is perhaps the most complex of all the examples we have examined.

O. Pervakov 1989



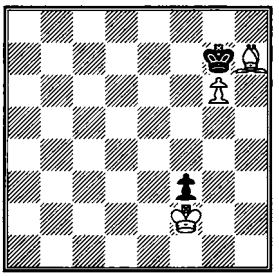
Win

Without further ado, we make the natural and correct move **1 ♔f2!**. After the no less natural **1...♔c7** (1...g6 2 ♗×g6 ♔c7 3 h4 ♔d6 4 h5 ♔e7 5 h6 ♔f8 6 ♗h7 ♔f7 7 ♔×f3 ♔f6 8 ♔f4+–), we sink into thought...

It is too early to take the pawn – 2 ♔×f3? – in view of 2...g6! 3 ♔f4 ♔d6! (but not 3...♔d8? 4 ♗e6 ♔e7 5 ♔g5+–) 4 ♔g5 gf=. So let's stick to the "animal:" 2 ♗g6?! ♔d6 3 h4 ♔e7! 4 h5 ♔f8 5 ♗h7 – is that all? No, Black is saved by 5...g5!! 6 hg (6 h6 g4=) 6...♔g7=. ***(D)***

The outcome is no different after 2 h4?! ♔d6 3 h5 ♔e5! 4 ♗g6 ♔f4=. So what is the answer?

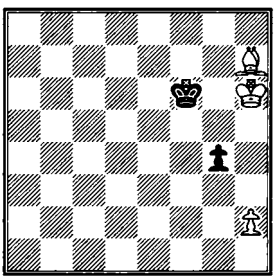
The paradoxical **2 ♗h7!!**.



Note that White could not have played this on the first move: 1 ♗h7?! g5! 2 ♔f2 g4 3 ♔g3 ♔c7 4 ♔×g4 ♔d6 5 ♔g5 ♔e7 6 ♔h6 ♔f8=, when it turns out that the bishop picked the exact wrong time to take the h7-square away from its king. As the proverb says: Haste makes waste!

2...♔d6 3 ♔×f3 ♔e6 4 ♔g4 (4 ♔f4? ♔f6=) **4...♔f7!**

Setting a small trap: if 4...♔f6 5 ♔h5 g5!? (5...g6+ 6 ♔h6 ♔f7 7 h4!+−) 6 ♔h6 g4, we reach a position from a study by Koszek:



Along with the author's continuation 7 ♗g6 ♔e6 8 ♗e8 ♔f5 9 ♗c6 ♔e5 10 ♔g6 ♔e6 11 ♗e4 ♔e5 12 ♗b7 ♔e6 13 ♗c8+, White can also win here by other means, including 7 ♗d3 ♔f7 (7...♔e5 8 ♔g5 ♔e6 9 ♗c4+ ♔e5 10 ♗b3+−) 8 ♗c4+ ♔f6 9 ♗d5 ♔e5 10 ♗c6 ♔f5 (10...♔f6 11 ♗d7+−) 11 ♗b7 ♔e5 12 ♔g6 ♔e6 13 ♗c8+.

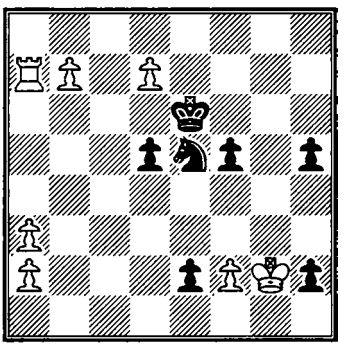
5 ♔g5!

5 ♔h5? g5! 6 ♔h6 g4, and White is in *zugzwang* – draw.

5...g6 6 ♔h6 g5 7 h3!+−

After some rather difficult analytical work, it is a good idea to have some light entertainment. We shall not pass up our chance, either.

O. Pervakov 1987



Win

1 d8♘+! ♔f6 2 ♖a6+ ♔g5 (2...♔g7 3 ♘e6+ ♔h7 4 ♘g5+ ♔g7 5 ♘f3 ♘×f3 6 ♖e6+−) **3 ♘f7+**

The other check does not work out: 3 ♘e6+? ♔h4 4 ♖a4+ ♘g4 5 ♖×g4+ hg! 6 b8♕ h1♕+ 7 ♔×h1 e1♕+ 8 ♔g2 ♕×e6=.

3...♔h4 (3...♘×f7 4 ♖e6) **4 ♖a4+ d4!**

Careful – Black plays for stalemate!

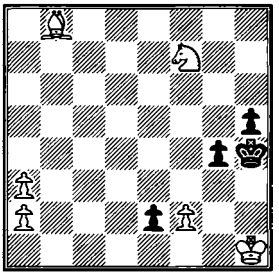
5 ♖×d4+ ♘g4 6 ♖×g4+ fg! 7 b8♗!!

Not falling for Black's trap: 7 b8♕? h1♕+ 8 ♔×h1 e1♕+ 9 ♔g2 ♕e4+ 10 ♔h2 ♕f4+! 11 ♕×f4 – stalemate.

7...h1♕+ 8 ♔×h1 ***(D)***

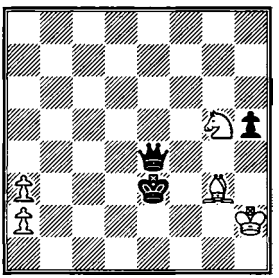
Now Black has two possibilities.

(A) 8...e1♕+ 9 ♔g2 ♕e4+



9...g3 10 ♗×g3+ ♔g4 11 f3+, with a battery strike.

10 ♔h2 g3+ 11 ♗×g3+ ♔g4 12 f3+ ♔×f3 13 ♘g5+ ♔e3



14 ♗f2+!

The same blow as in the Anand-Karpov game, except that the bishop is a promoted pawn! 14 ♘×e4? is too early: 14...♔×e4 15 a4 ♔d5, and draws.

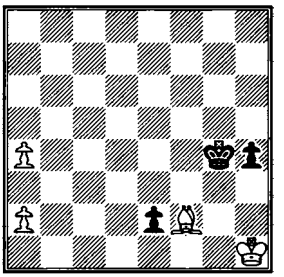
14...♔d3 15 ♘×e4 ♔×e4 16 a4 ♔d5 17 a5 ♔c6 18 a6 ♔c7 19 ♗a7 ♔c6 20 a4!+−

(B) 8...♔h3 9 ♘g5+ ♔h4 10 ♗g3+ ♔×g5 11 f4+!

This is no place for false modesty: 11 f3? h4 12 ♗f2 ♔f4 13 fg ♔×g4 14 a4, ***(D)***

and Black is saved by Réti's 14...♔f3! 15 ♗×h4 ♔e4=.

11...gf 12 a4 ♔f5 13 a5 ♔e4



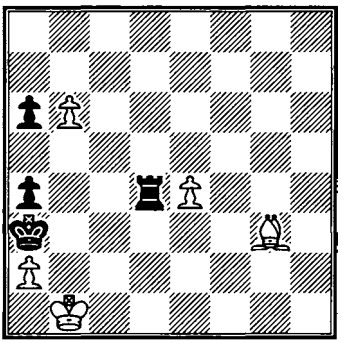
Now even Réti's maneuver will not help him.

14 a6 ♔e3 15 ♔g1 ♔d2 16 a7 e1♕+ 17 ♗×e1+ ♔×e1 18 a8♕ f2+ 19 ♔h2 f1♕, and now the finishing touch: **20 ♕h1!**.

Could any of you, dear readers, have predicted, in the opening position, that the a2-pawn would be the deciding factor in both variations!?

And now for something rather exotic.

K. Sumbatyan 1987

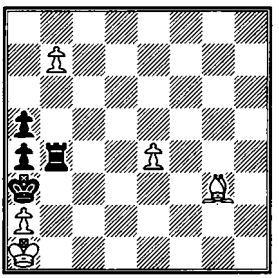


Win

Nothing special about this position, you say. Be patient...

1 b7 ♖b4+ 2 ♔a1 a5! ***(D)***

3 b8♗!

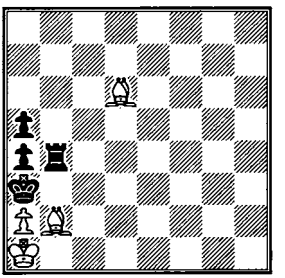


There is one for you! It is not enough to have one "wrong-color" bishop – why do we need two? But there is no room for quibbling here: 3 b8♕? ♖b1+! 4 ♔×b1 is stalemate; and if 3 b8♘? ♖×e4 (3...♖d4!) 4 ♗d6+ ♖b4 5 ♗×b4+ ab.

3...♖×e4 4 ♗bd6+! ♖b4 5 ♗c7 ♖e4

In the 5...♖b1+ 6 ♔×b1 ♔b4 variation, the second same-color bishop has the final word: 7 ♗gd6+ ♔b5 8 a3! ♔c6 9 ♔c2 ♔b5 10 ♔c3 ♔c6 11 ♔c4 ♔b7 12 ♔b5 ♔a8 13 ♗b4 ♔b7 14 ♗cd6 ♔a8 15 ♔a6 ab 16 ab. And if the black monarch does not head for the a8-corner, then White drives it further away from the a-pawns (and here too, the second bishop plays a decisive role) and captures them with the king.

6 ♗gd6+ ♖b4 7 ♗e5! ♖e4 8 ♗cd6+ ♖b4 9 ♗b2#!



Chapter 4

Ours among Strangers; A Stranger among Us

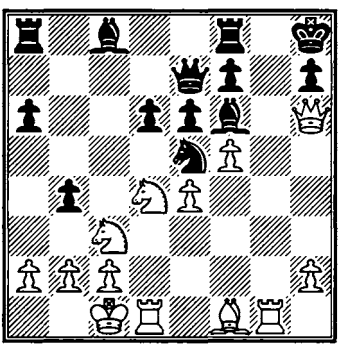
[The title of a popular Soviet film]

Oleg Pervakov

During play, situations occur fairly frequently where one side finds its intentions blocked by one of its own pieces or pawns, either occupying a vital square, blocking a line, or introducing some other annoying element into the position. And not infrequently, the speculative removal of such personages from the board alters the assessment of the position completely. Noting this kind of nuance and accurately executing such a "liquidation" is a sign of the highest kind of mastery.

Let's look at two classic examples.

R. Kholmov – D. Bronstein
32nd USSR Championship
Kiev 1964



White to move

The dark-squared bishop is the pillar of Black's defense. It would seem securely placed on f6: the d5-square is controlled by the pawn at e6, while the c6-square is covered by the knight on e5. Kholmov, always known for his tactical alertness, carries out an excellent combination, aimed at getting rid of his own e4-pawn, which prevents his knight on c3 from joining the attack with decisive effect.

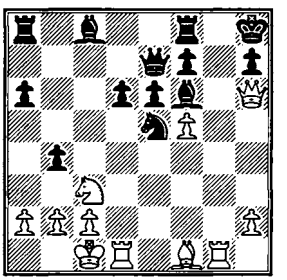
18 ♘c6!!

First, a sacrifice to clear the way for the e-pawn.

18...♘×c6 19 e5!

Note that there is one, and only one, path to victory. On 19 ♖d3 ♗g5+! 20 ♖×g5 f6, Black fights him off.

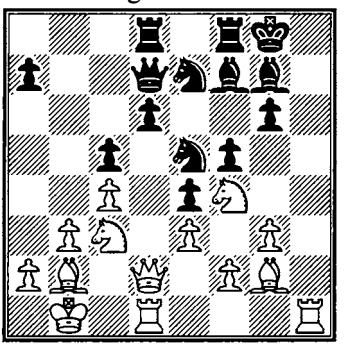
Now 19...♘×e5!? would lead to the position in the first diagram, but without the d4-knight, and importantly without the e4-pawn!



It is this last circumstance that brings White success: 20 ♘e4 ♘g6! 21 ♘×f6 ♕×f6 22 fg ♕g7! 23 ♕×g7+ ♔×g7 24 gf+ ♔×f7 25 ♖×d6±. Nevertheless, Black had to either play into this line, or choose 19...♗×e5 20 f6! ♗×f6 21 ♗d3 ♗g5+ 22 ♖×g5 f5! 23 ♖dg1! ♖a7 24 ♘e2! ♘e5 25 ♘f4± (Kholmov), since the move actually played lost quickly:

19...♗g5+?! 20 ♖×g5 f6 21 ed ♕f7 22 ♖g3 bc 23 ♗c4!, and White soon won.

Larsen – Kavalek
Lugano 1970



White to move

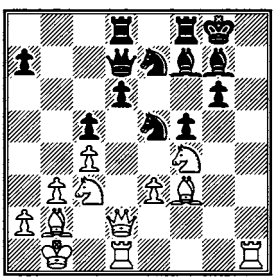
White has opened the h-file, and taken aim at the black king. It would be nice to push the queen over to h2 – but how? The d2-e1-g1-h2 route is pretty long, and would grant Black time to whip up counterplay on the queenside. Larsen finds a cardinal solution to the problem.

20 g4! ♘×g4?!

For accuracy's sake, it should be noted that the move Black played was not the best. The immediate 20...♗×c4!? came into consideration, or even 20...g5!?.

21 f3! ef 22 ♗×f3 ♘e5

22...g5 would now be too late: 23 ♘h3! ♕e6 24 ♗×g4 fg 25 ♘×g5.



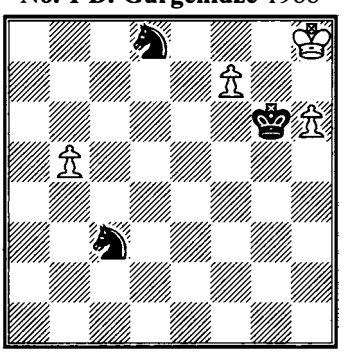
Now that the second rank is clear, from the e- to the h-file, the queen moves with lightning speed in the direction of the main attack.

23 ♕h2! ♗×c4 24 bc ♘×f3 25 ♕h7+ ♔f7 26 ♘cd5 ♖g8 (26...♘e5 27 ♗×e5 de 28 ♘×e7+–) **27 ♘×e7 ♖b8 28 ♔a1 ♕×e7 29 ♕×g6+ ♔f8 30 ♘e6+ ♕×e6 31 ♗×g7+ ♔e7 32 ♗f8+ ♖b×f8 33 ♖h7+** Black resigned.

Naturally, study composers would be unable to pass by such a "tasty" idea. A large number of compositions appeared, in which the presence of "excess" pieces resulted in a mournful finish. One particularly memorable class of studies arose, in which one side (usually White) had to make a difficult-looking choice between rejecting the tempting retention of his own material, or taking the opponent's. Solving such studies is undoubtedly quite useful to practical players, developing not just tactical alertness, but also the ability to note the hidden resources of a position.

In Examples 1-10, the pawn plays the "fifth-column" role. As in the study of any subject, we shall proceed from the simple to the complex.

No. 1 D. Gurgenidze 1988



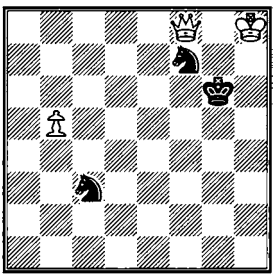
Win

After the direct **1 f8♕ ♘f7+**, the white queen is not long for this world, as otherwise, it is perpetual check. However, an immediate 2 ♕×f7+? ♔×f7 3 b6 ♘d5 4 b7 ♘e7 5 b8♕ ♘g6+ 6 ♔h7 ♘f8+ 7 ♔h8 ♘g6+ allows Black to set up a second perpetual, this one successful. We need not go very far to find the guilty party, or to come up with the operation which removes it.

2 ♔g8! ♘×h6+ 3 ♔h8!

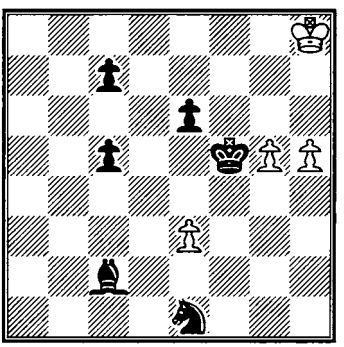
The king cannot be left at g8: 3 ♕×h6+? ♔×h6 4 b6 ♘d5 5 b7 ♘e7+, and the knight stops the pawn.

3...♘f7+



Now the h6-square is free, which means it is time for **4 ♕×f7+ ♔×f7 5 b6 ♘d5 6 b7 ♘e7 7 b8♕ ♘g6+ 8 ♔h7 ♘f8+ 9 ♔h6!**.

No. 2 G. Nadareishvili 1950



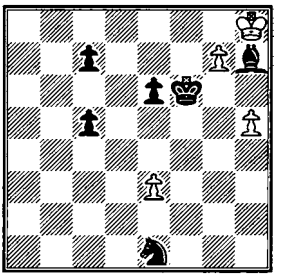
Win

Here too, the introduction is obvious:

1 g6 ♔f6!

1...e5 is weak: 2 g7 ♗b3 3 h6 ♘f3 4 h7 ♘h4 5 g8♕ ♘g6+ 6 ♔g7.

2 g7 ♗h7!

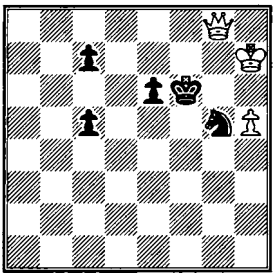


Black's counterplay consists of perpetual check, just as in the first example: 3 ♔×h7? ♘f3 4 g8♕ ♘g5+ 5 ♔h8(h6) ♘f7+. Relying on the newly-made queen does not work out either; after 5 ♕×g5+ ♔×g5 6 h6 c4 7 ♔g7 c3 8 h7 c2 9 h8♕ c1♕ 10 ♕h6+ ♔g4 (10...♔f5? 11 e4+) 11 ♕×e6+ ♔f3 12 ♕f5+ ♔e2! (12...♔×e3? 13 ♕g5+) 13 e4 c5, we have a drawn queen endgame.

Having calculated this uncomplicated variation, it would be easy to cut short the search, "due to lack of alternatives." Only a careful examination reveals the weakness in White's position – and that is the presence of the e3-pawn.

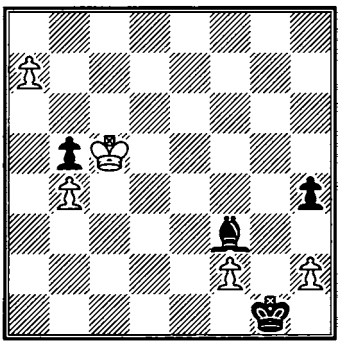
Therefore, **3 e4!! ♘f3 4 e5+! ♘×e5 5 ♔×h7 ♘f3 6 g8♕ ♘g5+**. ***(D)***

And now **7 ♕×g5+! ♔×g5 8 h6 c4** (8...♔f6 9 ♔g8) **9 ♔g7 c3 10 h7 c2 11 h8♕ c1♕ 12 ♕h6+!**.



White rids himself of the pawn in a most unconventional way in the next study.

No. 3 N. Riabinin 1991



Draw

White is on the verge of losing. Black's bishop securely controls the a8-h1 diagonal, and the h-pawn will soon move triumphantly forward. The desperate attempt to create counterplay by means of the natural 1 ♔×b5? ♔×h2 2 ♔a6 is nothing but flapping on the water: 2...♔g1! 3 b5 h3 4 b6 h2 5 b7 ♗×b7+ 6 ♔×b7 h1♕+ 7 f3 ♕h7+, and White fails to get rid of the traitorous f-pawn.

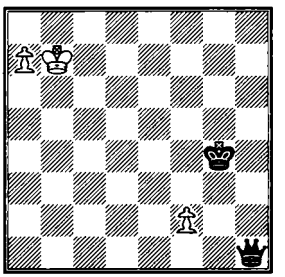
1 h3!!

At first sight, this move looks completely senseless, but it holds a saving idea.

1...♔g2 2 ♔×b5 ♔×h3 3 ♔a6 ♔g4!

Of course, the black king will not be lured onto the long diagonal for all the tea in China. But the g4-square is also not as safe as one might think.

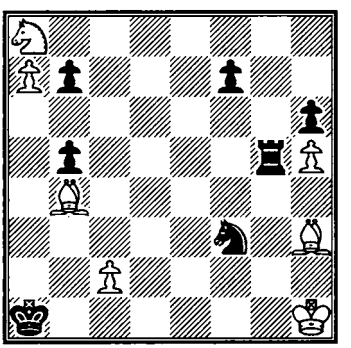
4 b5 h3 5 b6 h2 6 b7 ♗×b7+ 7 ♔×b7 h1♕+



And suddenly, a counter-check:

8 f3+! ♕×f3+ 9 ♔b8 Draw!

No. 4 P. Arestov 1999



Win

White will not have an easy time exploiting the material advantage. First, though, mate in one needs to be prevented. Since after 1 ♗g2 ♖×h5+ 2 ♗h3 ♖g5, the position practically repeats itself, let's try 1 ♗c5?! ♖×c5. Now White has two possibilities:

(A) 2 ♘b6 ♖g5!

The knight blocks the a7-g1 diagonal, and Black immediately exploits this. Conversely, if 2...♖×c2? 3 a8♕+ ♔b2 4 ♕b8!, the queen participates in the defense via the open b8-h2 diagonal.

3 a8♕+ ♔b1!

Another accurate move. On 3...♔b2?, White has 4 ♘c4+! ♔b1 (4...bc 5 ♕×b7+) 5 ♘d2+!.

4 ♗g2 ♖×h5+ 5 ♗h3 ♖g5 6 ♗g2 ♖h5+, and White cannot escape the bonds of this positional draw.

(B) Here we see play similar to variation A.

2 ♘c7 ♖×c2! (2...♖g5? 3 a8♕+ ♔b1 4 ♕a7!) 3 a8♕+ ♔b2! (3...♔b1?? 4 ♗f5) 4 ♕h8+ ♔b3! (4...♔a2? 5 ♗g2 ♖c1+ 6 ♗f1 ♖c2 7 ♗c4+! bc 8 ♕a8+ ♔b2 9 ♕×b7+) 5 ♗g2 ♖c1+ 6 ♗f1 ♖c2! 7 ♗g2 ♖c1+, with the same result.

Note that White also does not win after 1 ♗g4? ♖×g4 2 ♗c5 ♖a4 3 ♘c7 ♔b2 4 a8♕ ♖×a8 5 ♘×a8 ♔×c2=.

So, what is left? The move we at first rejected, 1 ♗g2. It is, in fact, the only move that wins!

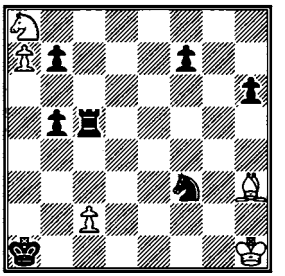
1 ♗g2! ♖×h5+ 2 ♗h3 ♖g5!

The h5-pawn is now liquidated.

3 ♗c5! ♖×c5 ***(D)***

4 ♘c7!

After 4 ♘b6?, all White's previous



efforts come to naught: 4...♖g5 5 a8♕+ ♔b1 6 ♗g2 ♖h5+ 7 ♗h3 ♖g5 is a draw.

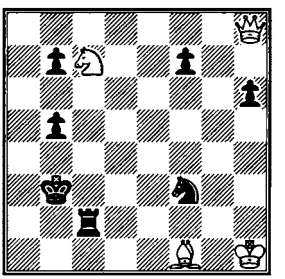
4...♖×c2

We already know about 4...♖g5 5 a8♕+ ♔b1 6 ♕a7.

5 a8♕+

A case where the most natural move is also the correct one: 5 ♗g2? ♖c1+ 6 ♗f1 ♖×f1+ 7 ♔g2 ♖g1+ 8 ♔×f3 ♖g8.

5...♔b2 (5...♔b1 6 ♗f5) **6 ♕h8+ ♔b3 7 ♗g2 ♖c1+ 8 ♗f1 ♖c2**

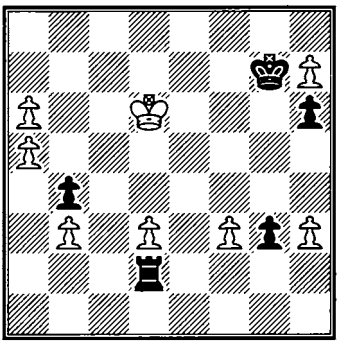


And the White queen breaks through to h2 after all:

9 ♕×h6! – and wins. ***(D)***

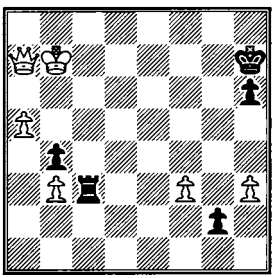
We understand that White must choose between 1 a7 or 1 h8♕+. From a practical standpoint, we would like to hold the check in reserve. One would think that White could always use it later; and there might be lines where the pawn on h7 would come in handy.

No. 5. A. Vysokosov, N. Kralin 2004



Win

And so: 1 a7? ♖×d3+ 2 ♔c7 ♖c3+ 3 ♔b7 ♔×h7 4 a8♕ g2 5 ♕a7



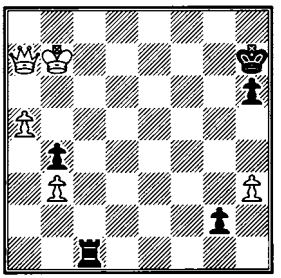
The g-pawn is stopped; and meanwhile, White has set up a "queen+king" battery. But Black does not lose heart: 5...♖c1 6 ♔a8+ ♔g8! 7 ♕b8+ (7 a6 g1♕ 8 ♕×g1+ ♖×g1 9 a7 ♔f7) 7...♔h7 8 ♕b7+ ♔h8!, and the king wins its duel with the queen – White is unable to approach the g2-pawn.

Let's go back to the starting diagram and find out what the difference is between 1 h8♕+ and 1 a7. There seems to be just one: the black king no longer controls any squares on the f-file. Wait a minute! White's pawn is on the same file, and it interferes by closing off the a8-h1 diagonal. Eureka!

1 h8♕+! ♔×h8 2 a7 ♖×d3+ 3 ♔e7! ♖e3+ 4 ♔f7! ♖×f3+

The f3-pawn is removed, and the king heads for the queenside.

5 ♔e7 ♖e3+ 6 ♔d7 ♖d3+ 7 ♔c7 ♖c3+ 8 ♔b7 g2 9 a8♕+ ♔h7 10 ♕a7! ♖c1



11 ♔a8+!

It is only in the corner that the king does not interfere with the queen: 11 ♔b8+? ♔g8!; 11 ♔a6+? ♔g6! 12 ♕b6+ ♔h5! 13 ♕b5+ ♔h4! 14 ♕×b4+ ♔×h3, draw. We shall have more to say on the subject of kingly courtesy at the end of the chapter.

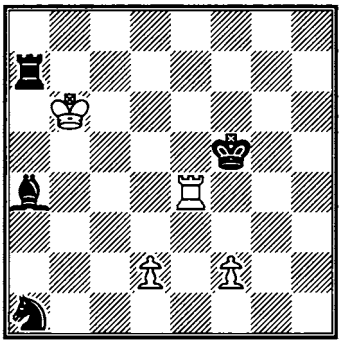
11...♔g6 12 ♕a6+! ♔g5! 13 h4+! ♔g4 14 ♕e2+!

Accuracy to the very end: 14 ♕e6+? ♔f3! 15 ♕d5+ ♔g3, and the rook is safe.

14...♔h3 15 ♕e3+, and wins.

The next study features grandmasterly play, in which not only White, but Black also is looking for clever possibilities. An uncomplicated analysis shows the futility of retreating White's rook. For example, 1 ♖h4? ♖a8 2 ♔b7 ♔g5! 3 ♖h1 ♖a5! 4 ♖×a1 ♗c6+, or 3 ♖c4? ♖a5! 4 ♔b6 ♗b3! – in either case, Black wins by tactical shots. 1 ♖b4 is bad too, in view of 1...♘c2.

No. 6 N. Riabinin 1989



Draw

This means that the rook can only be maintained on the 4th rank, by either 1 d3 or 1 f3.

1 f3!! is correct.

And why not the equivalent-looking move of the other pawn? Let's hold off on the explanation for a bit.

1...♖a8 2 ♔b7 ♖a5 3 ♔b6 ♘b3 4 ♖b4!

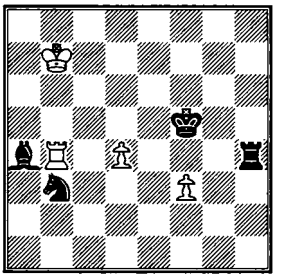
Threatening 5 ♖×b3, but Black finds excellent counterplay.

4...♖a8! 5 ♔b7 ♖h8!!

The opponent's king is too close after 5...♖d8? 6 ♖×a4 ♘c5+ 7 ♔c7!. Now White can neither play 6 ♖×a4? ♘c5+, nor 6 ♔c7? ♖h7+! 7 ♔b6 ♖h6+ 8 ♔a7 ♘c5 9 d4 ♖a6+. And White's next move appears to have a worthy reply prepared for it.

6 d4! ♖h4!

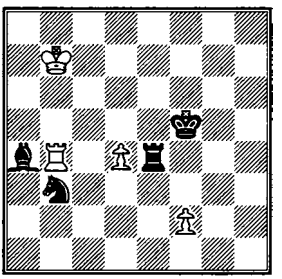
The point of Black's counterplay: the d4-pawn is pinned. Is it over? No, White disagrees.



7 f4! ♖×f4 8 ♖×a4 ♘c5+ 9 dc ♖×a4 10 c6 ♖b4+ 11 ♔c8! ♔e6 12 c7 ♔e7

Stalemate – this explains the 7 f4! sacrifice. After 12...♔d6 13 ♔d8 ♖h4 14 c8♘+, an "excelsior" by the white d2-pawn ends matters.

Let's go back to the starting position. After the mistaken 1 d3? ♖a8 2 ♔b7 ♖a5 3 ♔b6 ♘b3 4 ♖b4 ♖a8 5 ♔b7, Black's rook would find an escape route on the 4th rank to get around the f-pawn: 5...♖e8!! 6 d4! ♖e4!.



White's stalemate counterplay is eliminated, and Black wins. ***(D)***

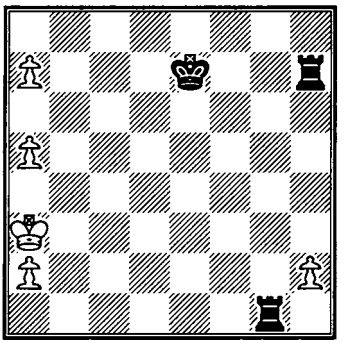
In this study, White must shed two pawns in order to achieve stalemate.

1 a8♕ ♖h3+ 2 ♔b2!

One...

2...♖×h2+ 3 ♔c3 ♖g3+ 4 ♔c4 ♖h4+ 5 ♔c5 ♖g5+ 6 ♔b6 ♖h6+ 7 ♔b7 ♖d5! 8 ♕c8! ♖d7+ 9 ♕×d7+ ♔×d7 10 a6 ♖h4! 11 a3!

No. 7 D. Gurgenidze 1988

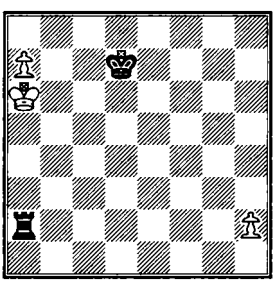


Draw

...and two! 11 a7? loses to 11...♖b4+ 12 ♔a6 ♔c7 13 ♔a5 ♖b2!.

11...♖h3 12 a7 ♖b3+ 13 ♔a6! ♖×a3+ 14 ♔b7 ♖b3+ 15 ♔a8!

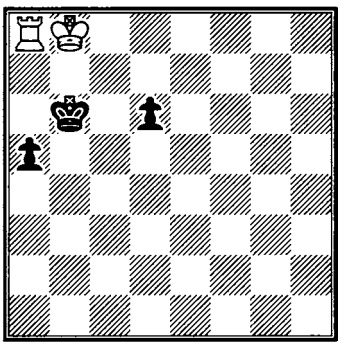
Is that not great? Unfortunately – this study has a second solution. If we follow the method of the character in the well-known Leonid Gaidai comedy, *Prisoner of the Caucasus*, which is, "Whoever opposes us, also helps us," then here too, White can attain the necessary result: 2 ♔b4! ♖g4+ 3 ♔c5 ♖g5+ 4 ♔c6 ♖g6+ 5 ♔b7 ♖d5 6 ♕c8 ♖d7+ 7 ♕×d7+ ♔×d7 8 a6 ♖g2 (8...♖g4 9 a3!) 9 a7 ♖b2+ 10 ♔a6 ♖×a2+



And here, the surprising 11 ♔b6! reaches the goal (11 ♔b7? ♖b2+ 12 ♔a6 ♔c7 13 a8♘+ ♔c6, and Black wins). The pawn at h2 still on the board saves White after 11...♔c8. Nor does Black achieve anything by 11...♖b2+ 12 ♔c5! ♖a2 13 ♔b6 ♔d6 14 ♔b7 ♖b2+ 15 ♔c8! – it is still a draw.

Now, here are a few examples in which White refuses the Greek gift of a pawn.

No. 8 V. Kalandadze 1984



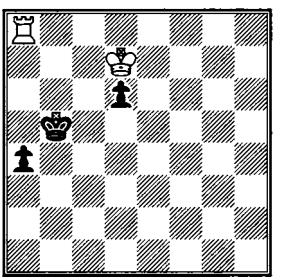
Win

1 ♔c8

The king does not have the time to complete a leftward flanking maneuver: 1 ♖a7? d5! 2 ♖b7+ (2 ♖d7 ♔c5 3 ♔b7 a4 4 ♔a6 ♔b4=) 2...♔c5 3 ♔a7 d4 4 ♔a6 d3 5 ♔×a5 ♔c4 6 ♔a4 d2 – draw.

1...♔b5 2 ♔d7! a4!

Black offers a bite of a "poisoned" pawn. 2...d5 3 ♔d6 d4 4 ♔d5 d3 5 ♖b8+ loses trivially.



3 ♔e6!

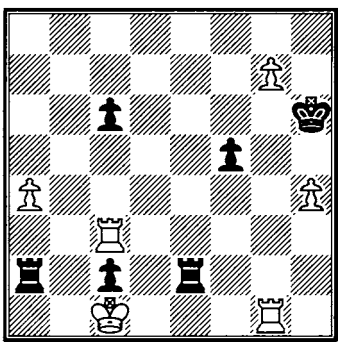
Not for nothing did the great Russian field-commander Alexander Suvorov say, "Feed the enemy your dinner!" After 3 ♔×d6 ♔b4 4 ♔d5 a3 5 ♔d4 ♔b3 6 ♔d3 ♔b2 7 ♔d2 a2 8 ♖b8+ ♔a1, Black is saved by stalemate.

3...♔b4 4 ♔d5 a3 5 ♔d4 ♔b3 6 ♔d3

If the white king were on d2 here, Black could save himself the same as in the previous study by 6...a2 7 ♖b8+ ♔c4!.

6...♔b2 7 ♔d2 a2 8 ♖b8+ ♔a3 9 ♔c2, and wins.

No. 9 N. Riabinin 1999



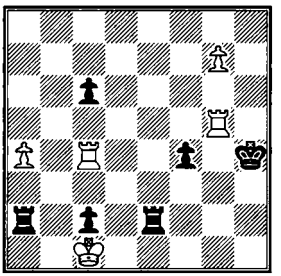
Win

The threatened 1...♖a1# forces White to take quick and decisive action. The key to the solution is the first move: which of two checks should he choose – 1 ♖×c6+ or 1 ♖g6+ ?

1 ♖g6+! ♔h5 2 ♖g5+ ♔×h4 3 ♖c4+

It is still too early to cut the Gordian knot. After 3 ♖h3+? ♔×h3 4 ♖h5+ ♔g4 5 g8♕+ ♔×h5 6 ♕×a2 ♖e1+ 7 ♔×c2 ♖e2+ 8 ♔b3 ♖×a2 9 ♔×a2 f4, or 3 ♖h5+? ♔×h5 4 ♖h3+ ♔g4 5 g8♕+ ♔×h3, the Black f-pawn comes to the fore.

3...f4!



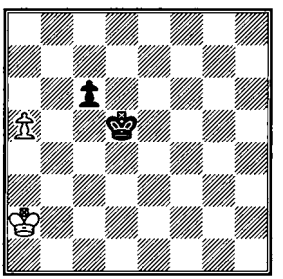
4 ♖g4+!

Black's king needs to be lured as far forward as possible. The hasty 4 ♖×f4+? ♔×g5 5 g8♕+ ♔×f4 6 ♕×a2 ♖e1+ 7 ♔×c2 ♖e2+ 8 ♔b3 ♖×a2 9 ♔×a2 ♔e5 would allow him to return to his home turf and neutralize White's passed pawn.

4...♔h3 5 ♖c3+ f3! 6 ♖×f3+!

Now's the time! 6 ♖g3+? ♔h2 actually lets Black win.

6...♔×g4 6 g8♕+ ♔×f3 8 ♕×a2 ♖e1+ 9 ♔×c2 ♖e2+ 10 ♔b3 ♖×a2 11 ♔×a2 ♔e4 12 a5 ♔d5

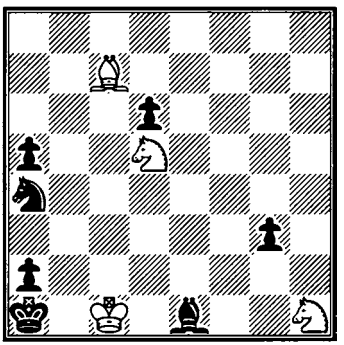


13 a6

And Black's king finds itself impeded by its own pawn at c6.

Now we can understand White's choice on move 1. After 1 ♖×c6+? ♔h5 2 ♖g5+ ♔×h4 3 ♖c4+ f4! 4 ♖g4+! ♔h3 5 ♖c3+ f3! 6 ♖×f3+ ♔×g4 7 g8♕+ ♔×f3 8 ♕×a2 ♖e1+ 9 ♔×c2 ♖e2+ 10 ♔b3 ♖×a2 11 ♔×a2 ♔e4 12 a5 ♔d5 13 a6, Black's pursuit of the passed pawn has succeeded: 13...♔c6 draws.

No. 10. O. Pervakov 1987



Win

Here too, White must come to a decision on the very first move: **1 ♗d8!** is correct, leaving the d6-pawn on the board.

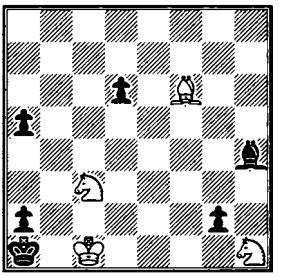
1...g2

Sacrificing the bishop by 1...♗c3 2 ♘×c3 leads to a quick mate, for example: 2...♘c5 3 ♗f6 ♘d3+ 4 ♔c2 ♘e1+ (4...♘b4+ 5 ♔b3 g2 6 ♘×a2+ ♔b1 7 ♘c3+ ♔a1 8 ♘g3) 5 ♔b3 g2 6 ♘×a2+ ♔b1 7 ♘c3+ ♔a1 (7...♔c1 8 ♗g5#) 8 ♘a4+ ♔b1 9 ♗b2! gh♕ 10 ♘c3#.

2 ♗f6+ ♘c3! 3 ♘×c3 ♗h4! *(D)*

4 ♗d4!

For the moment, this is the only square available on the a1-h8 diagonal. 4 ♗g7? g1♕+ would lose, as would 4 ♗h8? ♗g5+ 5 ♔c2 gh♕.



4...♗g5+ 5 ♔c2 ♗e3! 6 ♗f6!

6 ♗×e3? would be met by 6...gh♕ 7 ♗d4 ♕c6!, and the white "bishop+knight" battery is rendered harmless.

6...♗g5! 7 ♗g7! ♗h6! 8 ♗h8!

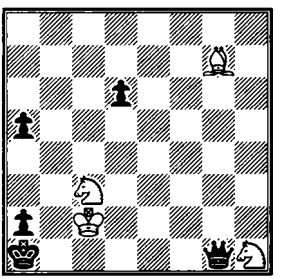
Hiding successfully in the opponent's shadow, and thereby evading pursuit.

8...♗g7!

Black's bishop nevertheless plays its role to the end. After 8...g1♕ 9 ♘e2+ ♗g7 10 ♘×g1, the two knights easily give mate.

9 ×g7 g1♕

Now 10 ♗f6? does not work, in view of 10...♕c5!, when the knight cannot be brought back into play from h1: 11 ♘g3? ♕f2+, while on 11 ♗g7, it would be enough to play 11...♕c7 12 ♗d4 ♕c4. Now the knight sacrifice decides.



10 ♘g3! ♕×g3

After 10...♕c5, the prisoner breaks loose, and takes a personal role in the punishment meted out to Black's king: 11 ♘f5! ♕c4 12 ♗d4 a4 13 ♔c1! a3 14 ♘e3.

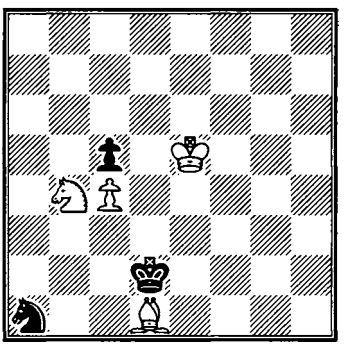
11 ♗d4!

There is no defense to this battery.

But if White had played 1 ♗×d6 for the first move, the b8-h2 diagonal would have been opened, allowing 11...♕c7, pinning the knight to c3.

Now let's move on from pawns to minor pieces.

No. 11 Y. Afek 1977



Win

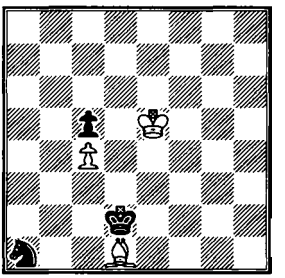
White cannot save the piece – but which one should be offered? After 1 ♘a6? ♔×d1 2 ♘×c5, the simplest way to draw would be 2...♔e2!. So let's give up the knight instead: 1 ♗a4? cb. But in this case, White cannot win either: 2 c5 b3 3 ♗×b3 ♘×b3 4 c6 ♘a5 5 c7 ♘c6+.

1 ♘c2! ♘b3!

This looks like Black is crawling out from the corner, while avoiding an unfavorable exchange. Does this exchange of blows end up in Black's favor? It appears that on 2 ♘e3?, Black has 2...♘a5! 3 ♔e4 ♘×c4. However, Black is in for a startling surprise.

2 ♘a1!! ♘×a1

Black must return to that uncomfortable corner to avoid the exchange: 2...♘a5 3 ♘b3+ (but not 3 ♗b3?, in view of 3...♔c3).



Compare this position with the starting position of the study. There is no longer a white knight at b4, so now we can proceed to the main plan.

3 ♗a4!

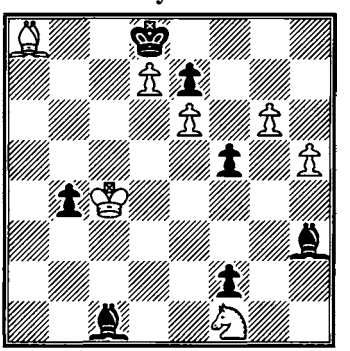
Keeping the knight penned in.

3...♔c3 4 ♔d5 ♔b4 5 ♗d1!

And Black loses to *zugzwang*.

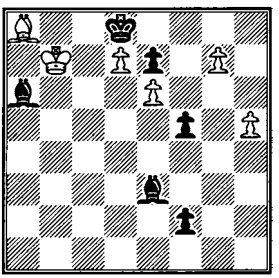
An enjoyable "short!"

No. 12. A. Vysokosov 2002



Win

Since after 1 ♘h2? ♗h6, Black holds the g-pawn, it would seem White has no choice – 1 g7? has to be played. Black's defense is based on chasing White's king, which cannot go on the diagonals a6-f1 or a2-g8: 1...♗×f1+ 2 ♔×b4 ♗d2+ 3 ♔a3! (for now, White is in no hurry to play 3 ♔a4 ♗b5+ 4 ♔a3 ♗c1+ 5 ♔b4 ♗d2+ 6 ♔c5 ♗e3+ 7 ♔d5 ♗c4+ 8 ♔e5 ♗d4+!) 3...♗c1+ 4 ♔a4 ♗b5+! 5 ♔a5 ♗d2+ 6 ♔b6 ♗e3+ 7 ♔b7 ♗a6+!



8 ♔c6

Unfortunately, the king cannot escape pursuers on the queen's wing: 8 ♔b8 ♗f4+ 9 ♔a7 ♗e3+, with perpetual check. So it must enter the above-cited variation.

8...♗b5+ 9 ♔d5 ♗c4+ 10 ♔e5 ♗d4+! 11 ♔×d4 ♗×e6. And this bishop endgame is drawish: 12 ♗g2 ♔×d7 13 ♔e5 ♗g8 14 ♔×f5 ♗h7+ 15 ♔g5 ♔e6 17 ♔h6 ♗g8 17 ♔g6 ♗f7+ 18 ♔h7 (18 ♔g5 ♗g8! 19 h6 ♔f7 20 ♗f1 e5=) 18...♔f5 19 h6 ♔g5!.

What was the mistake? The first move! We need to clear the a8-square for the king.

1 ♗g2!! ♗×g2 2 g7 ♗×f1+ 3 ♔×b4

3 ♔c5 ♗e3+ 4 ♔×b4 ♗d2+, etc., would just be a waste of time.

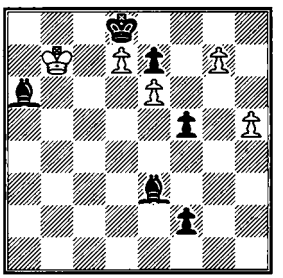
3...♗d2+ 4 ♔a3!

This is the only way the king can break through to the a5-square. It cannot avoid perpetual check after 4 ♔a4? ♗b5+ 5 ♔a3 ♗c1+ 6 ♔b4 (6 ♔b3? ♗c4+) 6...♗d2+ 7 ♔c5 ♗e3+ 8 ♔b4 ♗d2+ 9 ♔a3 ♗c1+.

4...♗c1+ 5 ♔a4! ♗b5+! 6 ♔a5! (6 ♔b4? ♗d2+) **6...♗d2+**

After 6...♗×d7 7 g8♕+ ♗e8 8 ♕g3, the mate threat wins for White.

7 ♔b6 ♗e3+ 8 ♔b7 ♗a6+!



9 ♔b8!

There is no bishop on a8, but it is still too early to hide in the corner: 9 ♔a8? ♔c7 10 d8♕+ ♔×d8 11 g8♕+ ♔c7 12 ♕b8+ ♔c6 13 ♕e8+ ♔b6! 14 ♕d8+ ♔c6 15 ♕d7+ ♔b6, and White cannot improve the position, so it is drawn. The bishop must be lured to the fatal f4-square.

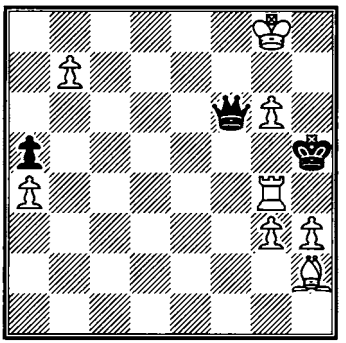
9...♗f4+ 10 ♔a8! ♔c7!

Needless to say, Black cannot cope with two white queens after 10...f1♕ 11 g8♕+ ♔c7 12 d8♕+ ♔c6 13 ♕ge8+.

11 d8♕+ ♔×d8 12 g8♕+ ♔c7 13 ♕b8+ ♔c6 14 ♕×f4 f1♕ 15 ♕×f1 ♗×f1 16 h6 and wins.

And after the minor pieces come the major pieces.

No. 13. D. Gurgenidze 2004



Win

The restricted position of Black's king is a sure sign that there may be some stalemating counterplay. Here, it is pretty obvious: 1 b8♕? ♕g7+ 2 ♔×g7; 1 g7? ♕d8+ 2 ♔h7 (2 ♔f7 ♕d7+) 2...♕d3+ 3 ♔h8 ♕h7+ 4 ♔×h7. So first, we use the rook to take control of the g7-square.

1 ♖h4+! ♔×g6

The strongest reply. 1...♔g5 2 g7 ♔g6 3 ♖g4+ ♔h5 4 b8♕ leads to the study's main line, except that the g7-pawn is still on the board.

2 ♖g4+ ♔h5

The g6-pawn no longer stands in the way, so White makes a queen.

3 b8♕

But Black still has resources.

3...♕e6+ 4 ♔f8 ♕d6+!

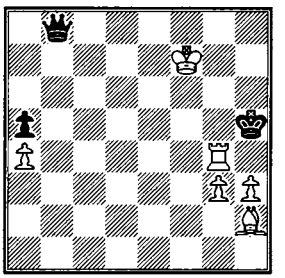
Once again hoping for stalemate. After 4...♕f6+ 5 ♔e8 ♕e6+ 6 ♔d8 ♕d6+ 7 ♔c8!, the normal checks are over.

5 ♔f7

5 ♔g7 ♕g6+ 6 ♔f8 ♕d6+ would only lengthen the play by one move.

5...♕×b8

The king easily escapes pursuit after 5...♕d7+ 6 ♔f6!.

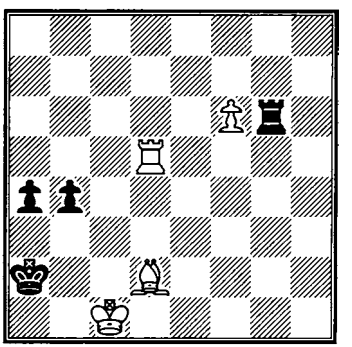


Black's queen ended up on the b8-h2 diagonal, where it came under the bishop's "x-ray" attack. All White needs to do now is get rid of the rook, and then deliver the deciding battery shot:

6 ♖h4+ ♔g5 7 ♖h5+! ♔×h5 8 g4+ and wins.

No. 14 is a widely-known classic study, in which the black rook ends up in a ridiculous situation.

No. 14 G. Kasparyan 1939



Win

1 ♗g5!

After 1 ♖f5? ♖g1+ 2 ♔c2 b3+ 3 ♔c3 b2 4 f7 ♖c1+, Black even wins.

1...b3 2 ♖d2+ ♔a1 3 f7

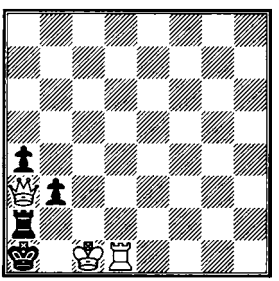
3 ♗e3? would be a mistake: Black can choose either the simple 3...a3 4 ♗d4+ b2+, or the elegant 3...b2+ 4 ♖×b2 ♖×f6 5 ♗d4 ♖f1+ 6 ♔c2 a3! 7 ♖b1+ ♔a2 8 ♖×f1, stalemate.

3...♖×g5

Here 3...a3 would lose quickly in view of 4 ♖d1 ♖d6 5 f8♕ b2+ 6 ♔c2+ ♖×d1 7 ♕×a3#.

4 f8♕ ♖g1+ 5 ♖d1 ♖g2! 6 ♕a3+ ♖a2

The culmination of the study. It is a positional draw after 7 ♕c5? ♖h2! (trying to get on the opponent's nerves



by 7...b2+? would be suicidal: 8 ♔d2+ b1♕+ 9 ♔e1!) 8 ♖d2 ♖h1+ 9 ♖d1 ♖h2.

7 ♖d2!!

A magical move!

7...♖×a3

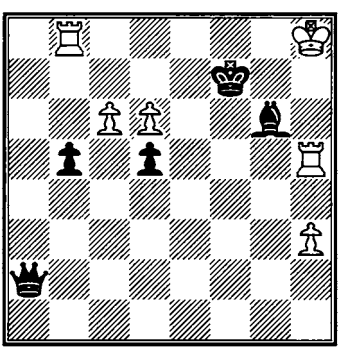
In the line 7...b2+ 8 ♕×b2+ ♖×b2 9 ♖×b2 a3, the precise winning path is 10 ♖b1+! ♔a2 11 ♖b8 ♔a1 12 ♔c2 a2 13 ♔b3 ♔b1 14 ♔a3+.

8 ♖b2! ♖a2 9 ♖b1#

Let's go back to the position after Black's 6th move, and stop for something that was overlooked by many commenting on this study. After 7 ♕×a2+?! ♔×a2 8 ♖d2+ ♔a1! 9 ♖b2, we have reached practically the same position as the final position of the study, except without the black rook – and that leads to stalemate after 9...a3 10 ♖×b3 a2. So it turns out that White was exactly right leaving Black's major piece on the board!

In Example No. 15, the "strange" piece turns out to be White's own queen.

No. 15 O. Pervakov 1987



Draw

1 ♖e5

There is no alternative: 1 ♖b7+? ♔f6 2 ♖g7 ♗×h5 3 d7 ♕a8+ 4 ♔h7 ♕f8 5 ♖g8 ♕×g8+ 6 ♔×g8 ♔e7.

1...♕a1! 2 ♖b7+

White quickly gets mated after 2 ♖be8? ♕d4! 3 ♖8e7+ ♔f8.

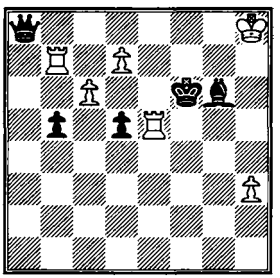
2...♔f8 3 ♖b8+ ♔f7 4 ♖b7+ ♔f6

The king must go to f6 after all, and unpin the rook on e5.

5 d7!

5 c7? fails against 5...♕×e5 5 c8♕ ♕h5+ 7 ♔g8 ♗f7+, and mates.

5...♕a8+

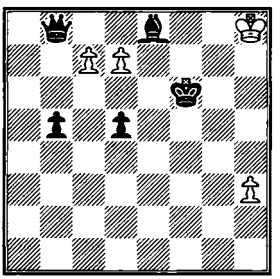


Which of the rooks should White give up first?

6 ♖e8!

It has to be this way!

6...♗×e8 7 ♖b8! ♕×b8 8 c7!



Here is the answer – Black's queen has really run across into the opposing camp: if the queen were not on the board, 8...♗×d7 would have won here, while now, it just allows 9 cb♕. Now it is clear that if White had mistakenly played 6 ♖b8? ♕×b8+ 7 ♖e8, Black would have been able to sacrifice by 7...♕×e8+! 8 de! ♗×e8 9 c7 ♗d7, winning. But now, the battle continues.

8...♕×c7 9 de♘+! ♔e5! 10 ♘×c7 b4 11 ♘a6!

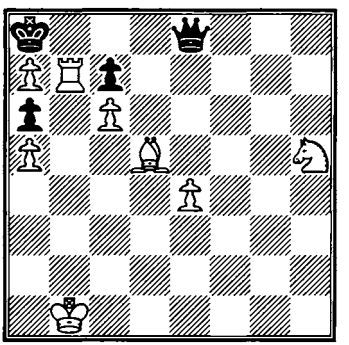
The final touch. Everything else loses: 11 ♘b5? d4 12 ♘×d4 ♔×d4 13 h4 b3 14 h5 b2 15 h6 b1♕ 16 h7 ♔e5; 11 h4? ♔d6 12 ♘b5+ (12 h5 ♔×c7 13 h6 b3 14 h7 b2 15 ♔g7 b1♕ 16 h8♕ ♕b2+ or 15 ♔g8 b1♕ 16 h8♕ ♕b8+ are just bad) 12...♔c5 13 h5 ♔×b5 14 h6 b3 15 h7 b2 16 ♔g8 b1♕ 17 h8♕ ♕g6+.

11...b3 12 ♘c5! b2 13 ♘d3+

He really gets around, does not he? The promoted knight was able to catch the queen in a fork, and get back in time to catch the pawn as well. Draw.

The author of the following study was able to get rid of three interfering pieces – pawn, rook and queen – in a single study. Here is how he did it:

No. 16 P. Benno 2004



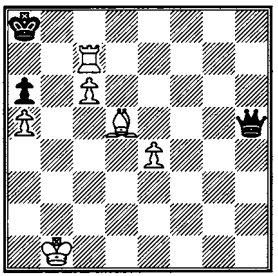
Win

No, this is not a case of mistaken identity: this Benno (not Benko) is a young Hungarian study composer.

1 ♖b8+

The motive behind this self-liquidation is to avoid a stalemate: if 1 ♖×c7 (♘f6?) ♕×e4+.

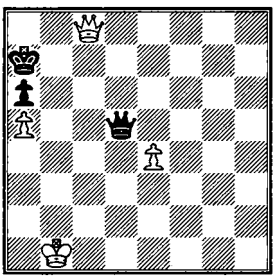
1...♔×a7 2 ♖b7+ ♔a8 3 ♖×c7 ♕×h5



Now it is the rook's turn – its sacrifice activates a "bishop + pawn" battery.

4 ♖c8+! ♔a7 5 ♖a8+! ♔×a8 6 c7+ ♔a7 7 c8♕ ♕×d5!

Once again, Black is playing for stalemate, since there is no point even in thinking about a perpetual check: 7...♕d1+ 8 ♕c1 ♕d3+ 9 ♔a2, etc.



But White does not mind giving up even his strongest piece.

8 ♕c7+!

Not 8 ♕b8+? at once: after 8...♔×b8 9 ed ♔c7, the king can take care of the d-pawn.

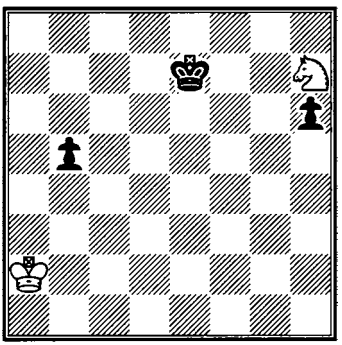
8...♔a8 9 ♕a7+!

Now is the right time!

9...♔×a7 10 ed, with an easily won pawn endgame.

Which brings us to the last and most important piece – the king. Of course, in contrast to the other pieces, it may not be sacrificed. So each step it takes must be exactly measured – truly kinglike.

No. 17 D. Gurgenidze 1970



Draw

A classic "baby" (that is, a study with five pieces or less).

1 ♔a3!!

The b3-square must be left open. 1 ♔b2? would be a loss of time: 1...♔f7! 2 ♔c3 ♔g7 3 ♔b4 ♔×h7 4 ♔×b5 h5, and Black wins.

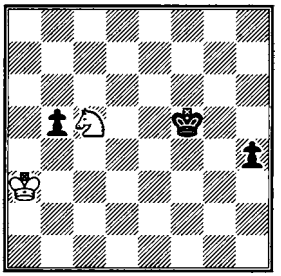
1...♔e6!

Now 1...♔f7 does not scare White: 2 ♔b4 ♔g7 3 ♔×b5 ♔×h7 4 ♔c4 is a draw.

2 ♘f8+!

Time to get the knight into the battle. 2 ♔b4? loses to 2...♔f5! 3 ♘f8 h5 4 ♘d7 h4 5 ♘c5 h3 6 ♘d3 h2 7 ♘f2 ♔f4 8 ♔×b5 ♔f3 9 ♘h1 ♔g2.

2...♔f5! 3 ♘d7 h5 4 ♘c5 h4



5 ♘b3!

This is why the white king did not occupy the b3-square on move 1! Had it done so, White would now have to continue 5 ♘d3 h3 6 ♘f2 h2, and resign soon thereafter.

5...h3 6 ♘d2 h2

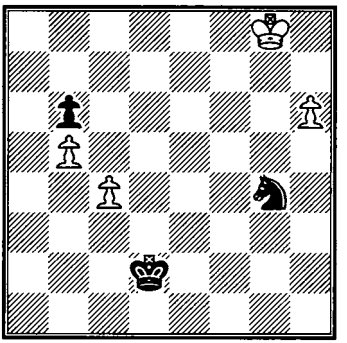
A well-known drawing carousel starts spinning after 6...♔f4 7 ♘f1 ♔f3 8 ♔b4 ♔f2 9 ♘h2 ♔g2 10 ♘g4 ♔g3 11 ♘e3 ♔f3 12 ♘f1.

7 ♘f1! h1♕ 8 ♘g3+

The pawn achieved a general's epaulets – and then perished. Drawn. ***(D)***

No matter what, Black's knight will succeed in giving itself up for the h-pawn; so White would like to get the king closer: 1 ♔g7? ♘×h6 2 ♔×h6. However, Black has an excellent counter-argument: 2...♔e3! (gaining control of the f4-square is a matter of life and death) 3 c5 bc 4 b6 c4 5 b7 c3

No. 18 N. Elkies 1986

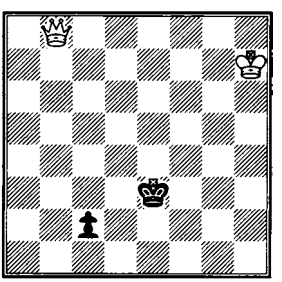


Win

6 b8♕ c2 7 ♔g5 ♔d2!, with a theoretical draw.

1 h7! ♘f6+ 2 ♔g7 ♘×h7 3 ♔×h7 ♔e3!

How could this move be bad here?
4 c5 bc 5 b6 c4 6 b7 c3 7 b8♕ c2



Now the h6-square is clear, and a pretty maneuver decides:

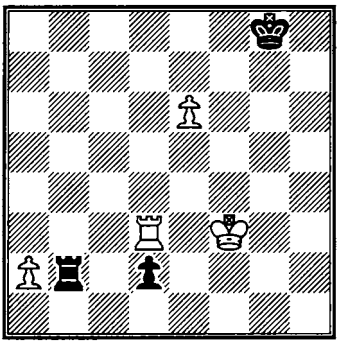
8 ♕h2! c1♕ 9 ♕h6+! – winning the queen. ***(D)***

1 ♖d8+! ♔g7 2 e7

Black's position is critical, but there is an interesting defensive maneuver.

2...d1♕+! 3 ♖×d1 ♔f7 4 ♖e1 ♔e8 5 a4 ♖b3+!

No. 19 V. Korolkov 1954



Win

Here there is no sense attacking the a-pawn in the usual way, from the rear: after 5...♖a2 6 ♖e4, White's king calmly marches over to the queen's wing.

6 ♔g2!

But where is it going now?

6...♖b2+ 7 ♔h1!!

We shall see the effect of this unusual route at the end of the solution.

7...♖b4!

If attacking from the rear does not work, try it from the side, thinks Black.

8 a5 ♖b5 9 a6 ♖b6 10 a7

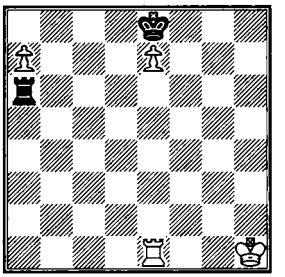
The only thing 10 ♖a1 ♖b8 11 ♖e1 ♖b6 12 a7 does is lose time.

10...♖a6

It looks like Black has the desired result: the white rook can no longer protect the a-pawn. ***(D)***

11 ♖g1!

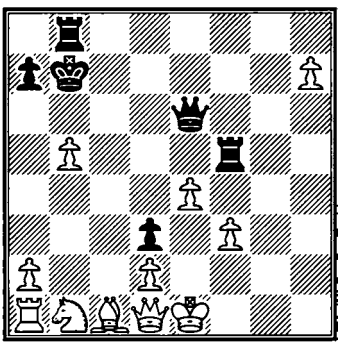
It turns out, the white king was keeping the g1-square clear for the rook.



11...♔×e7 12 ♖g8! ♖×a7 13 ♖g7+ and wins.

To conclude this chapter, we present a study that will probably bring a smile to even the most hardened pessimists. It would be interesting to know what White was doing in the previous phase of the game! Was there some kind of bet not to develop the queenside, until a certain move? It would seem that the moment has finally arrived.

No. 20 G. Costeff 2004



Win

1 ♕a4!

Pieces must be brought out carefully. 1 ♘c3? ♖g5 or 1 ♗b2? ♕b6 would lose; and 1 ♕b3? ♕d6 2 ef ♕g3+ 3 ♔f1 ♕×f3+ 4 ♔g1 ♕g3+ is a perpetual check.

1...♖×f3

It is as though Black suddenly shook himself, and began acting more decisively. After 1...♖h5 2 ♕a6+ ♕×a6 3 ba+ ♔×a6 4 ♔f2 ♖×h7 5 ♘c3, White completes development without any problems.

2 ♕a6+

White needs to trade off Black's main attacking piece right away. By trying to bring up the reserves to the front as quickly as possible, the vulnerable back rank might be exposed in a most unpleasant fashion: 2 ♗a3? ♕h3! 3 ♕a6+ ♔a8! (it is mate in the center: 3...♔c7? 4 ♕d6+ ♔c8 5 h8♕+ ♕×h8 6 ♕e6+ ♔c7 7 ♗d6+, etc.), and White must force a draw by 4 ♕c6+ ♖b7 5 ♕e8+ ♖b8 6 ♕c6+, or suffer worse.

2...♕×a6 3 ba+ ♔a8!

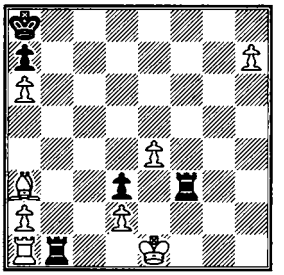
In the heat of battle, one should never lose sight of the possibility of castling – on either side. Since Black is unable to demonstrate that White cannot castle, it should be taken as a given – which means 3...♔a6 4 ♗a3 ♖h8 5 ♘c3 ♖×h7 is bad, in view of 6 0-0-0!. But a faint hope of stalemate still glimmers...

4 ♗a3!

Never falter, never weaken! After 4 ♗b2? ♖bf8!, White reaps the harvest of the lag in development. Mate on the first rank – is there anything sadder in the world?!

4...♖×b1+!

Is not it about time to sign the scoresheets? The variation 5 ♖×b1? ♖f1+ 6 ♔×f1 looks convincing enough.



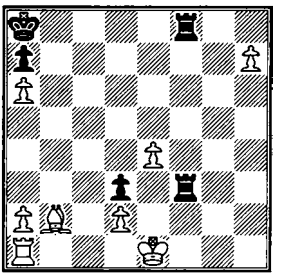
5 ♗c1!!

Is this some kind of *déjà vu* for White? Back to the initial position – again?!

5...♖b8

OK – you go home, and so will we. Along the way, we will reject 5...♖f8 6 h8♕! ♖×c1+ (6...♖×h8 7 ♖×b1 ♖h2 8 ♖a1!) 7 ♖×c1 ♖×h8 8 ♔f2 ♔b8 9 ♔e3 ♖h6 10 ♔×d3 ♖×a6 11 ♖c2 – and no bookmaker will take bets on this rook endgame.

6 ♗b2! ♖bf8



7 0-0-0!

Unbelievable! It turns out that giving White check on b1 is not enough to prevent castling. "Wasn't there a horse there once?" "*Pardon, m'sieur,* but you ate that already..."

White defends against the mate threat, and wins with no trouble after 7...♖c8+ 8 ♔b1 ♖h3 9 h8♕ ♖h×h8 10 ♗×h8 ♖×h8 11 ♖c1! ♔b8 12 ♔b2 ♖e8 13 ♖c4.

Part III

Training

Chapter 5

Studies by Wotawa
Mark Dvoretsky

Many of the noted Austrian composer Alois Wotawa's works seem less like studies to me than something more akin, in the eyes of a practical chessplayer, to fantastic combinations. His favorite theme was a mating attack against the opposing king, and his esthetic tools were a mixture of spectacular sacrifices and wondrous quiet moves.

In 2006, finding myself in hospital with a most serious diagnosis, I used my free time to look over all of Wotawa's studies using the computer database put together by van der Heijden, and transferred the best of these (according to my own tastes, naturally) into my notebook of exercises. I present to you 35 selected studies (not including, of course, the one which opened this book).

I have previously published some Wotawa studies on the websites www.ChessCafe.com and www.chesspro.ru, and many players found them quite appealing. Here is what chess master and journalist Ilya Odessky wrote:

...I very much wanted to describe to Mark Israilevich my delight at the selection of Wotawa studies he published at "Chesspro."

They have indeed given me colossal enjoyment! At first, I solved two studies per day; then I thought: This is too much, better limit yourself to one a day. Wotawa was a magician. Anderssen. It is as though I had returned to my earliest chess years ago. When each piece had its own odor, and glistened like paint. The knight was – a Stallion! I even wanted to look at it from underneath, putting my cheek at the board's edge. And the rook was – a Tower, or Fortress: if you go behind it, close one eye, and it is as if they cannot see you. And oh! How the new-bought chess sets smelled of oilcloth! Any book smelled like that! Dad would buy it at Sretenka, bring it home, and right away you'd start spinning like a top: where to find a place where nobody could see you or distract you, and you'd start reading, reading, as fast as you could – what is in this book, what does it say about chess?!

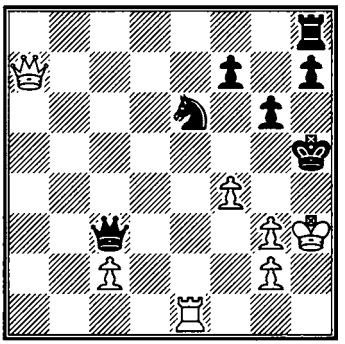
The starting position, set up on that oilcloth, was like a real kingdom of chess. A fairytale. And every game, even the offhand ones, even the smallest excerpt from it – that was a voyage.

And then, it all started fading, fading away... In its place came some sort of code: "plus-over-equals," "equal-to-plus," "dry up," "roll out"... And such nonsense.

Thank you, Wotawa. I touch my forehead to the floor. And to Dvoretsky.

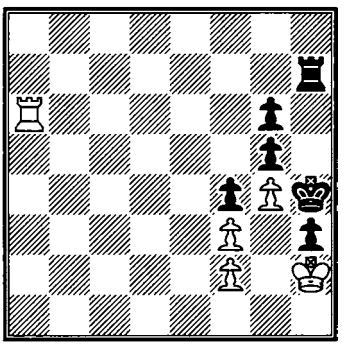
These studies are arranged in order of increasing complexity (which is, of course, very much according to taste and subjective). In all the examples, it is White to move. I recommend you use this selection to develop your resourcefulness and fantasy, or to bring yourself up to form before any important tournament.

(1)



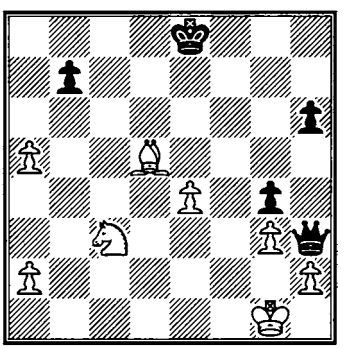
Win

(2)



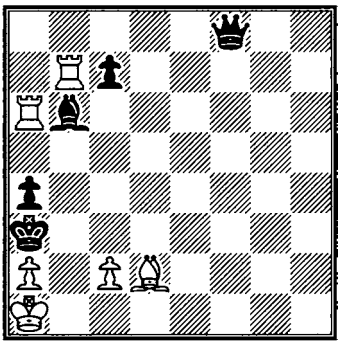
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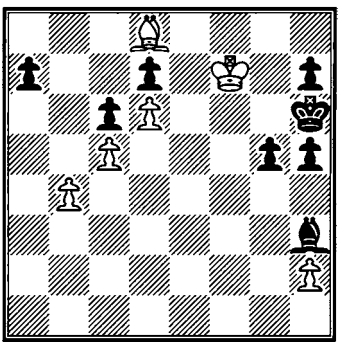
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(4)



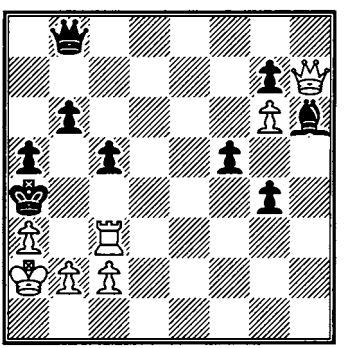
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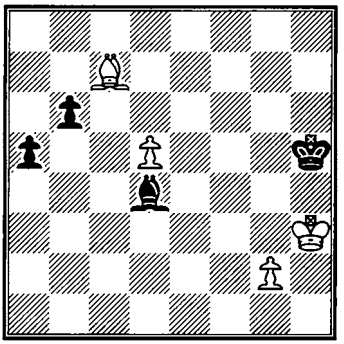
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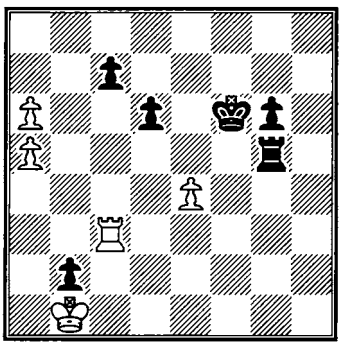
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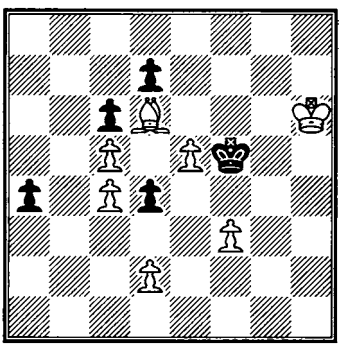
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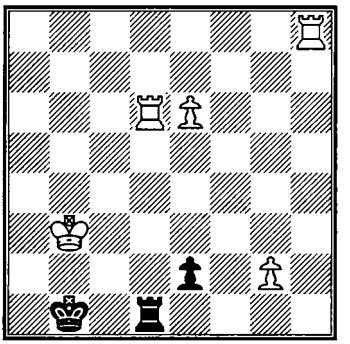
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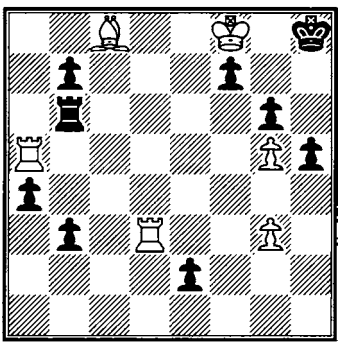
Win

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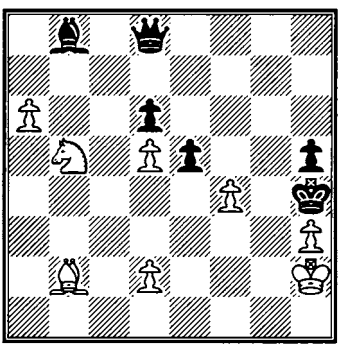
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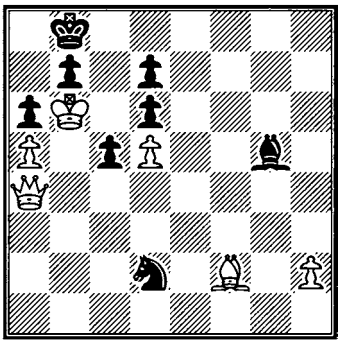
Win

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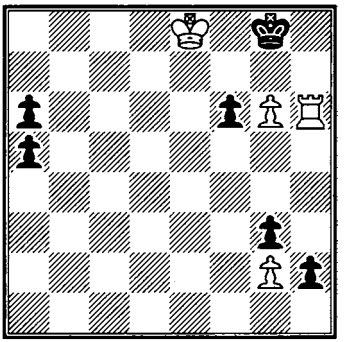
Win

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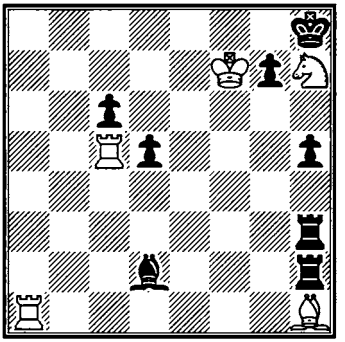
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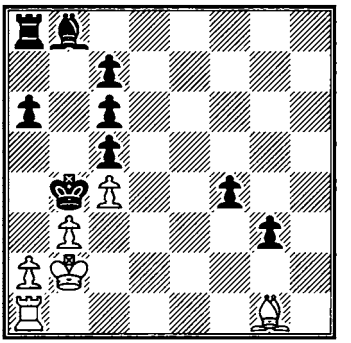
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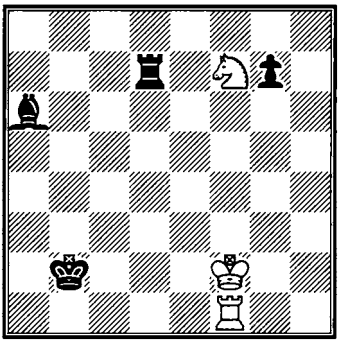
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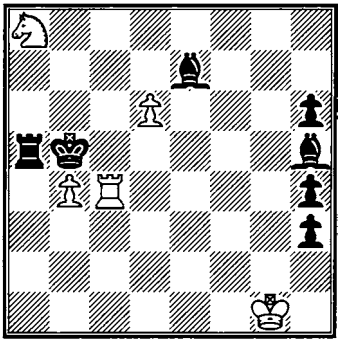
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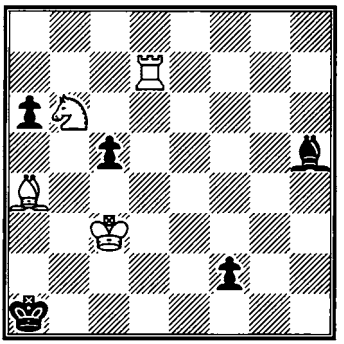
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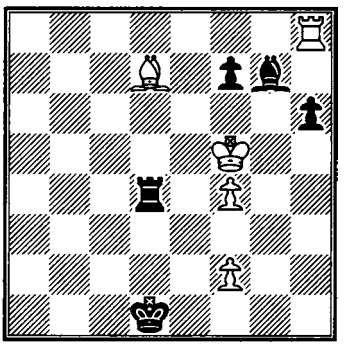
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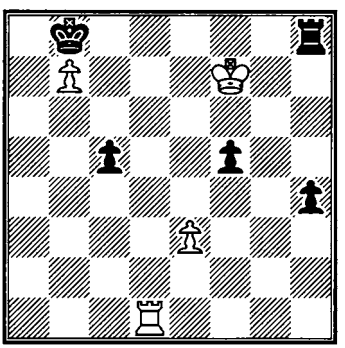
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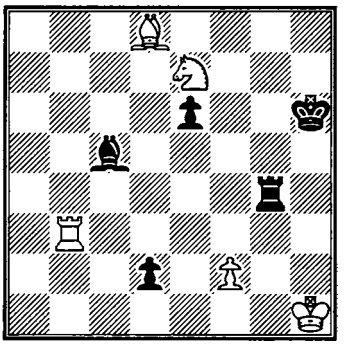
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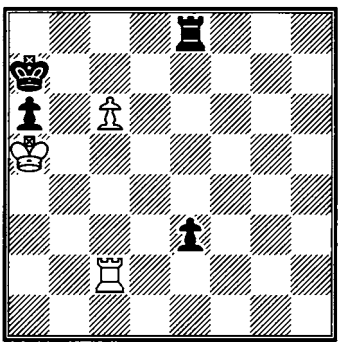
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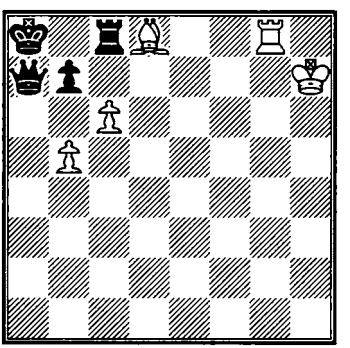
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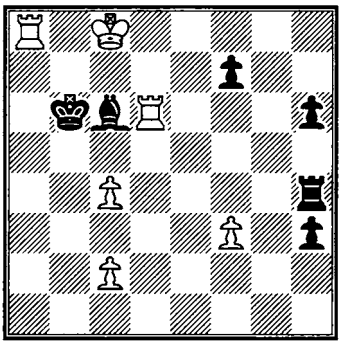
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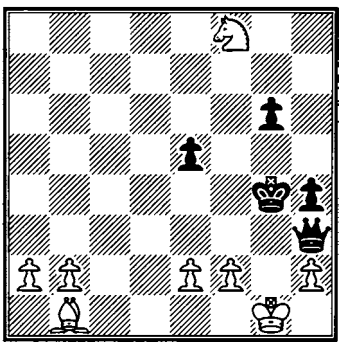
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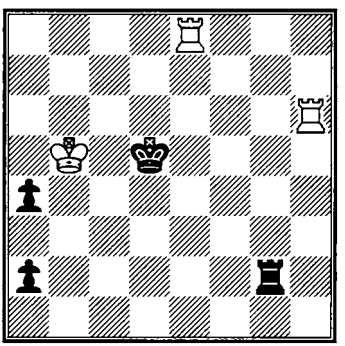
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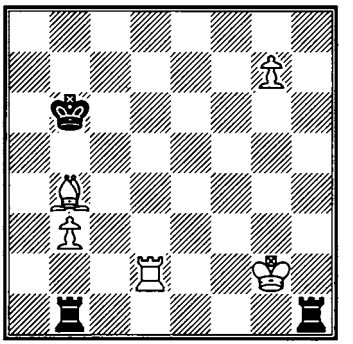
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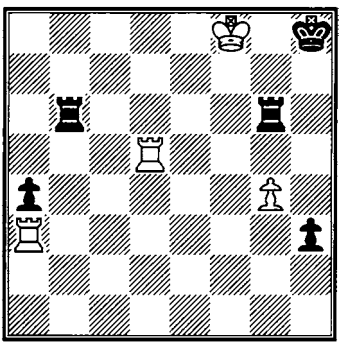
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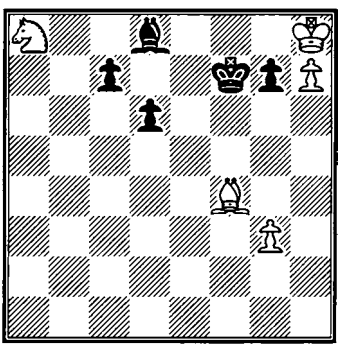
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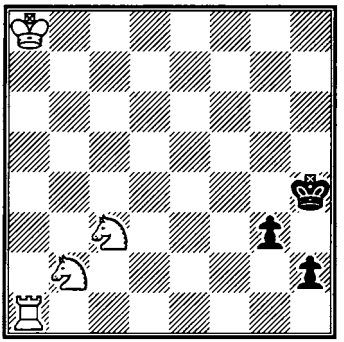
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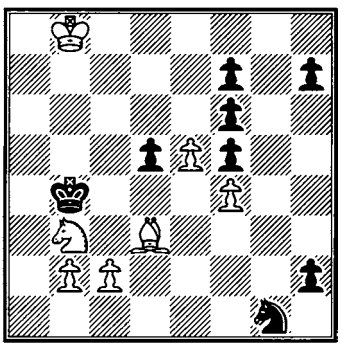
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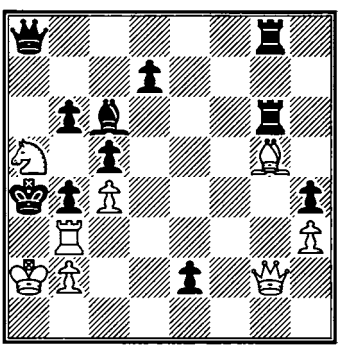
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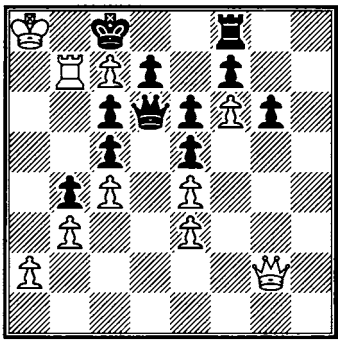
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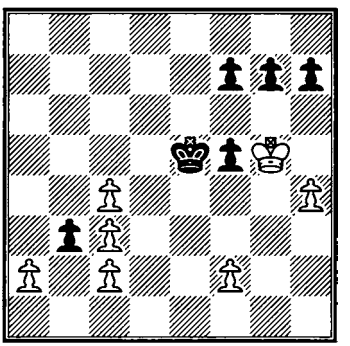
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Win

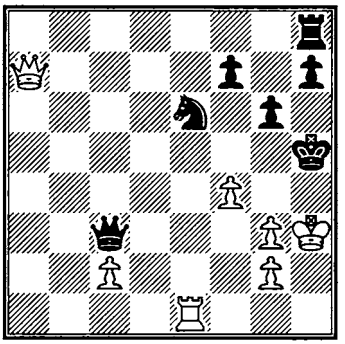
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Draw

Solutions

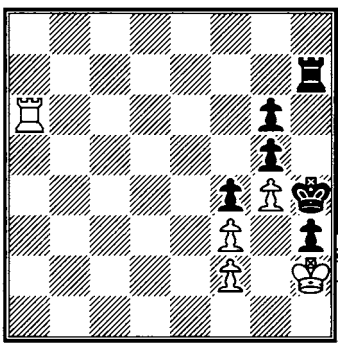
(1) 1935



White mates – but not, as might be expected, with the queen: with pawns!

1 ♖×e6! (1 ♕e7? is a mistake: 1...♘×f4+ 2 ♔h2 ♘×g2) **1...fe 2 ♕g7!!** (2 ♕e7? ♔h6=) **2...♕×g7** (2...♕e3 3 ♕×h8+–) **3 g4+ ♔h6 4 g5+ ♔h5 5 g4#**

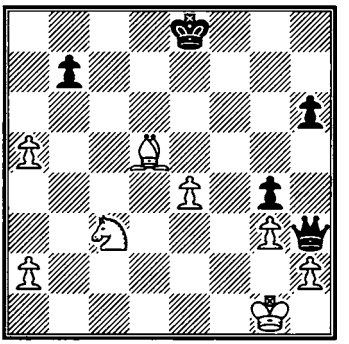
(2) 1935



1 ♖a8! (*zugzwang*: the enemy rook will have to go to the unfortunate h6-square)

1...♖h6 2 ♖a1! ♖h8 3 ♖g1 ♖a8 4 ♖g3! fg 5 fg#

(3) 1962

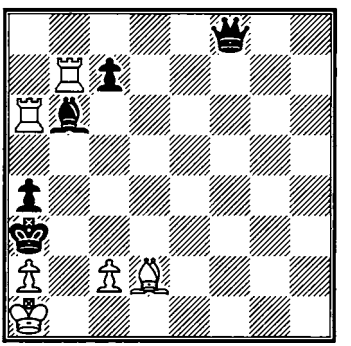


The spectacular sacrifice of two pieces by 1 ♗c6+!? bc 2 ♘d5! cd 3 a6 would let White's pawn queen. But after 3...♕h5 4 a7 de 5 a8♕+ ♔d7 6 ♕×e4 ♕c5+ 7 ♔g2 h5, Black keeps reasonable hopes for salvation in the pawn-down queen endgame.

The strongest plan involves trapping Black's queen.

1 a6! ba 2 ♗c6+ ♔d8 3 ♗e8! ♔×e8 4 ♘d5 ♔d8 (4...♕h5 ♘f6+) **5 ♘f4+–**

(4) 1935



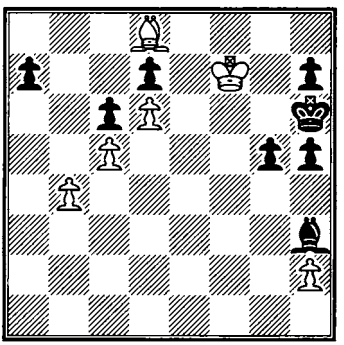
Black's king is endangered, but White must keep 1...♕f1+ in mind.

1 ♖a×b6! cb 2 ♖e7!!

2 ♖×b6? ♕f6+ leads to stalemate (as does 2...♕f1+ 3 ♖b1 ♕×b1+ 4 ♔×b1). But now White threatens 3 ♖e3#, and on 2...♕f1+, 3 ♖e1 decides.

2...♕×e7 3 c3, with the deadly threat of 4 ♗c1#.

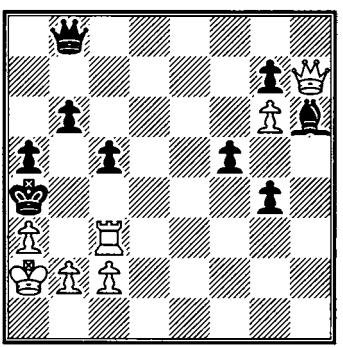
(5) 1936



Wotawa finds mating possibilities even in what appear to be the quietest of endgames. In order to get at the opposing king, White gives up all the pawns.

1 b5! cb 2 c6 dc 3 d7 (threatening 4 ♗×g5+) **3...♗×d7 4 h4! gh 5 ♗×h4**, and Black is defenseless against the threat of 6 ♔f6 and 7 ♗g5#.

(6) 1936



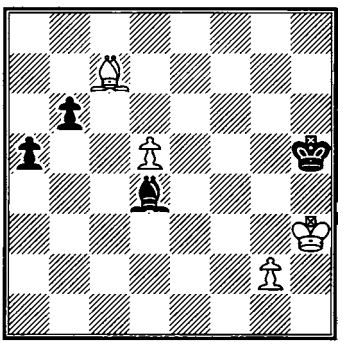
The mating scheme is obvious: c2-c4 and b2-b3#.

1 ♖h3!!

The choice of a square for the rook is dictated by the need to prevent the king from escaping the danger zone. Now 1...♔b5 would lose to 2 ♖×h6+−.

1...gh 2 ♕h8! (not the immediate 2 c4? ♕g3! −+) **2...♕×h8** (2...♕e5 3 c4 ♕e3 4 ♕e8+! ♕×e8 5 b3#) **3 c4+−**.

(7) 1951



White has a tactic that assures the queening of the b-pawn.

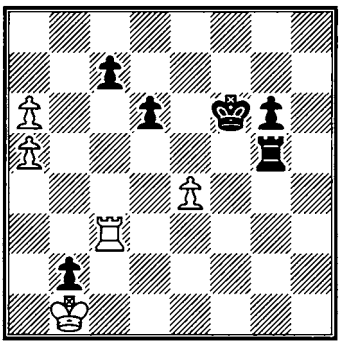
1 d6 ♗e5! 2 ♗b8! (threatening 3 d7) **2...♗f6 3 d7 ♗d8**

3...a4 4 ♗c7 a3 5 d8♕ ♗×d8 6 ♗×d8 a2 7 ♗f6+−.

Now 4 g4+? ♔g6 5 ♗g3 does not work in view of 5...♔f7! 6 ♗h4 ♗×h4 7 ♔×h4 ♔e7 8 g5 ♔×d7, and the black king is in the square of the g-pawn.

4 ♗g3! a4 5 ♗h4! ♗×h4 6 g4+

(8) 1959



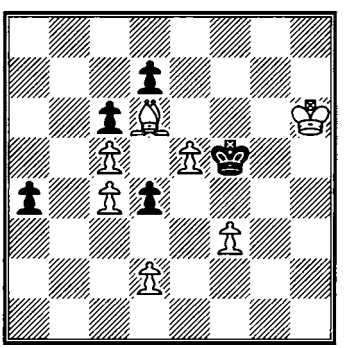
The a6-pawn will not queen by "normal" means, as shown by the variations 1 ♖a3? ♖h5 2 a7 ♖h8= and 1 ♔×b2? ♖×a5 2 ♖a3 ♖b5+ 3 ♔c3 ♖b8=. So White employs the idea of interference, which works in several variations.

1 ♖f3+! ♔e7

On 1...♔g7, White wins by 2 ♖f5!! gf 3 a7 +−, or 2...♖g1+ 3 ♔×b2 ♖h1 4 ♖f8! +−.

2 e5!! ♖×e5 (2...♖h5 3 ♖f8! +−) **3 ♖e3!** (and here is another standard technique: deflection!) **3...♖×e3 4 a7+−**

(9) 1944



Here, things look bleak for White, who cannot stop the a-pawn. One needs to have exceptional fantasy in order to find, in this harmless-looking endgame, the idea of playing for mate.

1 d3!!

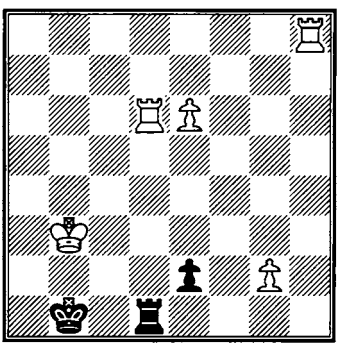
The right move-order is important. 1 e6? de 2 d3 e5! would lose.

1...a3 2 e6! de

If 2...♔×e6, then 3 ♔g6 a2 4 f4 a1♕ 5 f5#.

3 ♗e5! ♔×e5 (3...a2 4 ♗×d4 ♔f4 5 ♔g6+−) **4 ♔g5 a2 5 f4#**

(10) 1955



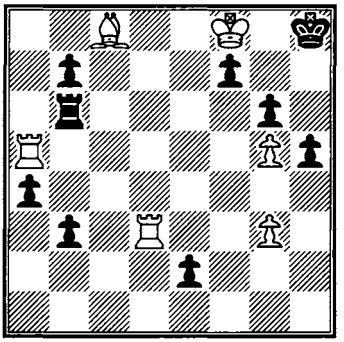
Here, 1 ♖hd8? ♖×d6 2 ♖×d6 e1♕ 3 e7?! (now 3 ♔c4 would be better) is a mistake, because of 3...♕e3+!. In the variation 1 e7? e1♕ 2 e8♕, Black is saved by 2...♕g3+! 3 ♔a4 ♕×d6=.

1 ♖d2!! ♖×d2 (1...e1♕ 2 ♖b2+ ♔c1 3 ♖c8+) **2 ♖h1+ ♖d1 3 ♖e1!! ♖×e1 4 e7 ♖d1**

4...♔c1 is no help: 5 e8♕ ♔d2 6 ♕d8+ ♔e3 7 ♕b6+ ♔d3 8 ♕d6+ ♔e3 9 ♕g3+, with mate in two moves after 9...♔d2.

5 e8♕ e1♕ 6 ♕g6+, and mate is inevitable.

(11) 1937



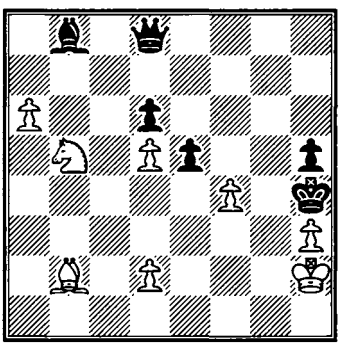
Black's pawns cannot be stopped. As usual with Wotawa, White plays for mate; and with that in mind, he spectacularly sacrifices all his pieces.

1 ♖e3! b2 2 ♗f5! gf 3 ♖b5!! ♖×b5 4 ♖e6!!

Of course not 4 ♔×f7? b1♕ 5 ♖e8+ ♔h7 6 g6+ ♔h6 7 ♖h8+ ♔g5 8 g7 ♕b3+.

4...fe 5 g6 e1♕ (5...h4 6 g7+ ♔h7 7 g8♕+ ♔h6 8 ♔f7) **6 g7+ ♔h7 7 g8♕+ ♔h6 8 ♕g7#**

(12) 1937

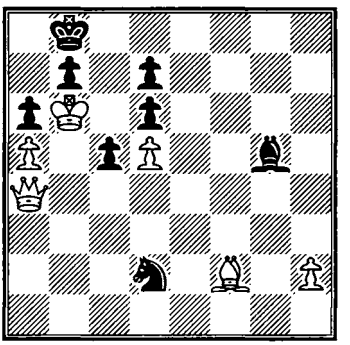


White can only bring his bishop or knight closer to the opposing king through the d4-square. The question is which piece to sacrifice, and which to keep.

If White plays the obvious 1 ♘d4? ed 2 ♗×d4, Black is saved by 2...♗a7! 3 ♗×a7 ♕b6! 4 ♗×b6 – stalemate.

1 ♗d4! ef! (1...ed 2 ♘×d4, with unstoppable mate) **2 ♗f2+ ♔g5 3 ♗h4+! ♔×h4 4 ♘d4** (threatening 5 ♘f3#) **4...♔g5 5 ♘e6+**

(13) 1937



1 ♗h4 ♗e3

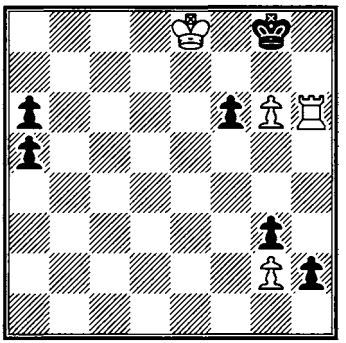
White stopped 1...♗d8#, but now the bishop has created a threat on the other diagonal (2...c4#).

2 ♗f2! ♗×f2 3 ♕f4 ♘c4+! 4 ♕×c4 ♗d4

What is to be done about the transfer of the black bishop via f6 to d8?

5 h3!! ♗f6 6 ♕h4! ♗×h4 – stalemate

(14) 1961



1 ♖h8+? (with the faint hope of 1...♔×h8? 2 ♔f7+−) would be useless, in view of 1...♔g7 2 ♖h7+ ♔×g6 3 ♖h3 ♔f5−+, or 2 ♔e7 a4−+ (2...f5−+).

Another way to lose would be 1 ♔e7? ♔g7 2 ♖h7+ (2 ♔e6 ♔×h6; 2 ♖h3 a4) 2...♔×g6 3 ♖h3 ♔f5−+.

1 g7! f5

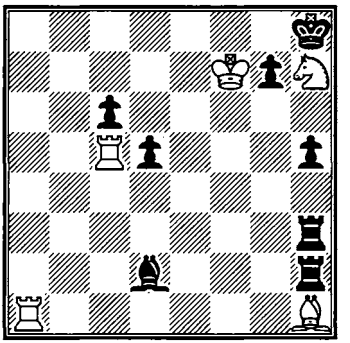
On 1...♔×g7, White would have enough time to destroy those dangerous kingside pawns: 2 ♖h3 ♔g6 (or 2...f5) 3 ♖×g3+ ♔f5 4 ♖h3+−. And nothing is changed by 1...a4 2 ♔e7 (threatening 3 ♔×f6) 2...♔×g7 3 ♖h3 a3 4 ♖×g3+ ♔h6 5 ♖h3+ ♔g5 6 ♖×h2 a2 7 ♖h1+−.

But now 2 ♔e7? is no longer dangerous to Black: 2...♔×g7 3 ♖h3 f4 4 ♔e6 a4 5 ♔e5 a3 6 ♔×f4 a2−+.

2 ♖h7!! f4 3 ♔e7 f3 4 ♔f6 ♔×h7 5 ♔f7 f2 6 g8♕ ♔h6 7 ♕g6#. ***(D)***

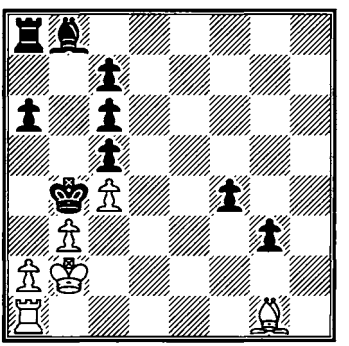
How does White weave a mating net around Black's king? By opening some lines, and closing others.

(15) 1950



1 ♘f6! gf 2 ♗e4!! de 3 ♖g5! fg (3...♗×g5 meets the same reply) **4 ♔g6+−**

(16) 1959



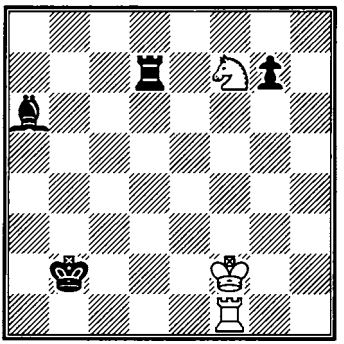
It is not hard to see that White has no mate in the lines 1 a3+? ♔a5 2 ♗×c5 ♗a7−+ or 1 ♖d1? ♗a7−+.

How about **1 a4!**. It is a quick mate after 1...f3 21 a5 f2 3 ♖a4#, or 1...♔a5 2 ♗×c5 ♗a7 3 b4#. The only question is how White continues the attack after

1...a5.

2 ♖c1!! ♗a7 3 ♗d4! (threatening 4 ♗c3#) **3...cd 4 c5 ♗×c5 5 ♖c4#**.

(17) 1952

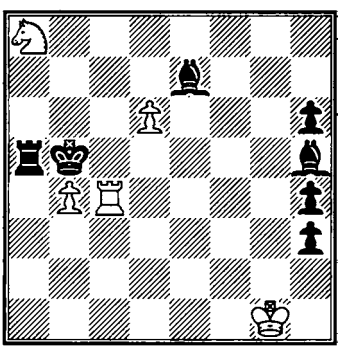


Two of White's pieces are attacked, and material loss cannot be avoided.

1 ♘e5 ♖d2+ 2 ♔e3 ♖e2+ 3 ♔d4 (3 ♔f4? ♖×e5−+) **3...♖×e5 4 ♖f6!!**

Now **4...gf** leads to a completely unexpected mid-board stalemate, while 4...♖a5 5 ♖g6 results in the loss of Black's last pawn.

(18) 1951



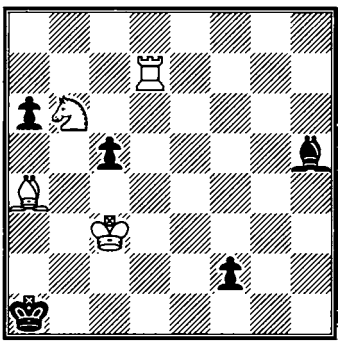
On 1 ba? h2+! 2 ♔g2 ♗f3+ 3 ♔×h2 ♗×d6+ 4 ♔h3 ♔×c4, Black retains a great advantage in material.

1 ♖c5+! ♔×b4 2 ♖×h5 (2 ♖×a5? h2+!) **2...♗g5!**

After 2...♖×h5 3 de ♖e5 4 ♘c7 ♖e1+ 5 ♔h2, the e7-pawn is indirectly defended by the threat of a knight fork at d5, while in the line 2...♖a1+ 3 ♔h2 ♗×d6+ 4 ♔×h3 ♖×a8 5 ♖×h4+ and 6 ♖×h6, Black loses the last pawn. But now, both 3...♖×a8 and 3...♗e3+ are threatened.

3 ♘c7 ♗e3+ 4 ♔h1 ♖×h5 5 d7 ♗g5 6 ♘d5+ ♔c5 7 ♘f4!=

(19) 1952



The f-pawn cannot be prevented from queening. This time, White cannot mate Black, so the play will have to be for stalemate.

1 ♗b5!! ab 2 ♘c4!!

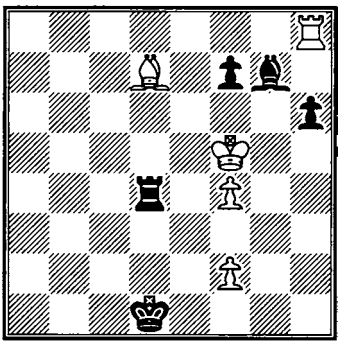
2 ♖a7+? ♔b1 3 ♘c4 would be inaccurate in view of 3...b4+!.

2...bc

Of course not 2...f1♕? 3 ♖a7+ ♔b1 4 ♘d2+ ♔c1 5 ♖a1#.

3 ♖a7+ ♔b1 4 ♖b7+ ♔c1 5 ♖f7!! (or 5 ♖a7 ♗g6 6 ♖f7!!) **5...♗×f7** – stalemate.

(20) 1957



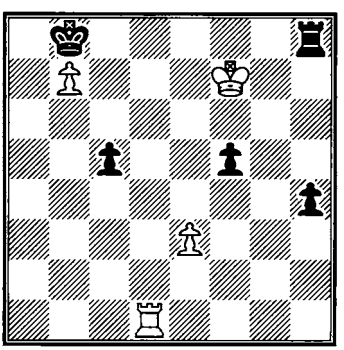
Two of White's pieces are attacked. It is easy to find the variation 1 ♖g8? ♖d5+! 2 ♔e4(g4) ♖×d7 3 ♖×g7 f5+, when the rook is lost.

1 ♖d8!! (threatening 2 ♗a4+) **1...♔d2** (1...♔c1 2 ♖c8+; 1...♔e1 2 ♖e8+).

What has White accomplished? On 2 f3?, Black plays 2...♖d6, with a winning *zugzwang*: 3 ♔g4 ♗f6−+, or 3 ♖g8 ♖d5+! and 4...♖×d7−+.

2 ♖g8! ♖d5+ 3 ♔e4(g4) ♖×d7 4 ♖×g7 f5+ 5 ♔f3! ♖×g7 – stalemate. This is the reason why the Black king had to be lured to d2!

(21) 1938

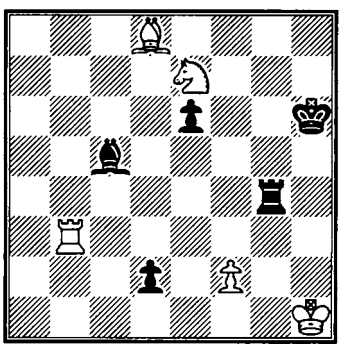


The rook endgame is difficult for White, as may be seen from the variation 1 ♔g7? ♖e8 2 ♖c1!? h3! 3 ♖×c5 h2 4 ♖c1 ♖×e3 5 ♔f6 f4 6 ♔f5 (6 ♖h1 ♖e2 7 ♔f5 f3 8 ♔f4 f2 9 ♔f3 ♖e1−+ is no better) 6...f3 7 ♔f4 ♖c3! 8 ♖b1 f2 9 ♔g4 ♖b3 10 ♖f1 ♔×b7−+.

1 e4!! fe 2 ♔g7 ♖h5 (2...♖e8 3 ♔f7 ♖e5 4 ♔f6 ♖h5 5 ♔g6, etc.) **3 ♔g6 ♖e5 4 ♔f6 ♖e8 5 ♔f7 ♖h8 6 ♔g7=**

An unusual picture: the rook, pursuing the king, ricochets off the corners of the e8-h8-h5-e5-square, and cannot win through to freedom.

(22) 1952



Black's passed pawn is very strong. If 1 ♖b1?, either 1...♖d4 or 1...♖c4 would win. If 1 ♘g8+?, Black can retreat the king either to h5 or to g6.

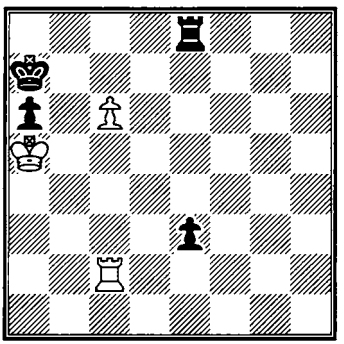
1 ♖d3? would be met by 1...♖h4+! 2 ♔g2 ♖d4−+. Why Black should not play 1...♖d4? immediately will become clear once we discover the main variation.

1 ♘f5+!! ef 2 ♖d3

2 ♖b1 ♖c4 is hopeless (Black could also win by 2...♖d4, but not by 2...♖e4? 3 ♗a5): 3 ♖g1 ♗×f2 or 3...♗e3 4 fe ♖c1.

2...♖d4 3 ♖×d2 ♖×d2 4 ♗g5+! ♔×g5 5 f4+, and the white king is stalemated.

(23) 1953



1 ♖e2? ♖e4! loses (Black cuts off the opposing king from its pawn): 2 c7 ♔b7 3 c8♕+ ♔×c8 4 ♔×a6 ♔c7 5 ♔b5 ♔d6. What else is there?

1 c7! ♔b7 2 c8♕+! ♖×c8

Here too, White cannot play 3 ♖e2? ♖e8 4 ♔b4 a5+! 5 ♔c3 (5 ♔×a5 ♔c6 6 ♔b4 ♔d5 7 ♔c3 ♔e4−+) 5...a4 6 ♔d3 a3−+.

3 ♖c4!! ♖g8

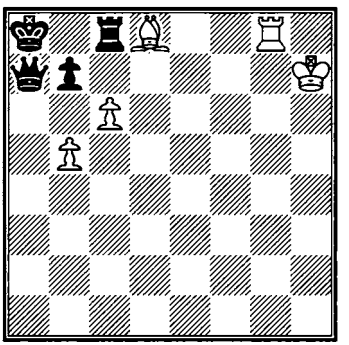
The rook is taboo, because of stalemate. Black cannot prevent it from getting behind the pawn: 3...♖e8 4 ♖e4!=. On 3...e2, White plays 4 ♖e4 ♖c2 5 ♔b4 a5+ 6 ♔b3! (but not 6 ♔×a5? ♔c6 7 ♔b4 ♔d5 8 ♖e8 ♖c4+ 9 ♔b3 ♖e4−+) 6...♖d2 7 ♔c3=.

4 ♖e4 ♖g3 5 ♔b4!

5 ♖e6? is a mistake: 5...♔c7 6 ♖×a6 ♔d7! 7 ♔b4 e2 8 ♖a1 ♖e3 9 ♖e1 ♔d6 10 ♔c4 ♔e5−+.

5...a5+ (5...♔c6 6 ♔c4 a5 7 ♔d3 changes nothing) **6 ♔c3! ♔c6 7 ♔d3 ♔b5 8 ♖×e3=**

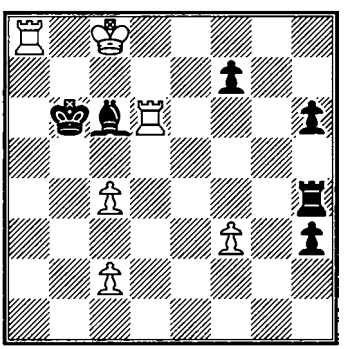
(24) 1941



In this study, we see the realization of a rare theme for Wotawa: setting up a fortress.

1 ♗b6! (1 b6? ♕a5−+) **1...♕×b6** (1...♕b8 2 ♖×c8 ♕×c8 3 c7=) **2 ♖×c8+ ♔a7 3 c7 ♕c5** (3...♕e6 is met the same way) **4 ♖a8+!! ♔×a8 5 b6=** The Black king is trapped in the corner, and the queen by itself can do nothing.

(25) 1952



On 1 ♖a1? ♔c5 2 ♖f6 h2 3 ♖h1 ♖h3 4 ♖×f7 ♗×f3 5 ♖×f3 ♖×f3, the position levels out.

1 ♖a4!

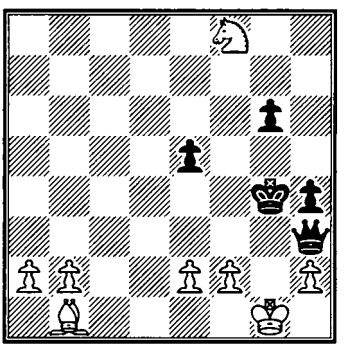
The rook waits in ambush: now 1...h2 cannot be played, because of 2 c5+ ♔×c5 3 ♖×c6+ ♔×c6 4 ♖×h4. And 1...♖h5 2 ♖×c6+ ♔×c6 3 ♖a6+ ♔c5 4 ♖a5+ does not help, either. There is only one move left, but it seems sufficient:

1...♔c5

Do you think it is easy to find, in this normal-looking position, a way to play for mate, especially a way that involves the immediate sacrifice of one of the rooks?!

2 ♖×c6+! ♔×c6 3 c3!! h2 (3...♔b6 or 3...♔d6 would be met by 4 c5+, and 3...♔c5 by 4 ♔c7) **4 ♖a6+ ♔c5 5 ♔c7 h1♕** (5...♖×c4 6 ♖a5#; 5...♔×c4 6 ♖a4+ and 7 ♖×h4) **6 ♖c6#**

(26) 1937



1 ♘×g6? ♔h5 2 ♘×e5 ♕c8 is a mistake, leading to an advantage for Black.

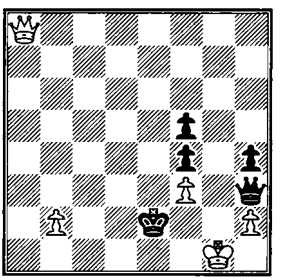
1 ♘e6! ♔h5

After 1...g5 2 ♗g6 e4, White has several ways to win, among them 3 e3 ♕f3 4 h3+! ♕×h3 5 ♘d4+−, or 3 ♘d4 ♔f4 4 ♗f5 g4 5 e3+ ♔e5 6 a4+−, or 3 ♗×e4 ♔h5 4 ♗f5 ♕×f5 5 ♘g7+.

2 ♗f5!! gf (2...♕×f5 3 ♘g7+) **3 ♘f4+! ef 4 f3**

Black's queen is imprisoned, and the a-pawn advances unhindered to its queening square.

4...♔g5 5 a4 ♔f6 6 a5 ♔e5 7 a6 ♔d4 8 a7 ♔e3 9 a8♕ ♔×e2

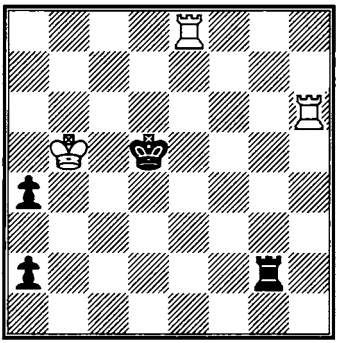


10 ♕a6+!

On 10...♔×f3, 11 ♕a3+ ♔g4 12 ♕×h3+ ♔×h3 13 b4 decides. And 10...♔d2 11 ♕d6+ ♔c2 (11...♔e2 12 ♕e5+ and 13 ♕×f4) 12 ♕×f4 (12 ♕a3+−) 12...♔×b2 13 ♕d2+ ♔b3 14 ♕g2+− is hopeless.

The composer gives: **10...♔e3 11 ♕b6+ ♔e2 12 ♕f2+ ♔d3 13 ♔h1!** (an accurate waiting move, forcing the king away from the f3-pawn) **13...♔c4 14 ♕g2+−**. I believe White has other ways to win, for example, 11 ♕e6+, aiming for the e5-square for the queen, in order to win the f4-pawn.

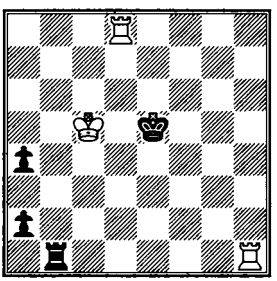
(27) 1948



1 ♖h1? would be met by 1...♖b2+ and 2...♖b1. And 1 ♖h5+? ♔d6 would be pointless.

1 ♖d8+! ♔e5 (1...♔e4? 2 ♖h4+ and 3 ♖×a4+−) **2 ♖h1 ♖b2+ 3 ♔c5! ♖b1**

Driving the king away from the center first by 3...♖c2+ 4 ♔b4 ♖b2+ 5 ♔a3 ♖b1 does not work: 6 ♖h5+ and 7 ♔×a2+−.

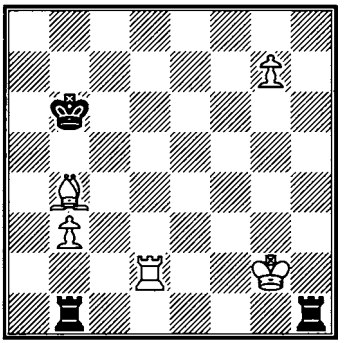


4 ♖f1!! (but not 4 ♖e1+? ♔f6)

Unexpectedly, the black king has fallen into a mating net in mid-board: 4...a1♕ allows 5 ♖e8#; and 4...♖×f1 is bad, because of 5 ♖e8+ followed by 6 ♖f8+ and 7 ♖×f1.

4...♔e6 5 ♖e8+ ♔d7 6 ♖fe1! a1♕ 7 ♖1e7#

(28) 1954



White cannot queen yet, because of the check at g1. How does White prepare to queen the pawn?

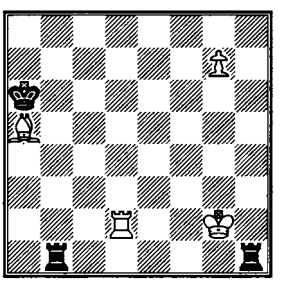
1 ♔g3!

Threatening 2 g8♕ ♖g1+ 3 ♖g2, White forces the opponent to capture the b3-pawn, which was only obstructing things. 1 ♔f3?!, with the same idea in mind, would be inaccurate, in view of 1...♖h3+ 2 ♔g4? (better to bring the king back to g2) 2...♖h7!=.

1...♖×b3+ 2 ♔g2! ♖bb1! 3 ♗a5+!

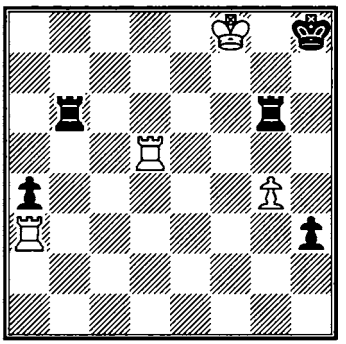
That is the point! A new idea has appeared: diverting the opposing rook from the first rank, as in the variation 3...♔×a5 4 ♖a2+ ♔b6 5 ♖b2+!.

3...♔a6



4 ♗b6!! (From here, the bishop controls the vital g1-square, so it must be taken.) **4...♔×b6 5 ♖b2+! ♖×b2+ 6 ♔×h1 ♖b1+ 7 ♔g2 ♖b2+ 8 ♔f3 ♖b3+ 9 ♔f4 ♖b4+ 10 ♔f5 ♖b5+ 11 ♔f6+−**

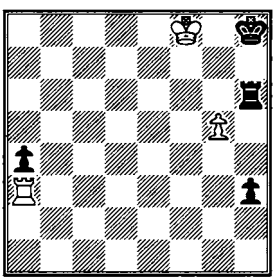
(29) 1955



White must give check on the h-file and trade off a pair of rooks. Any "normal" player would rather remove the dangerous passed pawn at h3, with check – but this costs White the win:

1 ♖×h3+? ♖h6 2 ♖×h6+ ♖×h6 3 ♖f5 a3 4 ♖f1 a2 5 g5 ♖h2 6 g6 a1♕! 7 ♖×a1 ♖f2+, or 3 g5 ♖a6 4 g6 (4 ♖d4 ♖a8+ 5 ♔f7 ♖a7+ 6 ♔g6 ♖a6+) 4...♖f6+ (4...♖a8+ 5 ♔f7 ♖a7+)

1 ♖h5+!! ♖h6 2 ♖×h6+! (2 ♖a×h3? ♖f6+) **2...♖×h6 3 g5**



3...♖h5

3...h2 would be bad: 4 g6! ♖h7 5 ♖h3! and 6 g7#. And 3...♖h4 is no better: 4 ♖f3 ♔h7 (4...h2 5 g6 ♖h7 6 ♖h3!+−) 5 ♖f6! (but not 5 ♔f7? h2 6 g6+ ♔h6) 5...h2 6 g6+ ♔h6 7 g7+ ♔g5 8 ♖f7 +−.

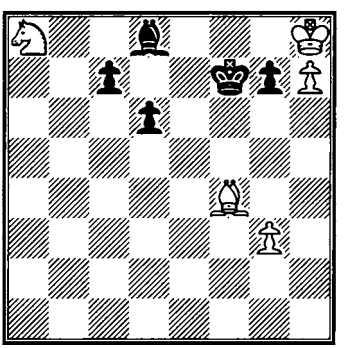
4 ♖f3! ♔h7 (on 4...a3 or 4...h2, 5 g6 decides) **5 ♔f7 h2 6 g6+ ♔h6 7 g7+−**

If 7...h1♕, then 8 ♖f6+!, and White's pawn queens with check.

White's task could be complicated somewhat by 7...♖f5+ 8 ♖×f5 h1♕. On 9 g8♕?! ♕b7+ 10 ♔f6 ♕b2+ 11 ♖e5 ♕f2+ 12 ♔e7 ♕a7+, and it would not be easy to shelter the king from checks. However, the endgame tables assure us the position is still winning: 13 ♔f8 ♕b8+ 14 ♖e8 ♕d6+ 15 ♔f7 ♕f4+ 16 ♔e6, and after traversing nearly the entire board, the king finally finds refuge – mate in 27!

Of course, it would be much simpler for White to play 9 ♖f6+! first, giving the king the safe g7-square: 9...♔h5 10 g8♕ ♕d5+ 11 ♖e6 (11 ♔g7?! ♕g5+) 11...♕b7+ 12 ♔f6 ♕f3+ 13 ♔g7 ♕c3+ 14 ♖f6, etc.

(30) 1936



White's king is trapped in the corner, at risk of getting mated by the enemy bishop. For example, 1 g4? loses at once to 1...g5!−+.

White cannot escape these difficulties by the diversionary knight sacrifice 1 ♘×c7? ♗×c7 2 g4. Black answers 2...g6! 3 g5 ♗b6, again threatening mate, and attempts to play for stalemate fall short: 4 ♗e3 (4 ♗e5 d5−+) 4...♗d8 5 ♗b6 ♗×g5 6 ♗d8 ♗h6 (6...♗f4 7 ♗f6 g5 is also strong) 7 ♗f6 ♔×f6 8 ♔g8 ♗g7−+, or 5 ♗f4 d5 6 ♗e3 ♗a5! 7 ♗d2 (7 ♗d4 ♗d2 8 ♗f6 ♗e3−+) 7...♗b6 8 ♗e3 d4−+.

And the desperate sacrifice of both pieces by 1 ♗e5? de 2 ♘b6 is also ineffective. Black has no reason to study the consequences of the variation 2...cb 3 g4 e4 4 g5 e3 5 g6+ ♔×g6 6 ♔g8 e2 7 h8♕ e1♕, when there is the far more convincing line 2...♗e7! 3 ♘d7 ♗d6! 4 g4 g5 or 4 ♘b6 e4.

1 ♘b6!! cb

After 1...♗f6 2 ♘d5 (2 ♘d7 is also possible) 2...♗d4! 3 ♗e3! ♗e5 (3...♗b2? would even lose: 4 ♗d2! c6 5 ♗c3) 4 ♗f4!, both sides are forced to repeat moves.

While after 1...g5 2 ♘d7! gf 3 gf, the forward advance of the f-pawn leads unavoidably to stalemate: 3...c5 4 f5 c4 (4...♗a5 5 ♘e5+ de 6 f6=) 5 f6 c3 6 ♘e5+.

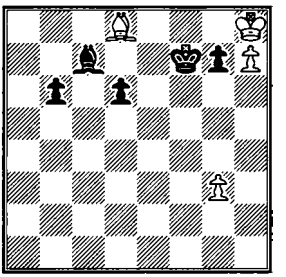
2 ♗g5!

2 g4? is a mistake: 2...b5! (the bishop wins its freedom) 3 ♗×d6 (3 g5 g6−+) 3...♗f6−+.

2...♗c7

If 2...♗×g5, then 3 g4 ♗f6 4 g5, stalemating after both 4...♗×g5 and 4...♗a1 5 g6+ ♔f8.

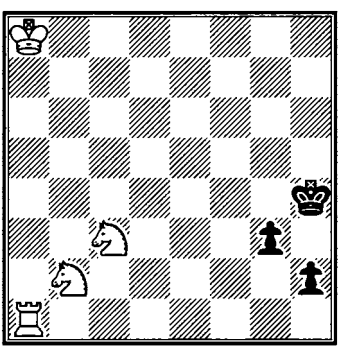
3 ♗d8!



A lovely position: Black's bishop, hemmed in by its own pawns, is unable to escape from the enemy bishop-gone-wild, and will eventually be forced to take it.

3...♗b8 4 ♗c7! (4 g4? b5! 5 ♗c7 b4!−+) **4...♗a7 5 ♗b8!** (5 g4? b5 6 ♗b6 ♗b8! 7 ♗c5 g6−+) **5...♗×b8 6 g4 d5 7 g5 ♗e5 8 g6+ ♔f8** – stalemate.

(31) 1960



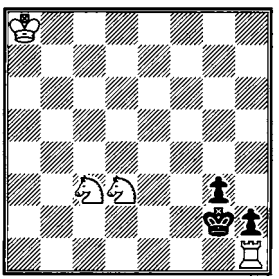
1 ♖h1! ♔h3

1...g2 loses: 2 ♖×h2+ ♔g3 3 ♖h8 g1♕ 4 ♘e2+, or 1...♔g4 2 ♘e2 ♔f3 3 ♘×g3 ♔×g3 4 ♘d3 (4 ♘d1) 4...♔g2 5 ♘f2.

But now, White must defend not only against 2...g2, but 2...♔g2 as well. 2 ♘e2? g2! 3 ♘f4+ ♔g3= would cost the win.

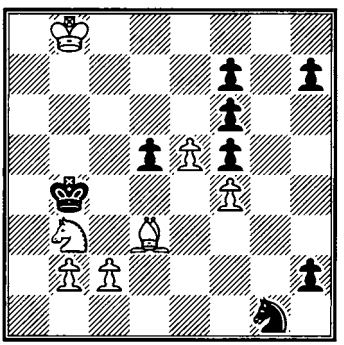
2 ♘d3! ♔g2

The 2...g2 threat is parried: 3 ♘f4+ ♔g3 4 ♘ce2+ ♔f3 5 ♖×h2 −+. But what has White prepared against the second threat?



3 ♘f4+! (White could also transpose moves: 3 ♘e2 ♔×h1 4 ♘df4) **3...♔×h1 4 ♘ce2! g2 5 ♘g3+ ♔g1 6 ♘h3#**

(32) 1958



And once again, White has nothing better than to attempt to weave a mating net around the opposing king with limited resources.

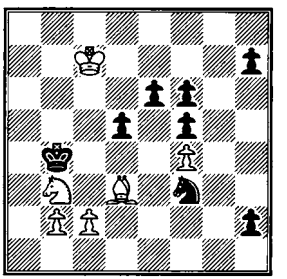
1 e6!!

The point of this mysterious-looking move is to close off the sixth rank and plug the e6-square. On the immediate 1 ♔c7?, Black replies 1...fe! (as will later become apparent, both 1...h1♕? 2 ♘d4! and 1...♘f3? 2 e6! are bad) 2 ♔b6 h1♕, followed by 3...♕h6+, or 2 fe ♘f3! −+.

1...fe (1...h1♕ 2 e7! +−) **2 ♔c7!**

On 2...h1♕ White wins by 3 ♘d4! (creating the threat of 4 c3+ ♔a5 5 ♘b3+ ♔a4 6 ♘c5+ ♔a5 7 b4#) 3...♕e4 (3...♘e2 4 ♗×e2) 4 c3+ ♔a5 5 ♘b3+ ♔a4 6 ♘c5+ ♔a5 7 ♗×e4 de (7...♔b5 8 ♗d3+ ♔×c5 9 b4#) 8 ♔c6, and 9 b4# cannot be prevented. Black also loses with 2...♘e2 3 ♗×e2 h1♕ 4 ♘d4 and 5 c3+.

2...♘f3

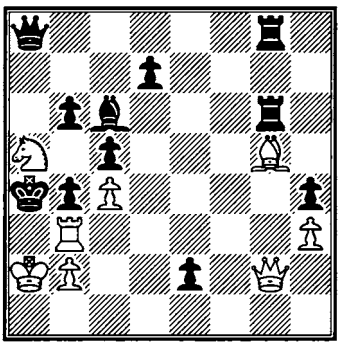


Now what? The d4-square is under control, and 3 ♔b6? is met by 3...♘e1! −+.

3 ♘c5!! (threatening 4 c3+ and 5 b4#) **3...♔×c5** (3...d4 4 ♔b6 h1♕ 5 ♘a6+ or 5 ♗b5) **4 c3 d4 5 b4+ ♔d5 6 c4#**

Black's king cannot go to e6 – the result of that far-seeing pawn sacrifice on the 1st move!

(33) 1959



1 ♗d2? (threatening 2 ♖a3+) is refuted by 1...♖g3! –+ or 1...♔×a5 2 ♖a3+ ♗a4 –+. 1 ♕f3? does not work: 1...♔×a5! 2 ♖a3+ ♗a4 –+ (or 2...ba 3 ♕×a3+ ♗a4 –+). 1 ♕×e2? ♔×a5! –+ is not dangerous; and on 1 ♘×c6? ♕×c6 2 ♗d2, the threat of 3 ♖a3+ ba 4 b3# is parried by 2...♖g3! –+.

The above variations demonstrate all of White's main attacking ideas. All remains to be done now is weave them together so cleverly that our opponent will have no loophole left.

1 ♘b7!! ♕×b7

On 1...♖×g5, simply 2 ♕×e2 ♖g3 3 ♕c2(d1) decides, or if 2...♕×b7 3 ♖a3+ (3 ♕c2 ♔a5 4 ♖a3+ is the same thing) 3...ba 4 ♕c2+ ♔a5 5 ♕c3+.

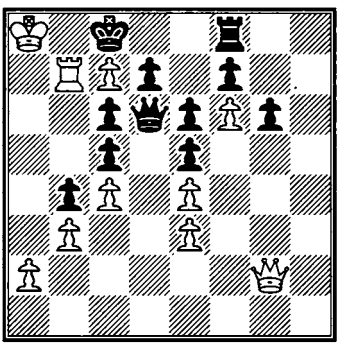
If 1...♗×b7, then 2 ♕f3!! (threatening 3 ♖a3+) 2...♗×f3 3 ♗d2! e1♕ 4 ♖a3+ ba 5 b3#.

2 ♕f3!! (but not 2 ♕×e2? b5 –+ or 2...♔a5 –+) **2...♗×f3**

2...♔a5 also loses quickly: 3 ♖a3+ ♗a4 4 ♕×b7 (4 ♖×a4+ ♔×a4 5 b3+ ♔a5 6 ♕×b7 +– would be just as good) 4...b3+ 5 ♖×b3 ♗×b3+ 6 ♔×b3.

3 ♗d2! e1♕ 4 ♖a3+ ba 5 b3#

(34) 1937

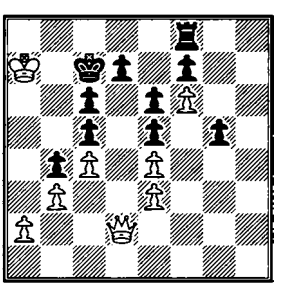


Black wants to play 1...♕×c7 2 ♖×c7+ ♔×c7+ 3 ♔a7 ♖b8, setting up a perpetual pursuit of the white king. The only way to break up this plan is...

1 ♔a7! ♕×c7! 2 ♖×c7+ ♔×c7 3 ♕d2!!

White lets slip the win on 3 ♕h2? ♖b8! 4 ♕×e5+ d6=. But now on 3...♖b8, White has prepared 4 ♕d6+!! ♔×d6 5 ♔×b8 g5 6 ♔b7 g4 7 ♔b6 g3 8 a3 g2 (8...ba 9 b4) 9 ab g1♕ 10 bc#.

3...g5



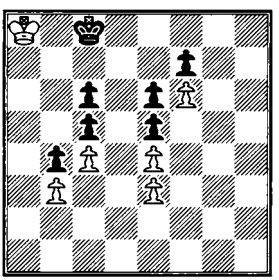
4 a4! (4 a3 ♖b8!=) **4...♖b8**

After 4...ba 5 ♕a5+, Black would lose quickly (5...♔d6 6 ♔b7 or 6 b4; 5...♔c8 6 ♔b6 d5 7 ♔×c6 or 7 ♕a8+).

And if 4...g4, White wins either by 5 ♕h2!? ♖b8 (5...d6 6 a5+−) 6 ♕×e5+ d6 7 ♕h5!+−, or 5 a5 g3 6 a6 ♖g8 (6...d6!? 7 ♕g2 ♖g8 8 ♕h3 g2 9 ♕h7+−) 7 ♕a2 g2 8 ♕a5+ ♔c8 (8...♔d6 9 ♔b7) 9 ♕b6+−.

5 ♕×d7+! ♔×d7 6 ♔×b8 g4 7 a5 g3 8 a6 g2 9 a7 g1♕ 10 a8♕ ♕g8+ 11 ♔b7 ♕×a8+ 12 ♔×a8 ♔c8

Now we enter a pawn endgame, in which White still has to demonstrate the win.



13 ♔a7 ♔c7 14 ♔a6 ♔d7 15 ♔b7 ♔d6 16 ♔b6 ♔d7 17 ♔×c5 ♔c7 18 ♔×b4 ♔b6 19 ♔a4

The immediate 19 c5+ ♔b7 20 ♔a5 ♔a7 21 b4 ♔b7 22 b5 cb 23 ♔×b5 ♔c7 24 ♔a4 (but not 24 c6? ♔d6! 25 ♔b6 – stalemate) 24...♔c6 25 ♔b4 is equivalent.

19...c5 20 b4 cb 21 ♔×b4 ♔c6 22 c5 ♔c7

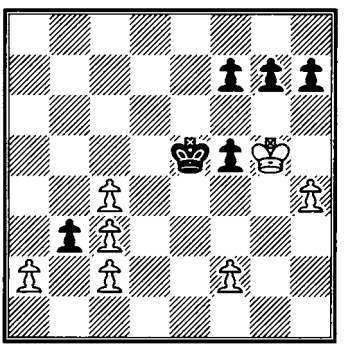
On 22...♔b7, White plays 23 ♔a5! ♔c6 24 ♔a6 ♔×c5 (24...♔c7 25 ♔a7) 25 ♔b7 ♔c4 26 ♔c6 ♔d3 27 ♔d6 ♔×e4 28 ♔e7+−.

23 ♔b5 ♔b7 24 c6+ ♔c8!

A well-known situation in pawn endgames: White must lose a move here, and does so by triangulating with the king.

25 ♔c4 (25 ♔b4) **25...♔c8** (25...♔c7 26 ♔c5 ♔c8 27 ♔d6 ♔d8 28 c7+) **26 ♔b4! ♔c8 27 ♔b5! ♔b8 28 ♔b6 ♔c8 29 c7 ♔d7 30 ♔b7 ♔d6 31 ♔b8+−** (or 31 c8♖ – just not 31 c8♕?, stalemate).

(35) 1963



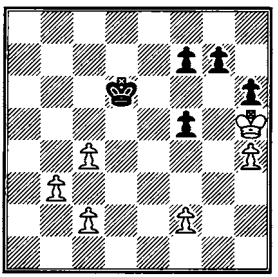
White must find some form of counter to Black's main threat, which is h7-h6+, followed by moving the king to h7 and g7-g6#. Black easily carries out this plan after 1 f4+? ♔e6 2 ab h6+ 3 ♔h5 ♔e7! 4 c5 ♔f8 5 c6 ♔g8 6 c7 ♔h7 7 c8♕ g6#.

And 1 cb? is no help: 1...h6+ 2 ♔h5 ♔d6! 3 c5+ (otherwise 4...♔e7) 3...♔×c5 4 b4+ ♔d6 5 b5 ♔e7 6 b6 ♔f8 7 b7 ♔g8 8 b8♕+ ♔h7−+ – and mate is again forced.

1 ab! h6+ 2 ♔h5 ♔d6!

2...♔e6? would not work: 3 c5 ♔e7 4 c6 ♔d6 5 c4 ♔×c6 6 b4+−.

3 c5+! (3 b4? ♔e7! −+) **3...♔×c5 4 c4 ♔d6**



5 c5+! (White gets rid of all the pawns, hoping for a stalemate.) **5...♔×c5 6 c4 ♔d6 7 c5+! ♔×c5 8 b4+ ♔d6** (8...♔×b4 9 f4=) **9 b5 ♔e7 10 b6 ♔f8 11 b7 ♔g8 12 b8♕+ ♔h7 13 ♕h8+! ♔×h8 14 f4**

To avoid the stalemate, Black must give up one of the two extra pawns, which means there is no longer a win.

14...f6 (14...g6+ 15 ♔×h6 ♔g8 16 h5=) **15 ♔g6 ♔g8 16 ♔×f5 ♔f7 17 h5 g6+** (17...♔e8 18 ♔g6 ♔f8 19 f5 ♔g8 is stalemate) **18 hg+ ♔g7 19 ♔g4! ♔×g6 20 f5+ ♔f7 21 ♔h5=**

Chapter 6

Challenge To A Duel
Mark Dvoretsky

My notebook of exercises contains several hundred excellent studies suitable for playing out – student versus teacher. Sometimes, at these training sessions, I have performed simultaneously, with clocks, against strong players: their challenge is to beat me (or to draw a difficult position) playing White in the study (with each participant playing a study of his own). Sometimes, I have had grandmasters sitting against me; sometimes, I have even played the entire national team of some European countries. Nevertheless, I have won all of these exhibitions, as in the majority of the games, my opponents made errors. And on the whole, it was not because the studies I used for this play were too complicated; it is just that, nowadays, chessplayers spend almost all their free time preparing openings, and never train the vitally important technique of calculating variations – this is the technique that lags behind, for them. Regular training in solving and playing out studies is a good recipe for eliminating that shortcoming.

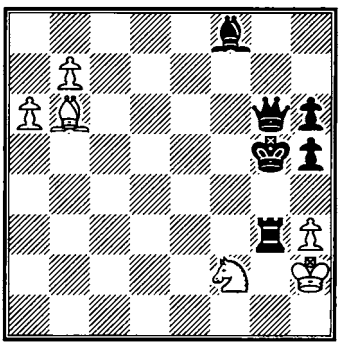
There are positions in my notebook (generally taken from practical games) which are useful for "two-handed play" – that is, training duels between two players. Studies which are useful for this form of training are a great rarity, for with accurate play, the black player in any study is destined to fail. Relative equality between the two sides generally only occurs when there is a lengthy struggle, in which both sides have chances to err. I should point out that certainly, not every study – not even a very complicated one! – is suitable for two-handed play: sometimes White has to resolve subtle, interesting problems, while Black's play largely depends on the opponent's actions – in such cases, the training becomes interesting and useful only for one of the participants.

In the introductory article, you will find two studies for two-handed play, and a few more that were presented in my books, *School of Chess Excellence 1 – Endgame* and *Dvoretsky's Analytical Manual*. Now I would like to acquaint you with some new examples of this genre from my notebook. The majority of them are quite complicated, and can only be used by highly-qualified players,

1. Sacrifice – Or Be Sacrificed!

I begin with some studies in which a violent combinative struggle flares up, leading to a rapid and spectacular finish.

O. Pervakov 1994



Win

1 b8♕

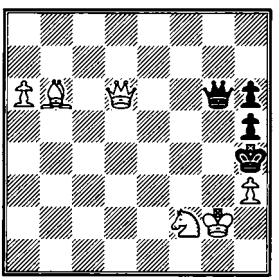
The natural move, which places the opponent in a very difficult situation: the rook and bishop are both attacked, and White also threatens deadly checks at e5 or d8. Black must find counterplay.

1...♗d6! 2 ♕×d6!

After 2...♕×d6 3 ♘e4+ ♔h4, then 4 ♘×d6 ♖×h3+ 5 ♔g2 ♖a4 6 a7, with ♘b5-c7 to follow, is probably enough to win; but we do not need to check out that variation, since 4 ♗f2! wins right away.

2...♖g2+! 3 ♔×g2 ♔h4!+

Taking the queen is stalemate; and on other moves, Black takes on d6, since he no longer has the knight fork to worry about.



4 ♘g4!! ♕×d6 5 ♘e5!!

Both of White's pieces are *en prise*, but that does not make it any easier for the opponent. The threat is now 6 ♘f3 mate. On 5...♔g5, the fork 6 ♘f7+ is decisive. Black also loses the queen in the line 5...♕d2+ 6 ♗f2+ ♔g5 7 ♘f3+.

5...♕×e5 6 ♗d8+ ♕g5 7 ♗×g5+, followed by 8 a7.

Let's imagine the possible path of logic followed by players who take the trouble to play through this study.

White's first two moves should be played quickly – it is enough to see that they create enormous problems for the opponent, and that there is nothing better available. This is why this kind of study should be played out, rather than solved. During the training process, we learn not only to seek out hidden ideas, and analyze their consequences, but also to save time by avoiding unnecessary calculations, studying only those variations which will have a bearing on our decision. Our opponent's search for a saving resource in this case is his problem, not ours.

Black needs to be resourceful in order to find the pretty defensive idea. He does not need to test it out carefully to find the hidden refutation – once again, since there is no alternative. Then comes the rook sacrifice, the king goes to h4, and once again, the ball is in White's court.

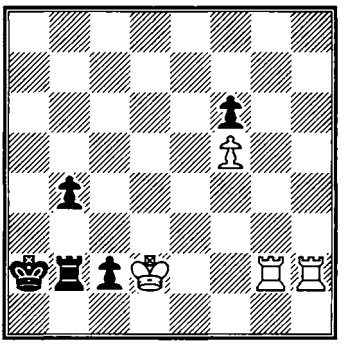
In a practical game, after running into this kind of surprise, a player often decides that the draw is unavoidable. However, since it is never too late to agree to a draw, the White player is obliged to test all his possibilities out carefully first. Suddenly, a revelation: two spectacular knight jumps, and the opponent is defenseless.

In simplest terms, first Black, then White had to solve just one task each. The "game" ended up being too short; thus, although such examples are good for training play, we still ought to lean more toward those studies in which the players must find more than one strong, unexpected move. ***(D)***

1 ♔c1!

An obvious first move, parrying the threat of 1...♔b1. Of course, 1 ♖g1?

V. Kovalenko 1968



Win

would not have worked, in view of 1...c1♕+ 2 ♔×c1 ♖×h2 −+.

1...b3

After 1...♔a1 2 ♖×c2 b3, we transpose back into the main line; while 2...♖b1+ 3 ♔d2 b3 leads by force into a lost rook endgame for Black: 4 ♖c6! ♖b2+ 5 ♔c3 ♖×h2 6 ♔×b3 ♖h3+ 7 ♔c4 ♖h6 8 ♔d5. But now, the game gets sharper, and both players must show accuracy and resourcefulness.

2 ♖×c2! ♔a1!

Black leaves the rook *en prise*, since taking it would be stalemate. Both 2...♖×c2+ 3 ♖×c2 bc 4 ♔×c2 and 2...bc 3 ♖×c2 ♔a1 4 ♖c6 would be hopeless.

3 ♖ce2!

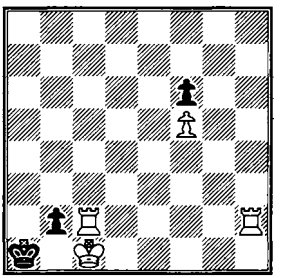
An exact choice of squares. Of course 3 ♖cd2 ♖b1# is bad; and on 3 ♖cf2? ♖×f2 4 ♖×f2 b2+, the game would end in a draw. Now trading the rooks on e2 instead allows White to enter a won pawn endgame: 3...♖×e2 4 ♖×e2 b2+ 5 ♔d2 b1♕ 6 ♖e1 ♕×e1+ 7 ♔×e1 ♔b2 8 ♔d2! (the last move of this variation illustrates a vital endgame idea: the "shoulder-block").

But the battle is not yet over: Black finds a new argument.

3...♖c2+! 4 ♖×c2

On 4 ♔d1? b2 5 ♖×c2 b1♕+ 6 ♖c1 ♖×c1 7 ♔×c1, it is stalemate.

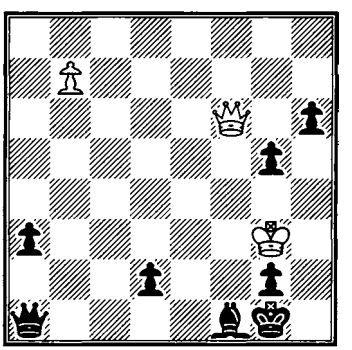
4...b2+



It looks as though Black has achieved the goal: any king move allows the same stalemate as in the variation just examined: 5...b1♕ 6 ♖c1 ♕×c1+ 7 ♔×c1. But White has not yet put forth all arguments in this heated discussion.

5 ♔d2! b1♕ 6 ♖h1!! ♕×h1 7 ♖c1+ ♕×c1+ 8 ♔×c1 +−

V. Razumenko 1987



Win

1 ♕b6+!

This appears to end the game before it has even begun (1...♔h1 2 ♕×h6+ and 3 ♕h2#). Note that none of the other moves even lets White have a draw: 1 ♕f2+? ♔h1, or 1 ♕×a1? ♔h1 2 b8♕ (2 ♕d4 d1♕) 2...g1♕+.

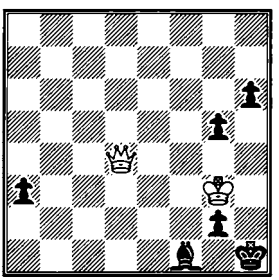
1...♕d4! 2 ♕×d4+ (2 b8♕? d1♕−+) **2...♔h1 3 b8♕ d1♕!**

A decoying maneuver. Taking the queen loses: 4 ♕×d1? g1♕+ 5 ♔f3 ♗g2+ 6 ♔e2 ♗f3+.

4 ♕g1+! ♔×g1 5 ♕b6+

Déjà vu: it is almost the same situation as after White's first move. So we already know what the reply will be:

5...♕d4! 6 ♕×d4+ ♔h1



The exchange of blows has ceased; now it is time for a battle of maneuvering. White must keep up the mating threats, while simultaneously preventing the g-pawn from queening.

7 ♕d5!

The accurate choice! 7 ♕e4? h5 8 ♕f3 (8 ♔f2? g4 would even lose) 8...g4 9 ♕d5 h4+ 10 ♔×h4 ♔h2= would not be enough (Black could also play 10...♗c4 11 ♕e4 ♗d3 12 ♕a8 ♔h2!=).

7...h5

7...a2 8 ♕f3 g4 9 ♕d5 is just bad.

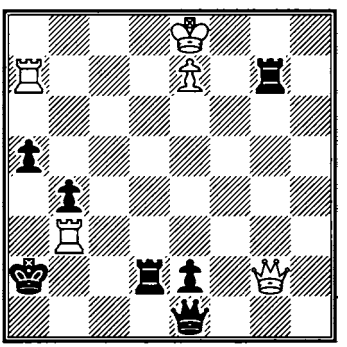
8 ♔f2! h4 9 ♕f3

But not 9 ♕×g5? h3 10 ♕g3 h2 11 ♕f3 a2−+.

9...♔h2 10 ♕g4 a2 11 ♕×g5

And the rest is simple: 11...♔h3 12 ♕f5+ ♔h2 13 ♕g4 a1♕ 14 ♕×h4#.

I. Hoch 1980



Win

Who stands better? White's queen and rook at b3 are both under attack; and it is easy to see that after 1 ♕×g7 ♔×b3, the best that can be hoped for is a draw. We can quickly dispose of the attempt to get in a few checks by 1 ♖×a5+ ♔×b3 2 ♕f3+, seeing that the opponent gains the upper hand after 2..♔b2 3 ♕f6+ ♖d4! 4 ♕×d4+ ♕c3.

1 ♖×b4!

Threatening 2 ♖×a5#. Black has no easy defense; some pieces will have to be sacrificed for the defense, which clearly means that this is the way White should play it.

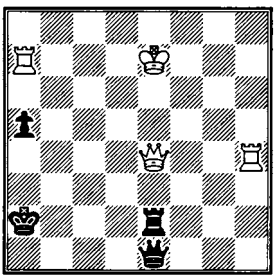
1...♖×e7+! 2 ♔×e7 ♕h4+! 3 ♖×h4 e1♕+

Our opponent has defended cleverly. Now White has to decide whether to interpose the rook or the queen at e4.

4 ♕e4!

This way, White continues to play for the win, whereas 4 ♖e4? ♖×g2 5 ♖×e1 ♖g7+ 6 ♔d6 ♖×a7 would lead to a drawn rook endgame.

4...♖e2



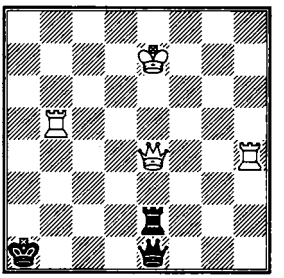
Now 5 ♖h2 looks attractive, creating a double pin (this bit of tactics is sometimes referred to as a "Maltese Cross"). But Black pays White back with the same coin: 5...♕b4+!.

5 ♖×a5+ ♔b2 6 ♖b5+!

As before, White cannot play 6 ♖h2 ♕b4+!. And 6 ♖e5? would be premature, in view of 6...♖×e4 7 ♖h×e4 ♕h1=. So White takes control of the b4-square, intending to resort to the "Maltese Cross" in the variations 6...♔a2 7 ♖h2! or 6...♔a3 7 ♖h3+ ♔a2 8 ♖h2!. Black's king cannot retreat to the c-file either: 6...♔c1 7 ♖b1+, or 6...♔c3 7 ♖h3+ ♔d2 8 ♖b2+. That leaves only one defense:

6...♔a1! ***(D)***

Black's last move sets a trap: on 7 ♖b1+? ♕×b1 8 ♕×e2, there is no

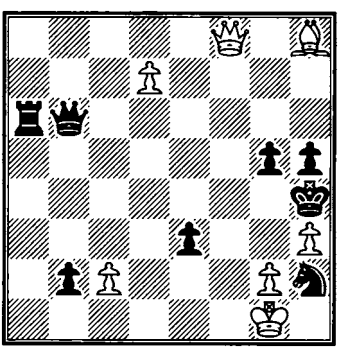


perpetual, but after 8...♕b4+! 9 ♖×b4, it is stalemate.

7 ♖e5!! ♖×e4 8 ♖h×e4

Now we see the point of the *zwischenschach* on b5: the queen can no longer retreat along the first rank, and it has no other safe squares. For example: 8...♕g3 9 ♖e1+ ♔b2 10 ♖5e2+ ♔c3 11 ♖e3+.

J. Rusinek 1971



Win

A very sharp position, with both kings in danger. White cannot win with a series of checks: 1 g3+? ♔×h3 (not, of course, 1...♔×g3?? 2 ♗e5+) 2 ♕f5+ ♘g4 3 ♕f1+ ♔×g3 4 ♕g2+ ♔f4−+. We can also reject 1 ♔×h2? ♕c7+, while 1 d8♕? actually has two refutations: 1...♕×d8 2 ♕×d8 ♘f3+! 3 gf b1♕+ 4 ♔g2 ♕×c2+, or 1...e2+ 2 ♔×h2 (2 ♕×b6 e1♕+ 3 ♔×h2 ♕g3+ 4 ♔g1 ♖×b6) 2...♕g1+! 3 ♔×g1 e1♕+.

1 ♗e5!

White's only acceptable continuation, threatening 2 ♔×h2, as well as 2 g3+ ♔×h3 3 ♕f5+. The immediate 1...g4? is impossible, owing to 2 d8♕+, while the attempt to prepare this move by 1...♘f3+? is easily rebuffed: 2 ♕×f3 g4 (2...b1♕+ 3 ♔h2 g4 4 d8♕+ ♕×d8 5 ♕×e3+−) 3 d8♕+ ♕×d8 4 ♕×e3 b1♕+ 5 ♔h2+−. Nor does 1...b1♕+? 2 ♔×h2 ♕g1+ 3 ♔×g1 e2+ work, as White has either 4 ♕f2+ ♕×f2+ 5 ♔×f2, or 4 ♔h2 ♕g1+ 5 ♔×g1 e1♕+ 6 ♕f1+−. That leaves only...

1...e2+! 2 ♔×h2 ♕g1+! 3 ♔×g1

Now 3...e1♕+ looks good, forcing 4 ♕f1 (4 ♔h2?? ♕×e5+). The line 4...♕e3+ 5 ♕f2+ ♕×f2+ 6 ♔×f2 is just hopeless for Black: 6...♖f6+ 7 ♔g1! (7 ♗×f6 b1♕ 8 ♗×g5+! ♔×g5 9 d8♕+ is also possible) 7...b1♕+ 8 ♔h2+−. And on 4...♕×f1+, rather than taking the queen, White plays 5 ♔h2!, creating threats of 6 g3# and 6 ♗g3#. The only defense then is 5...♕f2, when there follows 6 d8♕ (threatening the deflecting 7 ♕d4+!) 6...♖a4 7 ♕b6! (the most energetic), and the game is over.

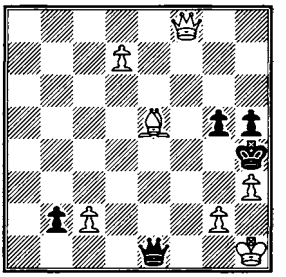
Note that after 6 d8♕, the black king has no moves, which means there might be a stalemating possibility. Black need only jettison all the pieces in time.

3...♖a1+! 4 ♔h2 ♖h1+! 5 ♔×h1 e1♕+

White's task is a little simpler after 5...b1♕+ 6 ♔h2 ♕h1+ 7 ♔×h1 e1♕+ 8 ♕f1!+−. ***(D)***

6 ♕f1!

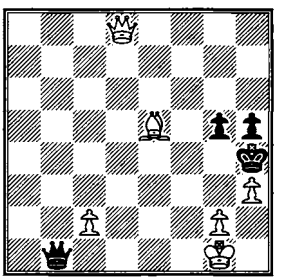
An obvious sacrifice (6 ♔h2?? ♕×e5+), but still pretty.



6...♕×f1+ (6...b1♕ 7 g3+) **7 ♔h2 ♕f2 8 d8♕**

On 8...b1♕, the solution is the deflection we already know: 9 ♕d4+!. Playing for stalemate is all that Black has left.

8...♕g1+! 9 ♔×g1 b1♕+



On 10 ♔h2? ♕g1+, or 10 ♔f2? ♕e1+ 11 ♔f3 ♕e3+, the defense triumphs.

10 ♕d1!!

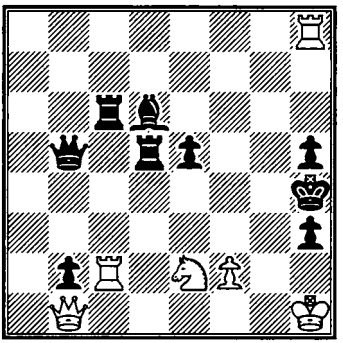
In order to unpin the g5-pawn, White willingly gives up the last queen.

10...♕×d1+ 11 ♔h2 g4 (White threatened 12 g3# or 12 ♗g3#) **12 ♗f6#**.

Probably, from the viewpoint of the professional composer, this study seems somewhat crude, but for practical training purposes, it serves very well.

Naturally, this kind of exchange of blows can also occur in drawing studies.

M.van Essen, Y.Afek, A.Wuhl 2005



Draw

1 ♖×b2

The strong pawn must be eliminated. On 1...♕d3, White could enter the endgame by 2 ♕×d3 ♖×d3 3 ♘g3, but there is no guaranteed draw here, as Black retains a sizable advantage. So it makes sense to calculate the forcing play that begins with the move 2 ♖b4+!.

(A) 2...♗×b4 3 ♕×b4+ ♔g5 (on 3...e4 4 ♕e7+ ♖g5, there is 5 ♖×h5+! ♔×h5 6 ♘f4+ and 7 ♘×d3, with equality) 4 ♕e7+ (4 ♖g8+!?; 4 f4+!?) 4...♔g4 5 ♖g8+ ♖g6 6 ♕b4+ ♔f3 7 ♘g1+ ♖×g1+ 8 ♖×g1, with a likely draw.

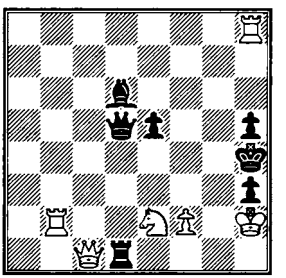
(B) 2...♔g5 3 ♕g1+ ♔f6 4 ♖b3! ♕e4+ (4...♕×b3? loses to 5 ♖h6+ ♔f7 6 ♕g6+) 5 ♔h2, and Black will more than likely have to exchange queens at g2, either right away or after 6 ♘g3, with a drawn ending.

Black really does not have to analyze these variations in every detail – it is enough to ensure that the opponent retains reasonable defensive possibilities. Then, concentrating on the search for other resources, the following pretty double-rook sacrifice may be discovered, in order to clear the a8-h1 diagonal.

1...♖c1+! 2 ♕×c1 ♖d1+! 3 ♔h2

The second rook is taboo: 3 ♕×d1? ♕c6+, with mate on g2. But now 3...e4+? fails to 4 ♘g3+–. Atempting prepare this check by 3...♕×e2?! (4 ♖×e2? e4+) is parried by the spectacular 4 ♕g5+!! ♔×g5 5 ♖×e2=. White is also safe after 3...♕d3 4 ♕×d1 ♕×d1 5 ♘g3.

3...♕d5!



There is no "normal" defense against the mates at g2 or h1; White's only salvation lies in checking, and one piece after the other must be sacrificed to this end.

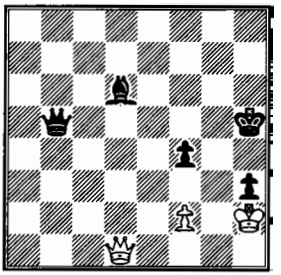
4 ♖×h5+! ♔×h5 5 ♘f4+!

But not 5 ♘g3+? ♔g6 6 ♕c2+ ♖d3! –+. It is important to get the enemy pawn off the fifth rank, to enable the following deflection of the queen.

5...ef 6 ♖b5! ♕×b5 7 ♕×d1+ ***(D)***

This appears to do the trick: on the following move, the queen grabs the bishop. Sadly, no!

7...♕e2!! 8 ♕×e2+ f3+

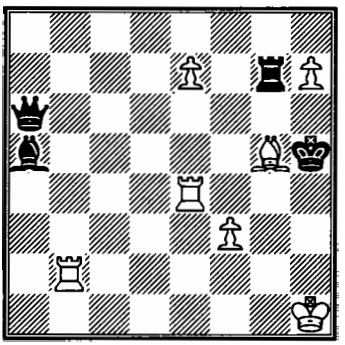


But the final conclusion of this engrossing debate falls, nevertheless, to White.

9 ♕e5+!! ♗×e5+ 10 ♔×h3=

If Black avoids the stalemate by removing the bishop from the b8-h2 diagonal, the last pawn is lost.

D. Gurgenidze 1985



Black to move. Draw

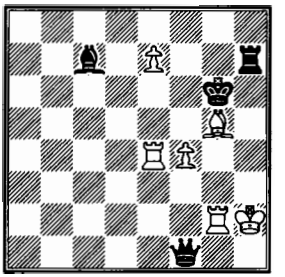
Two pawns on the verge of queening, and with check. Black's only chance lies in an attack on the enemy king.

1...♕f1+! 2 ♔h2 ♗c7+ 3 f4 ♖×h7!

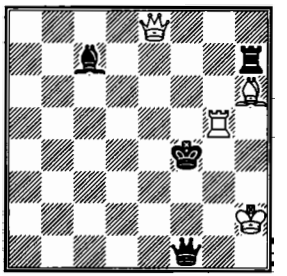
One pawn eliminated – and queening the other allows an immediate mate: 4 e8♕+? ♔g4+.

4 ♖g2! ♔g6+

On 5 ♔g3?, Black wins by 5...♕d3+. White's last hope is a discovered check.



5 ♗h6+! ♔f5! (5...♔f6 6 ♖e6+!) **6 ♖g5+ ! ♔×e4 7 e8♕+ ♔×f4!**



In such extremely sharp situations, the battle's outcome usually depends on who can start checking first. It is White's move, but the king stands on the same diagonal as the black bishop. White has to think of something...

9 ♕e3+!! ♔×e3+ 9 ♖g3+

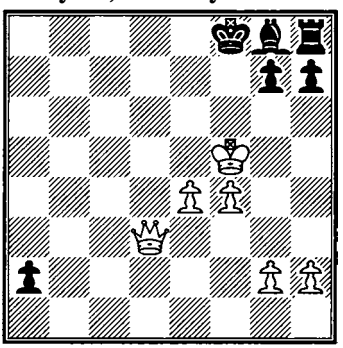
The last check is not only discovered – it is a double: neither one of White's pieces may be taken. And after the king retreats, they will be pinned, and it will be stalemate!

2. Accurate Calculation

This training in playing through the studies so far presented is directed at developing resourcefulness, fantasy (in chess, these qualities are called "combinative acuity"), and a readiness to sacrifice material, in pursuit of the goal.

Let's move on and look at some examples which might seem less spectacular (even though they are hardly any less beautiful), in which the primary consideration becomes the skill of calculating variations attentively and accurately. On the other hand, you will not succeed with these without demonstrating sharp combinative acuity, because unexpected combinations lie at the heart of most good studies.

V. Kozyrev, S. Rumyantsev 1989



Black to move. Draw

The direct 1...a1♕? leads to a perpetual check by 2 ♕d8+ ♔f7 3 ♕d7+ – but Black has the right to try to win.

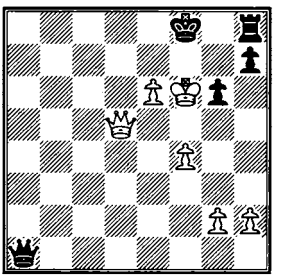
1...g6+!

Now if the king advances to f6, the pawn queens with check. Worse still is 2 ♔g5? a1♕ 3 ♕d8+ ♔g7 4 ♕e7+ ♗f7−+, when the checks run out.

2 ♔f6! a1♕+ 3 e5 ♗d5!

After White takes the bishop, Black could check on a6, which White's queen no longer controls. There is nothing else for Black to do: 3...♔e8 4 ♕b5+ ♔d8 5 ♕b8+ ♔d7 6 ♕b7+ is still a draw.

4 ♕×d5 ♕a6+ 5 e6 ♕a1+



White has a choice to make: either retreat the king to g5, and face the unpleasant reply 6...h6+, or interpose the queen, with an endgame in which the restricted status of Black's pieces makes it difficult to exploit the extra rook. Up to this point, the game has been simple for both players; they have only needed to calculate short variations accurately. But now, far-seeing calculations are necessary. In order to make the right choice, you must either find a forced draw in one of the lines, or find a certain refutation of the other.

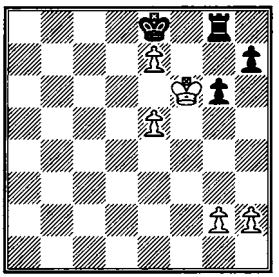
After 6 ♔g5?, Black gives a few checks which help to consolidate the position: 6...h6+ 7 ♔×g6 (7 ♔g4 ♕f6 8 ♕a8+ ♔e7 9 ♕a3+ ♔×e6 10 ♕b3+ ♔e7 11 ♕b7+ ♔f8 would be hopeless) 7...♖g8+ 8 ♔f5 (8 ♔h5 ♕f6−+) 8...♕b1+ 9 ♔e5 ♕b2+ 10 ♔f5 (10 ♔d6 ♕b8+ 11 ♔c5 ♕c7+ 12 ♔b5 ♔e7−+ is not any better) 10...♕c2+ 11 ♔e5 ♕c7+ 12 ♔f5 ♔e7, and White can resign.

6 ♕e5!! ♕×e5+ 7 fe

Threatening 8 e7+ ♔e8 9 ♔g7.

7...♔e8 8 e7 ♖g8

The threat is met, and now Black wants to continue 9...g5, followed by 10...♖g6+.



9 h4! g5

The indecisive 9...h6? would even lose: 10 g4 ♔d7 11 ♔f7 ♖h8 12 e6+ ♔d6 13 e8♕ ♖×e8 14 ♔×e8 ♔×e6 15 ♔f8 ♔f6 16 ♔g8+−. And it is a draw after 9...h5 10 e6 g5 11 hg h4 12 g6 ♖h8 13 g7 ♖g8 14 ♔g6 ♔×e7 15 ♔h7.

10 h5 g4 11 g3!

White must prevent 11...g3, opening up the g4-square for the rook. But now, the only way for the rook to gain its freedom lies through the g5-square. Fortunately for White, there is now a stalemate defense to that.

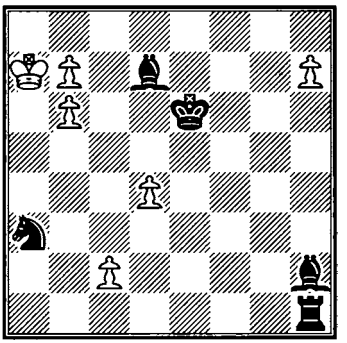
11...h6 12 e6 ♖g5 – stalemate.

Here is another of the same sort of study, where variations must be examined in depth at the critical moment – this time, by both players. ***(D)***

1 h8♕? loses at once to 1...♘b5+ 2 ♔a6(a8) ♖a1#. White must gain control of the a1-square by opening the a1-h8 diagonal.

1 d5+! ♔×d5 2 h8♕ ♗b8+!

G. Grzeban 1960



Draw

1 h8♕? loses at once to 1...♘b5+ 2 ♔a6(a8) ♖a1#. White must gain control of the a1-square by opening the a1-h8 diagonal.

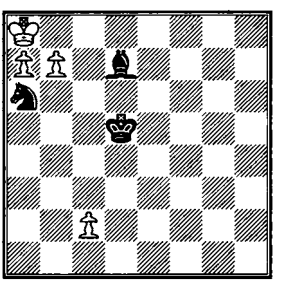
1 d5+! ♔×d5 2 h8♕ ♗b8+!

Excellent! White has to take with the queen, to save it from capture by the enemy rook, and then the check at a1 becomes possible.

3 ♕×b8 ♘b5+ 4 ♔a8 ♖a1+ 5 ♕a7 ♖×a7+!

On 5...♘×a7 6 ba, with 7 ♔b8 to follow, the game would end in a draw.

6 ba ♘c7+ 7 ♔b8 ♘a6+ 8 ♔a8



White's king is in danger: if the pawn promotes, the reply ♗c6+ would be

most unpleasant. Obviously, the hope of saving the game rests with a stalemate; and that means that White must find a timely way to get rid of the c-pawn.

Such considerations serve only as a rough base. Black must now calculate concrete variations accurately in order to find a way to render White's task unachievable, or at least to make it as difficult as possible to carry out.

Attacking the b7-pawn accomplishes nothing: 8...♗c6? 9 c4+ ♔d6 10 c5+ ♘×c5 11 ♔b8=.

On 8...♗b5? 9 c4+!, either the bishop or the king is deflected away from the attack.

In the variation 8...♗e8? 9 c4+! ♔c6 10 c5 ♗d7, White's saving resource is 11 b8♘+! ♔c7 12 ♘×d7= – here, on the d7-square, the bishop falls under the attack of the promoted knight.

8...♗a4!

Now what can White do? The defensive mechanism that worked in the preceding variation is no longer operative: 9 c4+? ♔c6! 10 c5 (10 b8♘+ ♔c7!) 10...♗b5! (a fatal *zugzwang*!) 11 b8♘+ (11 b8♕ ♘c7+ 12 ♕×c7+ ♔×c7 13 c6 ♗×c6#) 11...♔c7 12 ♘×a6+, and now the simplest line is 12...♗×a6 13 c6 ♔c8 14 c7 ♗b7#, although Black could also play 12...♔c8 13 ♘b4(b8) ♗a4 14 c6 ♗b5 15 c7 ♗a4, and once again White is in *zugzwang*.

In the variation 9 b8♕? ♗c6+ 10 ♕b7 ♔d6, sooner or later White will have to take with the queen at c6, and then Black delivers mate with the only knight left on the board: 11 c3 ♔d5! 12 c4+ ♔c5 (*zugzwang*) 13 ♕×c6+ ♔×c6 14 c5 ♔c7 15 c6 ♔c8 16 c7 ♘×c7#.

The last variation shows us the solution. The queen is too powerful a piece here – but a rook would be prevented from making that suicidal capture on c6 by the laws of chess!

9 b8♖!! ♗c6+ 10 ♖b7 ♔d6 11 c4

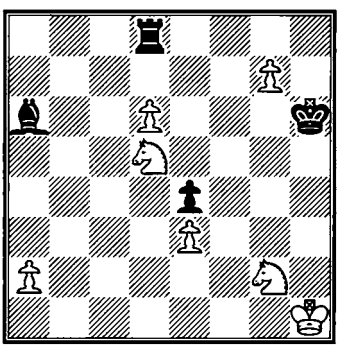
Now 11...♔c5 leads to stalemate, and Black has no other effective means available.

11...♗e4 12 c5+ ♔c6 13 ♖e7!?

Or any other square on the seventh rank.

13...♗d5 14 ♖b7= (or 14 ♖e5=).

O. Pervakov 1992



Win

1 ♘gf4

The natural move: White brings this knight into play and indirectly protects the g7-pawn (1...♔×g7? 2 ♘e6+). On 1...♗c4, 2 ♘e6 is still decisive, so Black takes control of the e6-square.

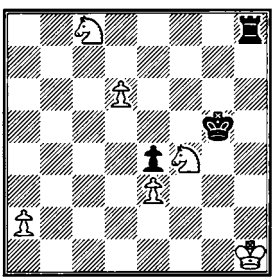
1...♗c8!

Now it turns out that White gets nothing from 2 ♘e7? ♔×g7 3 ♘×c8 ♖×c8 4 d7, because Black has the *zwischenschach* 4...♖h8+, followed by either 5...♔f7 or 5....♔f6. And 2 ♘c7? ♔h7 3 ♘h5 ♖×d6 4 ♘e8 ♖d1+ 5 ♔g2 ♗e6 6 ♘hf6+ ♔g6= is also insufficient.

2 g8♕! ♖×g8 3 ♘e7

This appears to solve the problem: on any rook retreat, White continues 4 ♘×c8 ♖×c8 5 ♘e6 ♖c1+ 6 ♔g2 ♖d1 7 ♘d4. But here, Black begins some interesting counterplay.

3...♖h8! 4 ♘×c8 ♔g5+!



What is this? Black will still have to recapture the knight next move. True, White can no longer play 6 ♘e6+? ♔f6 7 d7?? ♖g8+ – but after 6 d7, the d8-square is now off-limits for the black rook, because of the knight fork.

Following this line of reasoning, some players working out this study thoughtlessly played their king to g2, falling into a clever trap: 5 ♔g2? ♖×c8 6 d7 ♖g8! 7 d8♕+ ♔h6+!, when taking the rook is stalemate. And White cannot escape the stalemate by playing 7 d8♖!?, as Black responds 7...♔h4+!. And now it is clear why Black's king went to g5: on 4...♔g7+ 5 ♔g2 ♖×c8 6 d7 ♖g8, the rook underpromotion would have won.

Once White guesses Black's intention, it becomes clear to which square the king must retreat.

5 ♔g1!! ♖×c8 6 d7 ♖g8! 7 d8♖! (7 d8♕? ♔h6+!) **7...♔h4+!?** (7...♖×d8 8 ♘e6+) **8 ♘g2+!** (the whole point!) **8...♔h3 9 ♖d2!+–** (of course, not 9 ♖×g8? – stalemate).

Many players who are excellent tacticians can easily find their own combinative ideas, but have a habit of constantly overlooking or underestimating their opponents' counterplay. For these players, it can be most useful to practice playing through precisely this kind of study.

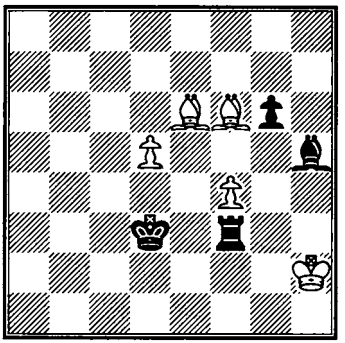
An important element of an effective technique for calculating variations is the "exclusionary method." At times, players will select a move, not by calculating its consequences to the very end, but merely after assuring themselves that it is playable, when all other continuations are refuted by force.

It is impossible to play through studies without employing the exclusionary method, which you will easily see if you recall any of the preceding examples. Now here are some fresh examples of this theme. ***(D)***

1 d6 ♖f2+!

A move selected by the exclusionary method, the Black player having seen that, in the lines 1...♔e4? 2 ♗d5+! and 1...♔e3? 2 ♗d4+!, the rook would not be able to be given up for the passed pawn. Thus, the rook aims for d2.

N. Kralin, O. Pervakov 1990



Win

But giving up the rook is only half the battle. Afterwards, Black must either remove or trade off White's last pawn at f4 – only this will save Black. This is achieved after 2 ♔g1? ♖d2 3 d7 ♔e4, or 2 ♔h3? ♖d2 3 d7 ♔e4 4 ♔g3 ♖d3+. In the second line, instead of 3 d7, White might try 3 ♔h4 ♔e4 4 ♗e5, but there is no win here, either: 4...♗d1 5 ♔g5 ♖g2+ 6 ♔f6 ♗a4 7 ♗c8 (7 d7 ♖d2=) 7...♗c6=.

The only other possibility is to defend the f4-pawn with the king at once:

2 ♔g3! ♖f3+!

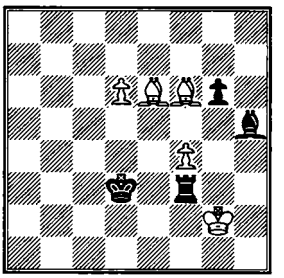
Already 2...♖d2? fails to 3 d7 ♔e4 4 d8♕, so Black tries another defensive method.

3 ♔g2 *(D)*

3...♔e4!

But not 3...♔e3? 4 ♗d4+! ♔×f4 5 d7 ♖d3 6 d8♕ ♖d2+ 7 ♔h3, when the king easily escapes the checks.

4 ♗d5+! ♔×f4!



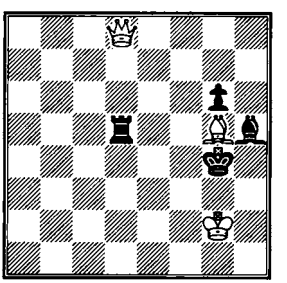
It is becoming clear why Black diverted White's king to g2. On the immediate 1...♔e4? 2 ♗d5+ ♔×f4, White would just take the rook, whereas now 5 ♗×f3? ♗×f3 *with check* would lead to an obvious draw. 5 ♗g5+? ♔×g5 would not work either, since 6 d7? would be met by 6...♖f8−+.

5 d7 ♖d3! 6 ♗g5+!

6 d8♕? ♖d2+ would be a mistake: the king is unable to escape the rook checks. But now, it looks as though it is all over: taking the bishop allows the pawn to queen with check, and otherwise, the perpetual-checking mechanism is disrupted. But Black finds another idea:

6...♔g4! 7 d8♕ ♖×d5!

The rook is immune because of stalemate. If Black is allowed to take the bishop, the resulting material balance would be even.



The rook is immune because of stalemate. If Black is allowed to take the bishop, the resulting material balance would be even.

8 ♕a8!

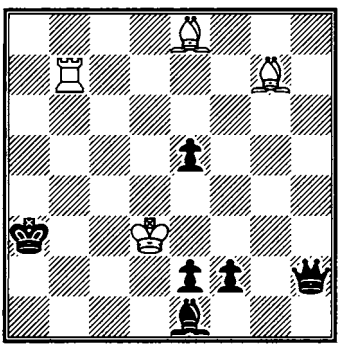
But not 8 ♕e7? in view of 8...♖e5!=.

8...♖×g5

8...♖a5 9 ♕c8+ ♔×g5 10 ♕d8+ is no help.

9 ♕e4#

V. Kirillov, N. Riabinin 1991



Win

The first move is automatic; the second move will require some thought.

1 ♗f8+ ♔a2 2 ♔c2!

In a practical game, a player would first ensure that there is a perpetual check after 2 ♖a7+ or 2 ♗f7+ ♔a1 3 ♖a7+; only then would the search for a win begin. Clearly, playing to win can only be done after the move ♔c2. It is easy to see that after 2 ♗f7+? ♔a1, it would do no good to play 3 ♔c2? ♕h7+; but if we play it at once, Black's position becomes difficult, since mate is threatened, while the h7-square remains under guard.

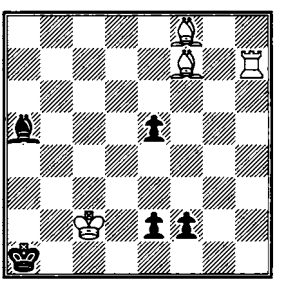
2...♕h7+!

Black arrives at this decoying queen sacrifice via the exclusionary method, seeing that 2...♗a5? lets White mate in two moves by 3 ♗f7+ ♔a1 4 ♖b1#, and there is no other defense against the deadly check at a7.

3 ♖×h7 ♗a5 4 ♗f7+

The check is necessary, because 4 ♖h3? (threatening 5 ♖a3#) is refuted by 4...e1♘+ 5 ♔c1 ♘d3+, followed by 6...f1♕.

4...♔a1



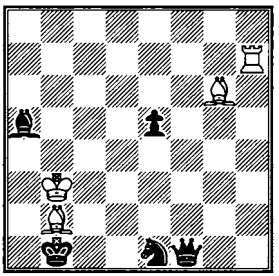
In order to reject the perpetual check at the beginning of the study, White had to have calculated to this point and made sure that at least there would be no risk of losing. For instance, after 5 ♖h3?! e1♘+! 6 ♔d1! f1♕ 7 ♖a3+ ♔b2 8 ♖b3+ ♔a1=, or 5 ♖h4?! e1♘+! 6 ♔c1 ♘d3+ 7 ♔c2 ♘e1+=. Finding either of these two variations would have been sufficient reason for White's decision on move 2. There is a perpetual check; perhaps there is something a little better.

Here, White rejects both these drawing continuations, in favor of a more promising attempt.

5 ♗a3! (threatening 6 ♗b2#) **5...e1♘+**

In order to choose this standard move, Black probably first had to reject 5...♗c3, when White wins by 6 ♗c4 (threatening 7 ♗b2+ ♗×b2 8 ♖a7+) 6...e1♘+ 7 ♔×c3.

6 ♔b3 (of course not 6 ♔c1?? ♘d3+)
6...f1♕ 7 ♗b2+ ♔b1 8 ♗g6+



White's idea becomes clear: on 8...♘d3, there is the deflecting 9 ♖h1!+−. And 8...♕d3+ 9 ♗×d3+ ♘×d3 10 ♖h1+ ♗e1 11 ♗c3 ♘c1+ 12 ♔c4 was also hopeless.

But the battle is not over yet: Black has a clever defense.

8...e4! 9 ♗×e4+ ♘d3 10 ♖h1! ♗e1!

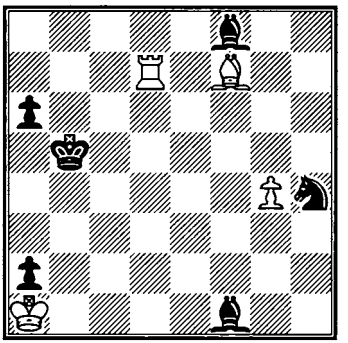
11 ♖×f1? is a stalemate, by pinning two pieces! But White does not have to take the queen – the opponent, after all, has almost no reasonable moves. White must lose a move, while defending against 11...♕f7+ (but not, of course, by 11 ♔a3?? ♕f8+).

11 ♗g6! (the decisive *zugzwang*)
11...♕e2 12 ♖×e1+! ♕×e1 13 ♗×d3# ***(D)***

In the starting position, Black has the advantage in material; however, White wins one of the bishops by means of a double attack on the f-file.

1 ♗e8! ♔b4! 2 ♖f7

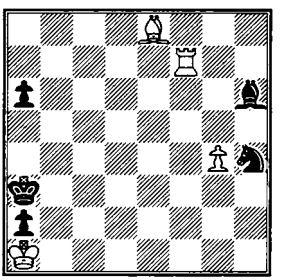
N. Kralin, An. Kuznetsov 1983



Win

Black is left the exchange down, and must create some counterplay.

2...♗h6! 3 ♖×f1 ♔a3 4 ♖f7



White has defended against the deadly check on the long diagonal, and now wants to play 5 ♖a7. The opponent's chances obviously lie in exploiting the vulnerable position of White's king, but how is Black to get to it? 4...♗e3 is useless, because of 5 ♖d7 (threatening 6 ♖d3+); and so is 4...♗d2 5 ♖c7 (threatening 6 ♖c2). On 4...♗c1, White wins by 5 ♖f2 (but not 5 ♖b7? ♗f4 6 ♖e7 ♘f3=).

4...♘f5!! 5 gf ♗g5!

A brilliant defense. White is already a rook up, and it would seem that nothing could threaten White – but now, what

is to be done? The rook is tied to the f7-square for now, while almost any bishop move would restrict the rook's possibilities, leading to unavoidable mate: 6 ♗d7? ♗e3–+; 6 ♗c6? ♗d2–+; 6 ♗b5? ♗c1–+. So White must choose either 6 f6 or 6 ♗a4.

6 ♗a4!!

After 6 f6? a5!, White still has nothing better than 7 ♗a4!, but then Black succeeds in demonstrating the thematic idea: 7...♗e3! 8 ♖d7 ♗d4+! 9 ♖×d4 – stalemate!

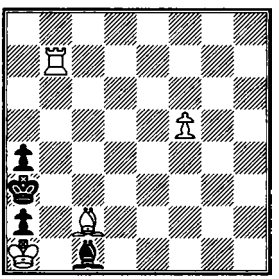
6...a5

Of course, 6...♔×a4? 7 ♔×a2 would be completely hopeless. However, it is not quite so easy to refute 6...♗d8?, with the idea of 7...♗a5. 7 ♖f8? ♗b6–+ would be a mistake, so White first sacrifices the bishop to lure the enemy king to the b-file: 7 ♗b3! ♔×b3 8 ♖f8! ♗g5 (8...♗b6 9 ♖b8; 8...♗c7 9 ♖e8; 8...♗a5 9 ♖b8+ ♔a3 10 ♖c8; 8...♗e7 9 ♖b8+ ♔a3 10 ♖b6) 9 ♖b8+ ♔a3 10 ♖b6+–.

7 ♗c2!

On 7 ♗d1?, Black is saved by the stalemate trick we have already seen: 7...a4! 8 ♗×a4 ♗e3 9 ♖d7 ♗d4+!. White instead selects a more accurate move, rendering 7...a4 harmless because of 8 ♗b1!+–.

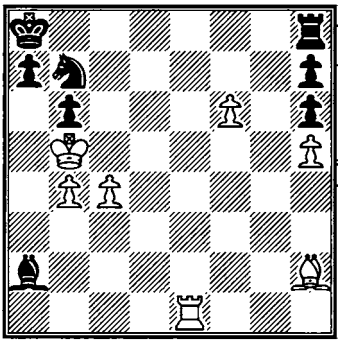
7...♗c1!? 8 ♖b7 a4



And here 9 ♗b1? would not work, because of a different stalemate after 9...♗b2+! 10 ♖×b2 ab♕+. But with the rook at b7, White can now capture the a4-pawn.

9 ♗×a4! ♗e3 10 ♖b3+ (but not 10 ♖d7? ♗d4+!)

L. Katsnelson 1968



Win

1 f7 ♘d8 2 ♖e8

Note the purely practical refinement: Black could have played 1...♗b3, and only after 2 ♖e8+, 2...♘d8 (the rook is taboo: 3 ♖×h8?? ♔b7, and White cannot prevent 4...a6#). But now, besides 2...♗b3, leading to the same position, Black also has a second possibility, 2...♔b7. And that means the move 1...♘d8 is more accurate, since Black retains the choice of two continuations.

Making logical comparisons between alternatives sometimes saves time, by helping us make the most accurate move without getting into complicated calculations. The technique is simple: we make our decision after ensuring that one of the two continuations is not worse, and possibly in some ways may be even better, than the other. For

example, we will select "Variation A" if it allows us – other things being equal – an additional choice that does not exist in the other variation (as in the current example); or the reverse: "Variation B" contains an additional possibility for our opponent; or perhaps we arrive at a nearly identical position in both variations, but in "Variation A" one of our pieces or pawns stands a little better.

2...♔b7!

Just so, since 2...♗b3? 3 c5! +− would be bad.

3 ♖e7+!

3 ♖×h8? ♗b3!; 3 f8♕? ♖×f8 4 ♖×f8 ♗b3!

3...♔a8

3...♔c8 would be met either by 4 ♖×a7 or by 4 ♖c7+ ♔b8 5 f8♕ ♖×f8 6 ♖f7+ ♔c8 7 ♖×f8, when the exchange plus guarantees White an easy win.

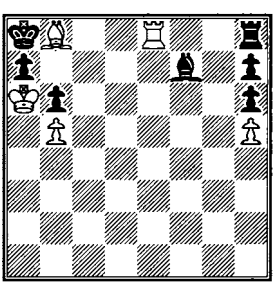
4 ♔a6!

White, of course, is not interested in a repetition.

4...♗×c4+ 5 b5 ♘c6!

The only acceptable defense against mate.

6 ♖e8+ ♘b8+ 7 ♗×b8 ♗×f7!



The sparkling point of Black's defense! On 8 ♖×h8? there would follow 8...♗g8!!, putting White in *zugzwang*: taking on g8 is stalemate – as is every move of the bishop away from b8.

8 ♖e7! ♗e6!

The rook endgame would be totally hopeless for Black, for example: 8...♔×b8 9 ♖×f7 ♖e8 10 ♖×a7 ♖e5 11 ♖×h7 ♖×h5 12 ♔×b6 ♔c8 13 ♔c6 ♔d8 14 b6. So stalemate ideas must be considered once again. On 9 ♖×e6, there is 9...♖e8!; and on 9 ♗×a7 – 9...♗c8+ 10 ♔×b6 ♖e8!. White must test out both variations accurately, in order to see which of them allows him to overcome his opponent's resourceful defense.

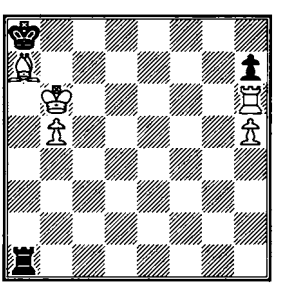
9 ♖×e6!

White will not succeed with 9 ♗×a7? ♗c8+ 10 ♔×b6 ♖e8! (the position after 10...♗g4 11 ♔a6 ♗×h5 12 b6 ♗f3 13 b7+ ♗×b7+ 14 ♖×b7 looks very dangerous for Black) 11 ♖×h7 ♗g4 12 ♖×h6 ♗×h5! 13 ♖×h5 ♖e6+ 14 ♔c7 ♔×a7=.

9...♖e8! (9...♔×b8? 10 ♖e7 +−) **10 ♖×h6**

10 ♖×e8? or 10 ♖e5? ♖×e5 11 ♗×e5 leads to stalemate.

10...♖e1 11 ♗×a7 ♖a1+ 12 ♔×b6



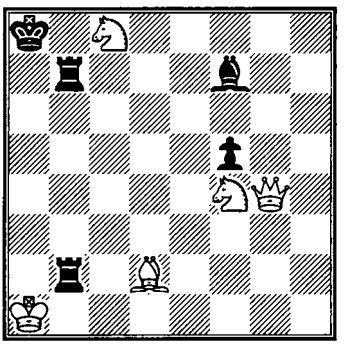
12...♖a6+!

A last try to confuse the opponent, since the rook endgame is lost after 12...♖×a7 13 ♖d6 ♖b7+ 14 ♔c6.

13 ♔c7! ♖×h6 14 b6 ♖×b6 15 ♗×b6+–

But of course, not 15 ♔×b6? h6=.

O. Pervakov 1993



Draw

The mating threats on a2 and b1 leave White no choice.

1 ♘b6+! ♖7×b6!

1...♖2×b6 is weaker, in view of 2 ♕×f5 ♖a6+ (the b1-square is now controlled by the queen) 3 ♗a5=.

Now the queen must give check, but from which square? Let's compare the choices. On 2 ♕f3+, Black must reply 2...♔b8, since 2...♔a7? (or 2...♖b7?) allows an immediate draw by 3 ♕a3+. But on 2 ♕g2+?, Black now has 2...♔a7, when 3 ♘d5 (there is nothing else) 3...♖b1+ 4 ♔a2 ♖1b5 lands White in trouble. But if Black's king were on b8, it could be checked.

2 ♕f3+! ♔b8! 3 ♘d5 ♖b1+ 4 ♔a2 ♖1b5!

Threatening both 5...♖a6+ and 5...♗×d5+.

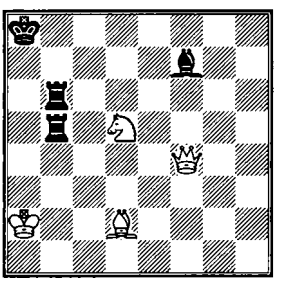
5 ♕g3+!

White loses immediately with 5 ♗f4+? ♔b7 or 5 ♕f4+? ♔a8 6 ♕a4+ ♔b7. But with the queen on g3, it is not so easy for the king to escape the checks: 5...♔a8? 6 ♕a3+ ♔b7 7 ♕e7+, or 5...♔b7? 6 ♕c7+ ♔a8 7 ♕c8+.

5...f4!

This deflecting pawn sacrifice allows the king to escape its pursuer.

6 ♕×f4+ (6 ♗×f4+? ♔b7–+) **6...♔a8!**



Now White's defensive resources appear at an end: 7 ♕a4+? loses to 7...♔b7, and how else can the deadly

rook check at a6 be parried (now or after the knight is captured)? Well, if normal moves do not help, we must use extraordinary ones!

7 ♗b4!! ♖×b4

7...♗×d5+ is not dangerous: 8 ♔a3 ♖a6+ 9 ♔b2 ♖a4 10 ♔c3=.

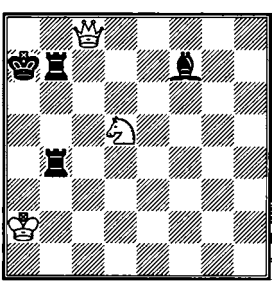
8 ♕c4!!

Taking the queen unpins the knight, which can then capture both Black rooks. If Black takes on d5, the queen takes the bishop with check.

8...♖b7!

White's defense would be simpler after 8...♔a7 9 ♕c7+ ♔a6 10 ♕c8+ ♔a5. White could continue 11 ♕c3! ♗×d5+ 12 ♔a3, when the eternal pin of the rook prevents Black from undertaking anything. But White could also carry on with his series of checks: 11 ♕c5+ ♔a4 12 ♕c2+ ♔b5 13 ♕d3+, for example: 13...♔c5 14 ♔a3 ♗×d5 15 ♕d4+, or 13...♔c6 14 ♔a3 ♗×d5 15 ♕g6+ ♔c5 (15...♔b7 16 ♕f7+) 16 ♕d6+!. But on 13...♔a5, White would have to go back to the pin: 14 ♕c3! ♗×d5+ 15 ♔a3=.

9 ♕c8+ ♔a7



There is no perpetual check anymore, but White can still play for stalemate. Now the important choice is between 10 ♔a3 or 10 ♕c5+.

10 ♕c5+!

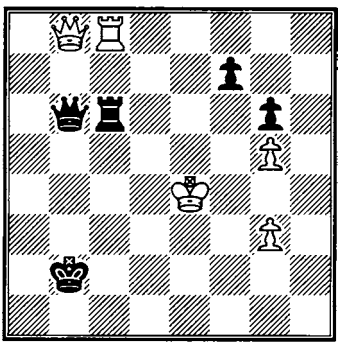
10 ♔a3? (hoping for 10...♗×d5? 11 ♕a8+) would be a mistake, because of 10...♖4b5! −+, when the knight is lost (11 ♘b4 would be met by 11...♖a5+ 12 ♔b2 ♖×b4+ 13 ♔c3 ♖c4+).

10...♖4b6

10...♔b8 11 ♕f8+ ♔a7 12 ♕c5+; 10...♖7b6 11 ♕c7+ ♔a6 12 ♕c8+.

11 ♔a1! ♗×d5 12 ♕a5(a3)+ ♖a6 (12...♔b8 13 ♕×b6 or 13 ♕a8+) **13 ♕×a6+ ♔×a6** – stalemate.

P. Benko 2000



Win

Positions in which each side is left with a queen and a rook have a sort of split personality. On one hand, it makes sense to play for attack then: the heavy pieces can sometimes deliver mate to the opposing king. On the other hand, the exchange of either pair of pieces leads to an ending in which endgame factors assume decisive importance, particularly king activity.

Benko's study is an excellent illustration of both these tendencies. In order to achieve the goal, White weaves a mating net; but at the same time, is ready to seize the first available opportunity to trade down into a winning endgame.

1 ♕e5+ ♔c1!

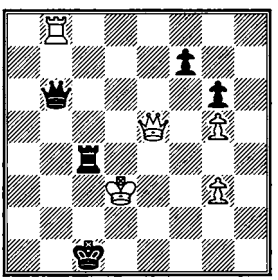
We have already seen the double pin ("Maltese Cross") in the Hoch study.

The theme also crops up here: on 1...♔c2?, 2 ♕d6! is immediately decisive. But with the king on c1, 2 ♕d6? would be refuted by 2...♕b1+ 3 ♔e3 ♕b3+, followed by ♖×c8.

2 ♖b8! ♖c4+

The only chance to continue the fight. There are no more queen checks, and retreating the queen would allow White to execute a mating attack: 2...♕c7? 3 ♕b2+ ♔d1 4 ♕d4+ ♔c1 5 ♕e3+ ♔d1 6 ♕d3+ (the pawn endgame after 6 ♖b1+ ♖c1 7 ♖×c1+ ♕×c1 8 ♕×c1+ ♔×c1 9 ♔e5 is also winning) 6...♔e1 7 ♔f3!.

3 ♔d3 (of course not 3 ♔f3?? ♕c6+)



3...♖d4+! 4 ♔c3!

After 4 ♕×d4? ♕×b8, it is useless to play 5 ♕c3+ ♔b1=, but there are two ways White can trade queens. Unfortunately, both versions of the pawn endgame turn out to be drawn: 5 ♕f4+ ♕×f4 6 gf ♔d1=, or 5 ♕a1+ ♕b1+ 6 ♕×b1+ ♔×b1 7 ♔e4 ♔c2 8 ♔e5 ♔d3 9 ♔f6 ♔e4 (mutual *zugzwang*!) 10 ♔×f7 ♔f5=.

4...♕d6! 5 ♕e3+!

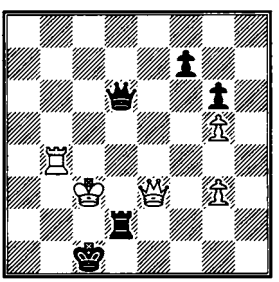
On 5 ♕×d4?, Black does not take the rook (because of mate), but instead plays 5...♕×g3+ 6 ♕d3 ♕e5+!.

5...♖d2 6 ♖b4!

Note the combination 6 ♕e1+?! ♖d1 7 ♖b1+ ♔×b1 8 ♕e4+. Any king retreat leads to mate, but Black is saved by 8...♕d3+ or 8...♖d3+. Examining such variations rarely turns out to be pointless: under slightly altered circumstances, the combination might work.

This strong rook move coordinates White's pieces and sets the opponent extremely difficult problems.

If Black plays the waiting move 6...♕d7, the combination we found earlier works now: 7 ♕g1+ ♖d1 8 ♖b1+! ♔×b1 9 ♕b6+.



After 6...♕c6+ 7 ♖c4 ♕d5, 8 ♖c8 is not bad, but the forcing 8 ♖c5 ♕×c5+ (if the queen retreats, 9 ♔b3+ decides) 9 ♕×c5 ♖c2+ 10 ♔d4 ♖×c5 11 ♔×c5 ♔d2 12 ♔d6 ♔e3 13 ♔e7! ♔e4 14 ♔f6! reaches the same mutual *zugzwang* position as in the note to move 4, but this time with Black to move.

6...f6 is more complicated: 7 ♖a4! ♕c6+ (if 7...♕e5+ 8 ♕×e5 ♖c2+ 9 ♔b3 fe, then White trades rooks advantageously by 10 ♖c4!+−) 8 ♖c4 ♕d5. Here 9 ♖c5? ♕×c5+! 10 ♕×c5 ♖c2+ no longer works for White. The attack continues with 9 ♕e1+! ♖d1 10 ♕e2! ♖d2 11 ♔b3+ (11 ♕f1+ ♖d1 12

♕f4+ ♖d2 13 gf is not bad either) 11...♔b1 12 ♕e1+! ♖d1 13 ♕b4! ♕d3+ 14 ♖c3 ♕d6, and now either 15 ♕e4+ or the more spectacular 15 ♖c1+! leads to mate.

6...f5!

The best defense.

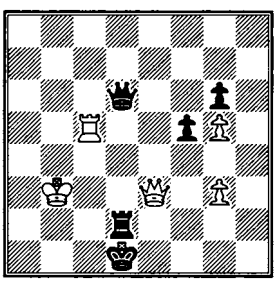
7 ♖a4!

Entering the pawn endgame after 7 gf? ♕×f6+ 8 ♖d4 ♕×d4+ 9 ♕×d4 ♖×d4 10 ♔×d4 would not suit White: 10...♔d2 11 g4 ♔e2 12 ♔e4 ♔f2 13 ♔f4 ♔g2! 14 g5 ♔h3=.

7...♕c6+ 8 ♖c4 ♕d5 9 ♖c8!

9 ♖c5? ♕×c5+ 10 ♕×c5 ♖c2+ 11 ♔d4 ♖×c5 12 ♔×c5 ♔d2, and this pawn endgame is also drawn.

9...♕d7 10 ♖c5! ♕d6 (10...♕g7+ 11 ♔b3+ ♔d1 12 ♕f3+) **11 ♔b3+ ♔d1**

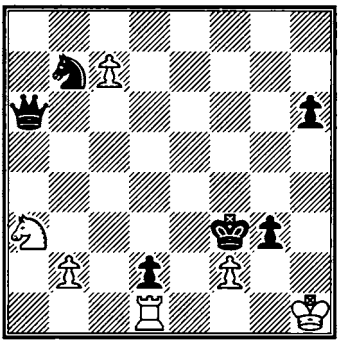


12 ♕f3+? ♔e1 13 ♖c1+ ♖d1 14 ♕e3+ ♔f1= is not the road to victory. But now a spectacular rook sacrifice decides.

12 ♖c1+!! ♔×c1 13 ♕e1+ ♖d1 14 ♕c3+ ♔b1 15 ♕b2#

In our next study, the queen's compatriot is a knight, instead of a rook. The power of the "queen+knight" attacking duo is well-known; here is yet another confirmation of it.

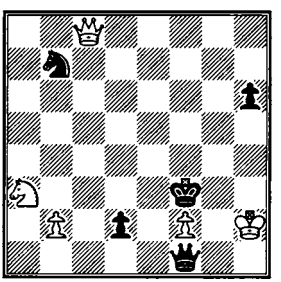
O. Pervakov 1985



Win

1 c8♕ ♕f1+!

An outstanding shot: on 1...g2+? 2 ♔h2 ♕d6+ 3 ♔g1, it is time for Black to resign.
2 ♖×f1 g2+ 3 ♔h2 (3 ♔g1?? gf♕+ 4 ♔×f1 d1♕#) **3...gf♕**



Now that the combinative introduction is complete, 4 ♕×b7+? ♔×f2 5 ♕f7+ looks inviting, checking the king while approaching with the queen, until it gets close enough to bring in the knight at the right moment. Let's check it out: 5...♔e2 6 ♕c4+ ♔f2 7 ♕d4+ (7 ♕f4+ ♔e2 8 ♕g4+ ♕f3) 7...♔e2. Everything looks in order: 8 ♘c4 d1♕ 9 ♕e3#. Unfortunately, Black is saved by 8...d1♘!=.

4 ♕f5+!

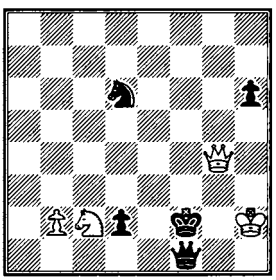
White refrains from taking the knight, in order to gain time for the attack: the pieces are successfully repositioned a little better than they were in the above-mentioned variation.

4...♔e2 5 ♕g4+ ♔×f2 (5...♔e1? 6 ♘c2+) **6 ♘c2!**

6...d1♕? leads to a familiar mate: 7 ♕g3+ ♔e2 8 ♕e3#. In this situation, underpromoting to a knight does not help either: 6...d1♘? 7 ♕f4+ ♔e2 8 ♘d4+ ♔e1 9 ♕e4+ ♔f2 (9...♔d2 10 ♘b3#) 10 ♕f3+ ♔e1 11 ♘c2+. But here comes the amazingly focused black knight, riding to the rescue!

6...♘d6!

It has to be here – from this square, which takes away not just e4 from the white queen, but c4 as well. The importance of this factor is made clear in the variation 6...♘c5? 7 ♕f4+ ♔e2 8 ♕c4+ ♘d3 (8...♔f2 9 ♕×c5+ ♔e2 10 ♕c4+ ♔f2 11 ♕f4+ ♔e2 12 ♘d4+) 9 ♕e4+ ♔d1 10 ♘e3+ ♔c1 11 ♕c4+ ♔×b2 12 ♕c2+ ♔a3 13 ♘×f1.



Here, White does not have many checks, and it might seem that the attack has reached a dead-end. But note the restricted Black pieces; it is not easy to suggest any reasonable move for them, except perhaps h6-h5.

7 b3!!

But not 7 b4? – the knight needs the b4-square, and it is also important to take control of the neighboring c4-square. Black is in *zugzwang*: any move will worsen the position.

7...h5

All other moves are more easily refuted:

7...d1♕ 8 ♕g3+ ♔e2 9 ♕e3#; 7...♘f7 8 ♕f4+ ♔e2 9 ♕e4+ ♔d1 10 ♘e3+; 7...d1♘ 8 ♕f4+ ♔e2 9 ♘d4+ ♔e1 10 ♘f3+ ♔e2 11 ♘g1+ ♔e1 12 ♕b4+ ♘c3 (12...♔f2 13 ♕d2+) 13 ♕×c3+ ♔d1 14 ♕a1+.

8 ♕f4+ ♔e2 9 ♕e5+ ♔f3

If 9...♔d3, then 10 ♘b4# – this is why White needed the b4-square!

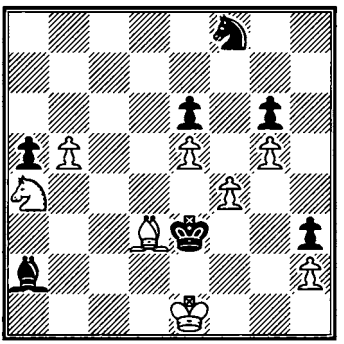
10 ♘d4+ ♔g4 11 ♕g3#

Now we see why we had to wait until the Black pawn advanced: it took the saving h5-square away from the black king! Very fine!

I suddenly noticed that this collection contains a lot of Pervakov studies. Do not think that Oleg suggested any of them to me, or that I wanted to distribute my co-author's work more widely. The explanation is much simpler: these studies were taken from the corresponding (comparatively small) segment of my notebook of exercises. Clearly, Pervakov has succeeded in packing his works with interesting and double-edged struggle better than other composers, so that many of them are suited for two-sided playing-through.

The next two studies were composed by grandmaster Jan Timman. The theme of both studies is the queening of a pawn.

J. Timman 1990



Win

1 b6 ♗d5

1...♔×d3? is quite bad: 2 ♘c5+, followed by 3 b7, or 2 b7 ♘d7 3 ♘c5+.

2 ♗c4!!

White cannot achieve the goal without recourse to sacrifices.

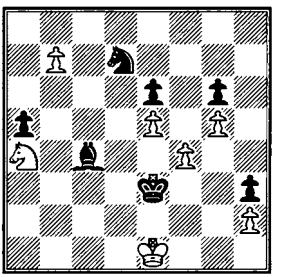
On 2 ♗b5? ♔×f4 3 ♘c5 ♘h7! 4 b7 ♗×b7 5 ♘×b7 ♘×g5, Black threatens 6...♘f3+ and 7...♘×h2, and 6 ♗c6 would be strongly met by 6...a4!=.

Nor would 2 ♘c5?! ♔d4 3 b7 ♗×b7 4 ♘×b7 ♔×d3 5 ♔f2 be dangerous: Black does not answer 5...a4? 6 ♘c5+ ♔c2 7 ♘×a4 ♘d7 (the knight is trapped, but that means nothing) 8 ♔g3 ♔b3 9 f5!+−, but instead 5...♔e4 6 ♔g3 ♘d7. On 7 ♘×a5, the simplest choice is 7...♘b6 8 ♘b7 ♘d5 9 ♘c5+ ♔f5 10 ♘d3 ♘c3= and the activity of Black's pieces offers full compensation for the pawn minus. And another, sharper possibility is 7...♘c5 8 ♘c4 ♘d3 9 ♘d6+ ♔e3 10 f5 gf 11 ♔×h3 (11 g6 ♘f4) 11...♘f4+ (or 11...♘×e5 12 ♘c4+ ♔f4=) 12 ♔h4 ♘g6+ 13 ♔h5 ♘e7=.

2...♗×c4

After 2...♗g2, the move 3 ♘c5 would now be much stronger than an immediate 2 ♘c5. For example, 3...♔d4 4 ♘×e6+ ♔×c4 5 ♘×f8 a4 6 ♔d2 a3 7 ♔c1 ♗e4 8 ♘d7 ♔c3 9 ♘c5 (another way is 9 ♘f6 ♗f5 10 b7 a2 11 ♘d5+) 9...♗c2 (9...a2 10 ♘×e4+ ♔b3 11 ♘d2+ ♔c3 12 ♘b1+ ♔b3 13 b7) 10 ♘a4+! (or 10 ♘b3!) 10...♔b3 11 b7+−. And 3...♔×f4 is no help either: 4 b7 ♗×b7 5 ♘×b7 ♘d7 (5...a4 6 ♘c5) 6 ♘×a5 ♘×e5 7 ♗e2 ♔×g5 8 ♔f2 ♔f4 9 ♘b3, and White should eventually be able to exploit the extra piece.

3 b7 ♘d7



And now, White has an important choice to make. Winning back the piece by 4 ♘b6 – and, in addition, after 4...♘b8 or 4...♗a6, playing the 5 f5 break. Or the pawn break could be played at once. As happens fairly often, no lengthy calculation is necessary in order to make the correct decision: it is simpler to compare the two continuations, and accurately test the first few moves.

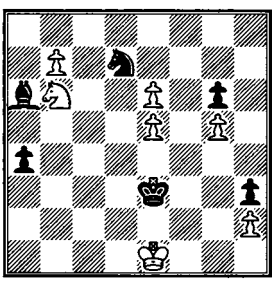
(1) 4 f5 ef (there is nothing else; the

attempt to create a mating net around the white king by 4...♗e2 is most simply refuted by 5 ♘c3!, although White could also play 5 ♘b6 ♘×e5 6 ♘c4+ ♗×c4 7 b8♕) 5 ♘b6 ♗a6 (5...♘b8 would be very bad after 6 ♘×c4+ and 7 e6) 6 e6! ♘b8 7 ♘d7! looks quite promising.

(2) 4 ♘b6 ♗a6! (4...♘b8? is met, not by 5 ♘×c4+? ♔×f4, but by 5 f5! +−) 5 f5 (5 ♘×d7 ♗×b7 is unpromising). Now 5...ef transposes into the variation examined above, but Black has an additional resource here: 5...a4!, which is not so easily refuted. This is probably enough for us to choose the first route.

Timman breaks off his analysis with 5...a4!, but in fact, things are not so simple here: Black needs to display exceptional accuracy. Let's go through the resulting variations. This may not be significant to a practical player (who has already figured out which move to play), but for a study composer, it is important that there not be an alternative solution.

On 6 ♘×d7? ♗×b7, it is already White who has problems: the a-pawn is threatening to queen and deliver mate to the white king (♘c5 can always be met by ♗d5, depriving the knight of the b3-square). So White has to play 6 fe:



Now 6...♘b8? appears to lose, in view of the following long and rather forcing variation: 7 e7 ♗b5 8 ♔d1 (it is important to get in the square of the a-pawn) 8...♔f4 9 e6 (threatening the interference move 10 ♘d7) 9...♗e8 10 ♘d7 ♘c6 11 ♘f6 ♔f5 12 ♘×e8 ♔×e6 13 ♘c7+ ♔×e7 14 ♘a6 ♔e6 15 ♔c1 ♔f5 16 ♔b2 ♔×g5 17 ♔a3 ♔f5 18 ♔×a4 ♔e6 19 ♔b5 ♔d6 20 ♔b6 g5 21 ♘c5 ♔d5 22 ♘e4.

6...a3 is stronger. Once again, the choice is White's.

(A) 7 ed a2 8 ♘d5+! ♔f3! (but not 8...♔d4 9 b8♕ a1♕+ 10 ♔d2 ♕a2+ 11 ♔c1 ♕c4+ 12 ♔b2+−) 9 b8♕ a1♕+ 10 ♔d2 ♕d4+ 11 ♔c1 ♕c4+ 12 ♔b2 ♕d4+ 13 ♘c3 ♕×d7, and Black keeps excellent saving chances.

(B) 7 ♘d5+ ♔f3 8 ♘c3!? ♘b8 9 e7 a2 (9...♗b5?? 10 ♘×b5 a2 11 ♘d4+) 10 ♘×a2 ♗b5 11 ♘c3 ♗c6 12 ♘d5. Black now attacks one of the white pawns with the king (12...♔e4 or 12...♔g4) and, according to my analyses, running on for at least a dozen more moves in each variation, he gets a draw.

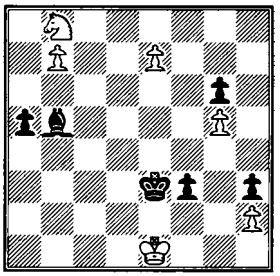
After this long analytical side-track, it is time once again to return to the main line of this study.

4 f5! ef 5 ♘b6 ♗a6 6 e6! ♘b8 7 ♘d7 ♗b5! (7...♗×b7 8 e7) **8 ♘×b8 f4 9 e7 f3**

The play has grown much sharper: White must find a series of only moves in order to avoid mate. ***(D)***

10 e8♕+ ♗×e8 11 ♘d7!

But not 11 ♘c6?? f2+ 12 ♔f1 ♗×c6, and 13...♗g2# cannot be prevented.

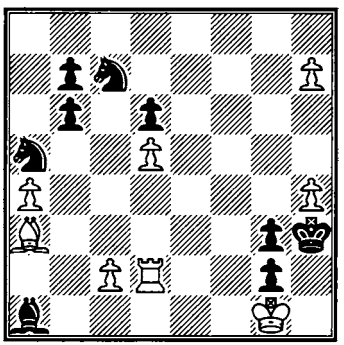


11...f2+ 12 ♔f1 ♗f7 13 ♘b6! +−

The final exactitude: on 13 ♘e5? ♗d5, White would have to repeat moves by 14 ♘g4+ ♔f3 15 ♘e5+ ♔e3.

The study is not a very esthetic one, to my taste; nevertheless, it is useful for training in the technique of calculating variations. The following study by the grandmaster is much clearer.

J. Timman 1987



Win

The h7-pawn is very strong, but White's real problem may be the shaky position of the king. For example, the attempt to "grab the bull by the horns", with 1 c3? ♗×c3 2 ♗b2, is refuted by 2...♗×d2 (threatening 3...♗e3#) 3 ♗d4 ♘b3 4 h8♕ ♘×d4 5 ♕×d4 (5 ♕c8+ ♘ce6) 5...♗e1 −+, when 6...♗f2+ cannot be prevented.

And 1 ♗b4? ♘c4 2 ♖d3, intending 3 c3, 3 ♗c3 or 3 ♗e1, might look tempting. 2...♘e5? 3 c3! ♘×d3 (3...♘f7 4 ♗×d6+−) 4 h8♕ ♘f4 does not work, in view of 5 ♕c8+! ♘ce6 6 ♕×e6+! ♘×e6 7 de+−. But Black can transpose moves: 2...♘ce6!! 3 de (3 c3 ♘f4; 3 ♗e1 ♗d4+!) 3...♘e5! 4 c3 ♘×d3 5 h8♕ ♘f4 −+.

There is no future in 1 ♖×g2? ♗d4+ 2 ♔h1 ♘c4 3 ♗b4 ♘e3 −+. And on 1 ♗×d6?! ♘c4 2 ♖d1, the simplest answer is 2...♘e5! 3 ♗×e5 ♗×e5=. There is also a more spectacular defense: 2...♘b5! 3 ab (3 ♗×g3? loses to 3...♘c3! 4 ♖×a1 ♔×g3 5 ♖e1 ♘d2, or 4 ♖e1 ♘e2+ 5 ♖×e2 ♗d4+ 6 ♗f2 ♘e5 7 ♗×d4 ♘f3+ 8 ♔f2 g1♕+ 9 ♔×f3 ♕×d4) 3...♘d2 4 ♖×d2 ♗d4+! 5 ♖×d4 stalemate.

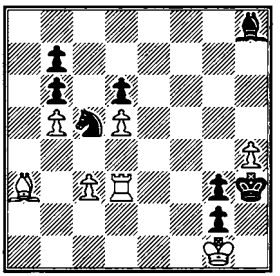
1 ♖d3!

A simple and strong move, creating threats of 2 c3 and 2 ♗×d6. On 1...♗e5, either 2 ♗b2 ♗×b2 3 c3 ♗a3 4 h8♕ ♗c5+ 5 ♖d4 or 2 ♗×d6 ♗×d6 3 h8♕ ♗c5+ 4 ♖d4 would be decisive. And 1...♘×d5 2 ♗×d6! +− is no help (although not 2 ♖×d5? ♘c6! −+). In order to continue fighting, Black must think of something extraordinary. The only chance is to play for a stalemate similar to the one we saw in one of the side variations.

1...♘b5!! 2 ab (2 c3?? ♘×c3 −+) **2...♘b3!**

Now 3 cb? ♗d4+? leads to the familiar stalemate. And 3 ♗×d6?? ♗d4+ 4 ♖×d4 ♘×d4 −+ would be worse yet. The spectacular 3 ♗c5? does indeed avoid stalemate in the variation 3...bc? 4 cb b6 (4...c4 5 bc b6 6 c5! +−) 5 ♖d2 c4 6 b4! +−; however, Black has 2...♘c1! 4 ♖d2 bc, and the advantage shifts to Black.

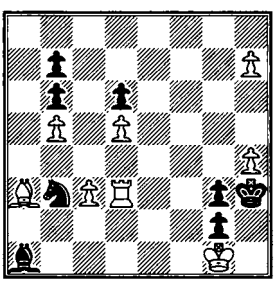
The consequences of the surprising pawn sacrifice 3 h8♕!? ♗×h8 4 c3 ♘c5! are not easy to assess:



According to my own analyses (of whose correctness I am not 100% sure), White cannot demonstrate a convincing road to victory. For example, 5 ♖e3 ♘e4! 6 ♗b4! (6 ♖×e4 ♗d4+!) 6...♗e5 7 h5 ♘g5 8 h6 ♗f4 9 ♖d3 ♗e5, or 5 ♗×c5 bc 6 h5 ♗g7 7 ♖e3 c4 8 h6!? (there does not seem to be a win in the variation 8 b6 ♗h6 9 ♖e2 ♗g7 10 ♖c2 ♗e5 11 h6 ♗h8 12 h7 ♗e5 13 ♖×g2 ♗×c3 either) 8...♗×h6 9 ♖e7 ♗d2 10 ♖h7+ ♔g4 11 ♖×b7 ♗×c3 12 ♔×g2 ♗d4 13 ♖d7 ♗c5 14 b6 ♗×b6 15 ♖×d6 ♗f2 16 ♖f6!? c3 17 ♖c6 ♔f5 18 ♖×c3 ♔e5 19 ♖d3 ♔d6=, and White has no means of strengthening the position.

But why give up the passed pawn if c2-c3 can be played immediately? Only if White foresaw the opponent's clever reply, and was scared off by it:

3 c3!



3...♘d4!!

3...♗×c3? does not work: 4 ♖×c3 ♘d4 5 ♖e3+−.

4 ♖×d4

It is stalemate after 4 cd? ♗×d4+ 5 ♖×d4.

4...♗×c3

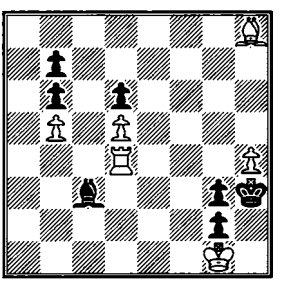
Now it seems the defense is triumphant: 5 h8♕? ♗×d4+ 6 ♕×d4 is stalemate, while 5 h8♗?? ♗e1 even loses. And 5 ♗c5? bc 6 ♖d1 b6 7 h5 c4 8 h6 ♗h8 9 ♖d2 c3 10 ♖×g2 ♔g4, with 11...♔f3= to follow, poses no danger to Black.

The time has come for White to demonstrate some resourcefulness.

5 ♗b2!! ♗×b2

In the variation 5...♗e1 6 ♖f4 ♗f2+ 7 ♖×f2 gf+ 8 ♔×f2 ♔h2 9 h8♕+−, White comes out a bishop to the good, while the king escapes the checks.

6 h8♗!! ♗c3!



Thanks to the underpromotion, White has avoided the stalemate, but the struggle continues. Now 7...♗e1 is threatened.

7 ♗e5!! de

7...♗e1 8 ♗×g3 ♗×g3 9 ♖d3 is hopeless.

8 ♖e4 ♗b2!

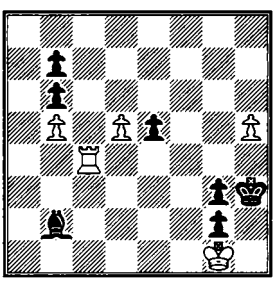
On 8...♗d4+ 9 ♖×d4 ed 10 d6, White's pawn is the first to queen. So the bishop makes an attempt to break into the g1-a7 diagonal.

9 h5!

The only way! 9 d6? ♗a3 would lead to the loss of a vital pawn, and 9 ♖c4? e4! 10 ♖×e4 (10 d6? e3 11 ♖c2 e2−+) 10...♗d4+, to stalemate.

9...♗a3 10 ♖c4 ♗b2!?

10...e4? may be met by either 11 h6!? (when 11...♗b2 would transpose back into the main line), or by 11 ♖c2!+−. 10...♗f8 does not help: 11 ♖c2 e4 12 ♖×g2 ♔g4 13 ♔f1 ♔f3 14 ♖c2 ♗c5 (threatening 15...♗f2) 15 ♖c3+! e3 (15...♗e3 16 ♖×e3+!) 16 ♖c2 ♗b4 (threatening 17...♗d2) 17 ♖e2 (or 17 ♖g2 ♗f8 18 ♖e2) 17...♗f8 18 ♖g2+−, as Black is now in *zugzwang*, and must weaken the position.



The impression left by this scintillating study is unfortunately marred by the fact that in its concluding stage, White's moves cease to be "only" moves, but may be transposed. Well, in a practical game, this sort of thing happens all the time. White still needs to be careful.

11 h6!

On 11 d6 e4 12 d7?, Black is saved by 12...♗f6 13 h6 ♗g5!! 14 ♖×e4 (14 ♖c3 ♗f6=) 14...♗f6!, and the bishop sacrifice ♗d4+! will be unstoppable: 15 ♖h4+ ♗×h4 16 h7 ♗f6 17 d8♕ ♗d4+! 18 ♕×d4 stalemate. But White still wins – as the following note makes clear – if 12 h6! is played instead of 12 d7?.

11...e4 12 h7

This is probably the most accurate move: on 12...e3, White is ready to continue 13 ♖c8!. But after 12 d6!? e3 he also wins, and there are two ways to do it:

(A) 13 d7 ♗f6 14 h7 e2 15 h8♕+ ♗×h8 16 ♖h4+! ♔×h4 17 d8♕+ ♔g4 18 ♕d2 ♔f3 (18...♔h3 19 ♕d7+ ♔h4 20 ♕e6) 19 ♕d3+;

(B) 13 ♖h4+ ♔×h4 14 d7 ♗f6 15 h7 e2 16 h8♕+ ♔g4 (16...♗×h8 17 d8♕+ transposes back into the variation we just examined) 17 ♕e8!? ♔f3 18 ♕h5+ ♔e3 19 ♕h6+ ♔d3 20 d8♕+ ♗×d8 21 ♕d6+ ♔c2 22 ♕e5 ♔d2 23 ♕d4+ ♔c2 24 ♕e3.

12...♗h8 13 d6 e3 14 d7

Or 14 ♖h4+ ♔×h4 15 d7.

14...e2 15 ♖h4+! ♔×h4 16 d8♕+

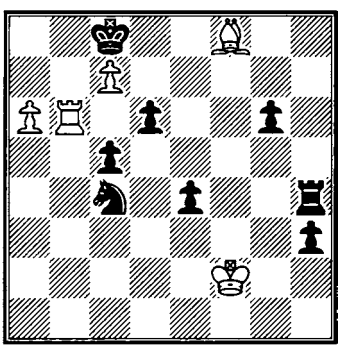
And we have reached the same winning position as in the 12 d6 e3 13 d7 variation.

The last two studies, composed by a grandmaster, were filled with complex analytical variations to a considerably

greater degree than were those preceding – and this is hardly accidental. On one hand, strong practical players are not afraid to immerse themselves in the debris of variations, and navigate confidently through them. On the other hand, it is possible that sometimes they lack the specific technical skill of the professional composers, enabling them to cut away the unnecessary details which would distract the solvers' attention from the main line.

And then, sometimes it is hard for even experienced study composers to avoid excessive complexity (not of ideas, just of analysis).

H. Aloni 1980

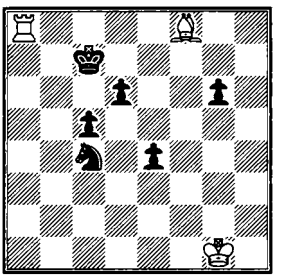


Win

1 ♖b8+! ♔×c7 2 a7 ♘b6!

2...e3+ is hopeless: 3 ♔g3! e2 4 ♖b1 ♘b6 (4...♖e4 5 a8♕ e1♕+ 6 ♖×e1 ♖×e1 is not much better) 5 ♔×h4.

But 2...♖f4+!? definitely sets White some technical problems. In the variation 3 ♔e2? ♖×f8 4 ♖×f8 ♘b6 5 a8♕ ♘×a8 6 ♖×a8 d5, the kingside pawns will be lost, but the three connected passed pawns in the center will be enough to draw against the rook. So White must play 3 ♔g1! h2+!? (3...♖×f8 4 ♖×f8 ♘b6 5 ♖b8+–) 4 ♔×h2 ♖f2+ 5 ♔g1 ♖a2 6 a8♕ ♖×a8 7 ♖×a8.

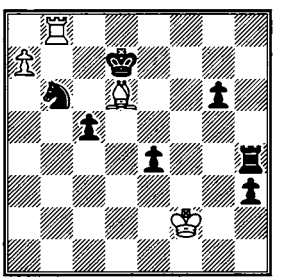


White will most likely be able to realize the extra rook; but still, I'm not 100% certain the position can be won.

3 ♗×d6+!

Of course not 3 ♖×b6?? ♖f4+ and 4...♖×f8.

3...♔d7!

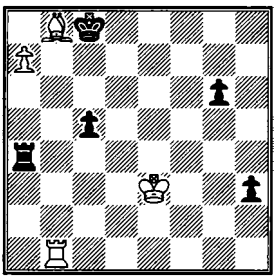


4 ♖b7+!

It is an immediate draw after 4 ♗×c5? e3+ (or 4...h2 5 ♖b7+ ♔c8 at once) 5 ♗×e3 h2! 6 ♖b7+ ♔c8 7 ♖b8+ ♔d7=.

In the line 4 ♖×b6? e3+ 5 ♔×e3 ♖a4 6 ♗b8 h2 7 ♖b1 ♔c8, we reach an instructive position. ***(D)***

The king cannot be prevented from reaching b7, when the position is drawn. Setting up this kind of fortress

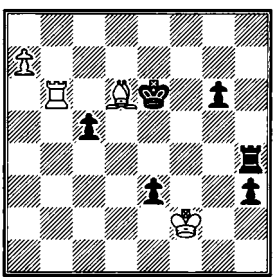


is the *leitmotif* of Black's defense. It is White's task to make the bishop defend the pawn from the other diagonal.

4...♔e6! 5 ♖×b6!

White lets the win slip by playing 5 ♗h2? e3+ 6 ♔f3 (6 ♔×e3? ♘d5+) 6...♖a4 7 ♖×b6+ ♔d5 (but not 7...♔d7? in view of 8 ♖×g6! ♔c8 9 ♖g7+–) 8 ♖b7 (8 ♗b8 h2) 8...♔c6 9 ♖g7 ♔b6 10 ♗b8 h2= (10...g5 is not bad, either) – once again reaching the same fortress as in the previous diagram.

5...e3+!



A new problem to solve: should White take the pawn, or put the king on g3?

6 ♔×e3

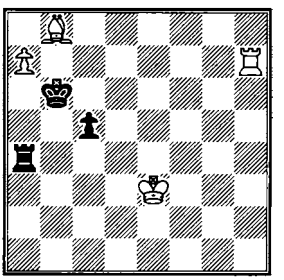
Right! 6 ♔g3? would be a mistake, because of the following fairly complex variation: 6...♖a4 7 ♗×c5+ (7 ♗b8+ ♔d7 leads to our familiar fortress) 7...♔d5! 8 ♖b4! (8 ♖b8? e2) 8...e2! 9 ♖×a4 e1♕+ 10 ♔×h3 ♕f1+ 11 ♔g3 ♕d3+ 12 ♔h4! g5+! 13 ♔×g5 ♕g3+, and the king cannot escape the checks.

6...♖a4 7 ♗×c5+!

White decides, once and for all, not to defend the pawn from b8. Let's examine the alternative possibilities:

7 ♔f2? ♔d5 8 ♗b8 ♖a2+ 9 ♔g1 c4! 10 ♖b2! ♖a1+ 11 ♔h2 ♔c6 12 ♔×h3 c3! 13 ♖b3 c2 14 ♖c3+ ♔b7= – it is the fortress again.

7 ♗b8+? ♔d5 8 ♖×g6 h2 9 ♖h6 h1♕! 10 ♖×h1 ♔c6 11 ♖h7 ♔b6



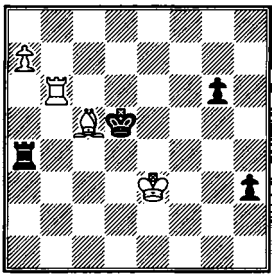
The king could not reach b7 – but it appears that this position is drawn as well: there does not seem to be any way for White to make progress. For example, 12 ♗d6! ♔c6! 13 ♗f8 (13 ♖h6 ♔b6! 14 ♗b8+ ♔b7=) 13...♔b6=.

7...♔d5 ***(D)***

8 ♖b4!

Of course not 8 ♖b8? h2 9 ♖h8 ♔×c5.

If White plays 8 ♖b5?, it would be a



mistake to reply 8...♔c4? 9 ♖b4+, or 8...♔c6? 9 ♖b4 ♖a3+ 10 ♔d4. Black would play 8...h2! 9 ♗d4+ ♔d6! (or 9...♔e6! – just not 9...♔c6? 10 ♖c5+ ♔d6!? 11 ♖c1 ♔d5 12 ♗b6! h1♕ 13 ♖×h1 ♔c6 14 ♖h8 ♔b7 15 ♖b8+) 10 ♖b1 ♔d5 (threatening 11...♖a3+) 11 ♗b6 (11 ♖a1 h1♕! 12 ♖×h1 ♖a3+) 11...♔c6! 12 ♗d4 ♔d5!. It is a positional draw – White cannot manage to secure the bishop.

8...♖a3+!

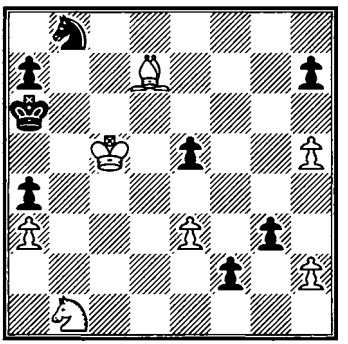
Other rook retreats (8...h2? 9 ♖×a4 h1♕ 10 a8♕+ would be altogether bad for Black) let White untangle himself: 8...♖a2? 9 ♖b2! ♖a1 10 ♗b6 ♔c6 11 ♗d4+–, or 8...♖a6 9 ♗d4 h2 (9...♖a3+ 10 ♔f2+–) 10 ♖b5+! ♔c4 (10...♔d6 11 ♖b6+) 11 ♖c5+ and 12 ♖c1+–.

9 ♖b3!! ♖×b3+ (9...♖a4 10 ♖a3+–) **10 ♔f4!** (10 ♔f2?? ♖b2+ and 11...♖a2) **10...g5+ 11 ♔g4!**

The checks are over, the pawn queens. 11 ♔×g5? would have been a mistake, because of 11...♖g3+ and 12...♖g8; but the somewhat less accurate 11 ♔f5?! ♖f3+ 12 ♔g6 ♔×c5 13 a8♕ g4 14 ♕e4 would also have sufficed for victory.

I should like to close this section devoted to the calculation of variations with an analysis of the following exceptionally deep and complex study.

O. Pervakov 2003



Win

It is easy to see that 1 ♗b5+ will be met, not by 1...♔b7? 2 hg+–, but by 1...♔a5, and if 2 hg, then 2...♘d7+! 3 ♔c6 (3 ♗×d7? f1♕–+; 3 ♔d5? ♔×b5 4 ♘d2 ♘b6+ and 4...♘c4–+) 3...♘b8+ 4 ♔c5 ♘d7+.

So White is assured of the draw. The attempt to play for the win must involve exploiting the shaky position of the enemy king. White can drive it to a5 with a check, either from b5 or from c8. Which is correct? We must make use of a technique we have learned, that of comparison.

After 1 ♗b5+ ♔a5 2 ♘d2, White threatens 3 ♘c4#, and 2...♘d7+? is bad, because of 3 ♗×d7 g2 (3...f1♕ 4 ♘×f1 gh 5 ♘d2 changes nothing) 4 ♘c4+ ♔a6 ♗c8#. So that leaves only 2...♘a6+ 3 ♗×a6 g2.

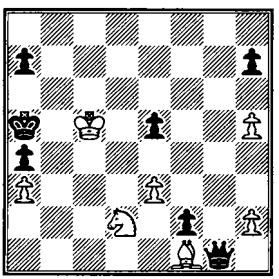
And on 1 ♗c8+? ♔a5 2 ♘d2, Black can also play 2...♘a6+, but now there is an additional possibility, 2...f1♕! 3 ♘×f1 g2. Here, it draws: 4 ♘d2 ♘a6+ 5 ♔d5 (5 ♔c6 ♘b8+) 5...♘b4+! 6 ♔c5 ♘a6+.

Now the first moves become clear.

1 ♗b5+! ♔a5! 2 ♘d2! ♘a6+! 3 ♗×a6! g2 4 ♗f1!

It is very important to keep the f2-pawn on the board as long as possible, in order to restrict the movements of Black's queen. It is a draw after 4 ♗b5? f1♕ 5 ♗f1 g1♕.

4...g1♕



White cannot mate as long as the queen attacks the white bishop. With that in mind, Black's possibilities are limited: most likely, the queen will have to shuttle back and forth between g1 and h1. On the other hand, it is not so clear what White can do: on ♗b5, Black has f2-f1♕!, stopping the immediate mate.

Here is an idea: White could play ♔c6, to be followed by ♘c4+ and ♗h3. The only thing that could save Black from being mated would be ♕g8, but then White has ♘d6. White's task is to carry out this plan in the most favorable circumstances possible, while not falling into zugzwang and avoiding stalemate defenses.

Black is not completely helpless in the starting position: the queen threatens to go to g7. The careless 5 e4? would allow Black to draw by 5...♕g7! 6 ♘c4+ ♔a6 7 ♘d6+ ♔a5 (the knight cannot use the b7-square) 8 ♘c4+ (8 ♔c6? ♕h6! 9 ♗c4 f1♕ 10 ♗×f1 ♕c1+ 11 ♗c4 ♕×a3 −+) 8...♔a6=.

So White must choose either 5 h6, taking control of the g7-square, or an immediate 5 ♔c6.

5 h6!!

When working out the plan of attack, it is important to note Black's possibility of giving up the queen for the knight, resulting in an ending with an extra bishop for White. And this is the basic idea behind the move h5-h6: to fix Black's h-pawn on a light square. The hasty 5 ♔c6? would throw away the win: I am going to wait until we are finished with our examination of the correct line to show this variation.

5...♕h1

White's task is simpler after 5...e4. The continuation is 6 h4 ♕h1 7 ♔c6! ♕g1 8 h5 (*zugzwang*: with White's pieces in their ideal positions, Black's queen has to go to the less useful h1-square) 8...♕h1 (8...♕g8 9 ♘c4+ ♔a6 10 ♘d6+ ♔a5 11 ♘b7#) 9 ♗b5! f1♕ 10 ♗×f1 ♕g1 11 ♗b5! +− .

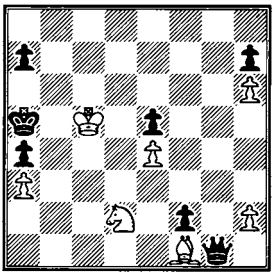
6 e4!

On 6 h3?, the reply 6...e4! becomes very strong. White loses after 6 ♗b5? f1♕ 8 ♗×f1 ♕g1, or 7 h4? ♕g1 (*zugzwang*), when 8 h5 can no longer be played in view of 8...♕g5+. All that remains is 7 ♔c6 ♕g1 = (threatening 8...♕g6+) – the white pawn never has time to control the g6-square.

The position after 6 h4? ♕g1! 7 h5 ♕h1! 8 e4 ♕g1 will be examined in the next note.

6...♕g1 ***(D)***

7 h3!!



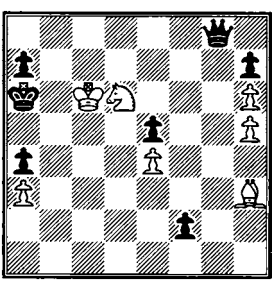
Festina lente (make haste slowly) was a favorite expression of the Roman emperor Augustus. The pawn must go to h5, in order to take the g6-square away from Black's queen; but the hasty 7 h4? ♕h1 8 h5 ♕g1 9 ♔c6 ♕h1 would place White in *zugzwang*. With the queen on h1, White cannot play 10 ♘c4+ ♔a6 11 ♗h3. And on 10 ♗b5, there follows 10...f1♕ 11 ♗×f1 ♕g1 (threatening 12...♕b6+) 12 ♘c4+ ♔a6 13 ♗h3, when 13...♕g8 does not lose, but it is simpler to play 13...♕g4! 14 ♗×g4 – stalemate.

The bishop must only come out to h3 with the f2-pawn still on the board.

7...♕h1 8 h4 ♕g1 9 h5 ♕h1 10 ♔c6

Now it is the same position of mutual *zugzwang*, but this time with Black to move.

10...♕g1 11 ♘c4+ ♔a6 12 ♗h3! ♕g8 13 ♘d6



(A) 13...♕e6

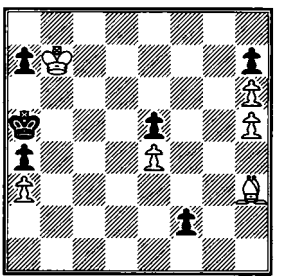
The attempt to draw by stalemate does not work out. Objectively speaking, taking the "bishop vs. pawns" ending described below is much more stubborn.

14 ♗×e6 f1♕ 15 ♔c7!

Just not 15 ♗c4+? ♕×c4+ 16 ♘×c4 stalemate.

15...♕c1+ 16 ♗c4+ ♔a5 17 ♘b7#.

(B) An endgame difficult to calculate arises after **13...♕a8+!? 14 ♔c7 ♔a5 15 ♘b7+** (15 ♗f1? a6! 16 ♘b7+ ♕×b7+ 17 ♔×b7 is stalemate) **15...♕×b7+** (15...♔b5? 16 ♗f1#) **16 ♔×b7**.



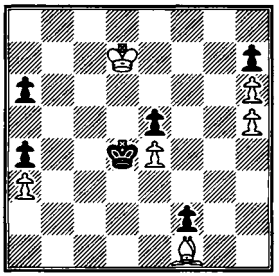
16...a6!

The variation 16...♔b5 involves less subtlety: 17 ♗f1+ ♔c5, and now the most exact line is 18 ♔a6! ♔d4 19 ♔b5 ♔×e4 20 ♔c4, although 18 ♔c7 ♔d4 19 ♔d6 is possible, too.

17 ♔c8!

Of course not 18 ♔c7? f1♕ 18 ♗×f1 – stalemate.

17...♔b5 (threatening ♔c4-b3) **18 ♗f1+ ♔c5 19 ♔d7 ♔d4**



20 ♔d6!

The less accurate move 20 ♔e6!? leads by force to a queen endgame in the line 20...♔×e4 21 ♔f6 ♔f4 22 ♔g7 ♔f3 23 ♔×h7 e4 24 ♔g8 e3 25 h7 e2 26 ♗×e2+ ♔×e2 27 h8♕ f1♕. Most likely, White will win this by continuing 28 ♕e5+ (or 28 ♕b2+) 28...♔d3 29 h6.

20...♔×e4 21 ♔c5 ♔e3

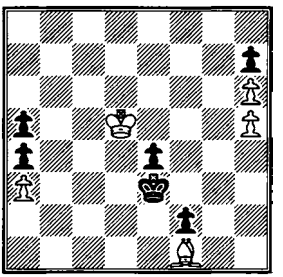
Now White would only have a draw after 22 ♔c4? ♔d2 23 ♔d5 ♔c3 24 ♔×e5 ♔b3 25 ♔d4 ♔×a3 26 ♔c3 (26 ♔e3?? ♔b3 27 ♔×f2 a3−+) 26...♔a2 27 ♗×a6 ♔b1 28 ♔b4 ♔c2 29 ♔×a4 ♔d2.

White must force the the e-pawn to advance, so that after capturing it, the White king will be closer to the pawn at f2.

22 ♔d5! e4

After 22...♔d2 23 ♔×e5, White is a tempo ahead of the variation we just examined, and may take the h7-pawn with the king and queen first (now we see yet another reason why it was important to push the pawn to h6 on the 5th move): 23...♔c3 24 ♔f6 ♔b3 25 ♔g7 ♔×a3 26 ♔×h7 ♔b3 27 ♔g6 a3 28 h7 a2 29 h8♕.

23 ♔e5! a5 (23...♔f3 24 ♔d4 e3 25 ♔d3 a5 26 ♗e2+) **24 ♔d5**



24...♔f4

In the line 24...♔d2 25 ♔×e4 ♔c3, White has time to capture the f2-pawn with the king, and then to attack the h7-pawn with the bishop (since the pawn was fixed ahead of time on a light-square): 26 ♔e3 ♔b2 27 ♔×f2 ♔×a3 28 ♗d3 ♔b4 29 ♗×h7 a3 30 ♗g8+−.

25 ♔d4 ♔f3 26 ♔c3 ♔e3 27 ♔c2 ♔f4

27...♔d4 leads to a familiar finish: 28 ♔d2 e3+ 29 ♔e2 ♔c3 30 ♔×e3 ♔b3 31 ♔×f2 ♔×a3 32 ♗d3+−.

28 ♔d2

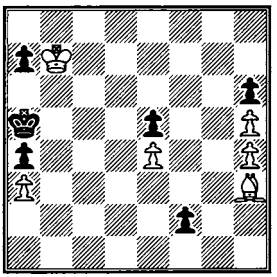
In this situation, Black has no counterplay, so *zugzwang* is inevitable and the pawns lost.

28...♔f3 29 ♗e2+ ♔f4 30 ♗b5 ♔f3 31 ♗f1 (*zugzwang*) **31...e3+ 32 ♔d3 ♔f4 33 ♗e2+−**

Had White played 5 ♔c6? instead of a 5 h6!!, similar endgame would have resulted, but with a kingside pawn configuration less favorable to White.

5...♕h1+! (but not 5...e4 6 h3 h6 7 h4! ♕g7 8 ♘c4+ ♔a6 9 ♘d6+ ♔a5 10

♘b7+ ♕×b7+ 11 ♔×b7 a6 12 ♔c8 ♔b6 13 ♔d7 ♔c5 14 ♔e6+–) 6 e4 h6 7 h4 ♕g1 8 ♘c4+ (8 ♗b5?? f1♕ 9 ♗×f1 ♕b6+) 8...♔a6 9 ♗h3 ♕g8! 10 ♘d6 ♕a8+! 11 ♔c7 ♔a5 12 ♘b7+ ♕×b7+ 13 ♔×b7

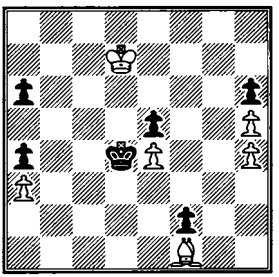


Now on 13...♔b5? 14 ♗f1+ ♔c5 15 ♔a6! ♔d4 16 ♔b5 ♔×e4 (16...♔c3 17 ♔×a4 ♔d2 18 ♔b5 ♔e1 19 ♗g2 f1♕+ 20 ♗×f1 ♔×f1 21 ♔c5+–) 17 ♔c4 ♔e3 18 ♔c3, Black's king will be unable to break through to the queenside, so Black loses: 18...e4 19 ♔c2 ♔d4 (19...♔f3 20 ♔d2 a5 21 ♔c2 ♔e3 22 ♔d1! ♔f3 23 ♔d2 ♔f4 24 ♗e2 ♔g3 25 ♔e3 ♔g2 26 ♔×e4 f1♕ 27 ♗×f1+ ♔×f1 28 ♔f5+–) 20 ♔d2 ♔c5 21 ♔e3 ♔d5 22 ♗a6 ♔e5 23 ♗b5 ♔d5 24 ♔×f2 ♔d4 25 ♗×a4 ♔c3 26 ♗b5+–. Black's only saving move is 13...a6!! (it is important to force White's king as far away from the back rank as possible) 14 ♔c8! (14 ♔c7? f1♕ 15 ♗×f1 is stalemate) 14...♔b5.

Now 15 ♔d7 ♔c4 16 ♔e6 ♔b3 17 ♔×e5 ♔×a3 leads to an equal queen endgame: 18 ♔f5 ♔b4 19 e5 a3 20 e6 a2 21 e7 a1♕ 22 e8♕ f1♕+ 23 ♗×f1 ♕×f1+ 24 ♔g6 a5 25 ♕e7+ ♔b3=.

After 15 ♗f1+ ♔c5, White cannot win by 16 ♔b7 ♔d4 17 ♔×a6 ♔×e4 18 ♔b5, as the black king gets to d2: 18...♔e3! 19 ♔c4 ♔d2 20 ♔d5 ♔c2 21 ♔×e5 ♔b3 22 ♔d4 ♔×a3 23 ♔c3 ♔a2=.

White could also try 16 ♔d7 ♔d4, but this would not change the drawn outcome.



Going after the h-pawn would be ineffective here, since the pawns queen at the same time: 17 ♔e6 ♔×e4 18 ♔f6 ♔f4 19 ♔g6 e4 20 ♔×h6 ♔f3 21 ♔g6 e3 22 h6 e2 23 ♗×e2+ ♔×e2 24 h7 f1♕ 25 h8♕ ♕g2+ 26 ♔f7 ♕d5+.

On 17 ♔d6 ♔×e4 18 ♔c5, Black replies 18...♔e3! 19 ♔d5 (19 ♔b4? ♔d2–+) 19...e4.

(A) 20 ♔e5 ♔d2 21 ♔×e4 ♔c3 22 ♔e3 ♔b3 23 ♗×a6 ♔×a3 24 ♔×f2 ♔b4 25 ♗c8 ♔c5 26 ♗e6 ♔d6 27 ♗a2 ♔e7, and the king has reached the safe corner – the one not controlled by the opposing bishop – with an elementary draw.

(B) 20 ♗g2 ♔d2 21 ♔×e4 ♔c3 22 ♔e3 ♔b2 23 ♔×f2 ♔×a3 24 ♔e3 (with the black pawn on h7, White would win by ♗e4 followed by ♗×h7; now, White must settle for the draw) 24...♔b2 25 ♔d4 a3 26 ♗d5 a2 27 ♗×a2 ♔×a2 28 ♔c5 ♔b3 29 ♔b6 ♔c4 30 ♔×a6 ♔d4=.

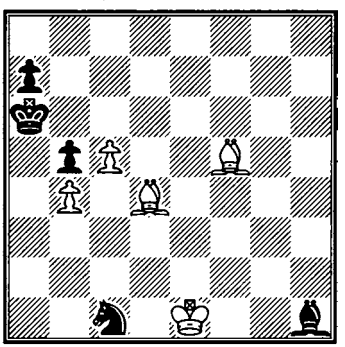
A many-faceted study, in which White had to select the most exact method of bringing the intended attacking plan to

life; it could very well have gone into the next section as well, dedicated to strategic studies

3. Strategic Studies

The overwhelming majority of studies are purely tactical – in order to solve them, a player need only calculate concrete variations and look for hidden combinations. But occasionally, we find strategic studies too, in which the key to the solution is selecting the proper plan. On the other hand, they differ from practical games, where some leeway is occasionally permitted (for example, one may sit and wait, or do a little maneuvering, or gradually improve one's position). On the other hand, in studies, every move is necessary, strategic studies being no exception. Playing them out requires absolute accuracy.

N. Kralin, An. Kuznetsov 1967



Win

1 ♗e3

1 ♗c3? ♔b7 would be considerably weaker, so White begins to hunt down the knight at once, giving the opponent no time to consolidate.

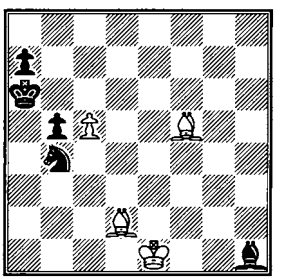
1...♘a2!

The prelude to a clever piece sacrifice. The move 1...♘b3? is easily refuted by 2 ♗e6 ♘a1 3 ♔d2 ♗e4 4 ♗d4 ♘c2 5 ♗c8+.

2 ♗d2

What can Black do? 2...♔b7? is just bad, because of 3 ♗e6; so it would seem Black has nothing better than 2...♗d5. But after 3 ♗d3!, White's positional advantage is too great. 3...♔b7 4 ♗×b5 is hopeless; on 3...♗c4, there follows 4 ♗e4!, and there is nothing to be done about the king march to c7 followed by the bishop mate on b7. All that is left is 3...♗c6 4 ♔e2 ♔b7 5 ♔e3 ♔c7. Now 6 ♗e4? would be a mistake: 6...♗×e4 7 ♔×e4 ♔c6 8 ♔d4 a6! puts White in *zugzwang*, as a king retreat would be answered by 9...a5=. But after 6 ♔d4 ♗d7 7 ♔e5 ♗e8 8 ♗e4, there seems to be nothing Black can do to save the knight which is presently under arrest. The threat is 9 ♗d5; if 8...♗c6, then 9 ♗b1; in the variation 8...♗f7 9 ♔f6 ♗c4 10 ♗f4+ ♔c8 11 c6, the c-pawn queens. Nor does 8...a5 9 ba b4 10 ♔d4+− help.

2...♘×b4!!



Now it appears that after 3 ♗×b4 ♗e4!, taking on e4 is stalemate; and wherever

the bishop retreats along the h3-c8 diagonal, the opposing bishop will pursue it along the neighboring diagonal. The only way to avoid either stalemate or a repetition is to exchange on b7, but that endgame is a draw: 4 ♗c8+ ♗b7 5 ♗×b7+ ♔×b7 6 ♗d2! (the threat was 6...♔c6 and 7...a5) 6...♔c6 7 ♗e3 a5 8 ♔d2 b4 9 ♔d3 ♔d5! 10 ♗f2 a4 11 ♗e3 a3! 12 ♔c2 a2 13 ♔b2 b3 14 ♗d4 ♔c6, and on 15 ♔×b3, Black plays the diversionary 15...a1♕ 16 ♗×a1 ♔×c5.

So the plan to trap the knight has been stymied – but not completely: on b4, the knight remains vulnerable, and cannot retreat to c6 or d5, because of mate.

3 ♔e2!!

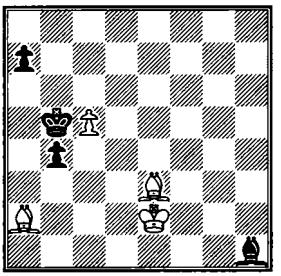
By taking control of the f3-square, White creates the threat of 4 ♗×b4 ♗e4 5 ♗g4+–.

The move 3 ♔f2 looks inferior "on general principles:" the king moves too far away from the queenside. As will be made clear later on, in that case White would not be able to execute the plan (which should have been visualized, at least in broad strokes, even before the opponent made the rather obvious next move).

3...♔a5

Another try worth considering is 3...♘a2!? 4 ♗e6 b4! 5 ♗×a2 ♔b5 6 ♗e3.

Objectively speaking, White ought to win, although not without difficulty. 6...a5 7 ♔d3! and 8 ♗c4+ poses no

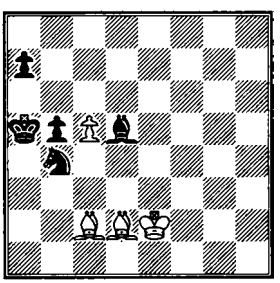


problems; on 6...♗e4, 7 ♗f7 a5 8 ♔d2 a4 9 ♗f2 could be played, intending ♔e3-d4.

Perhaps the most stubborn defense is 6...♔a4!?. The natural reply 7 ♔d3? throws away the win: 7...♔a3 8 ♗e6 b3 9 ♔c3 b2 10 ♗f5 ♔a2=, or 8 ♗b1 ♔b2 9 ♗c2 b3 10 ♗d1 a5= (10...♔a2). And the attempt to push the passed pawn by 7 ♗f7?! b3 8 ♗e8+ ♔a3 9 c6 b2 10 c7 b1♕ 11 c8♕ ♕b2+ can hardly be justified, when Black most likely gets a draw.

The more solid choice is 7 ♔d2! b3 (or 7...♔a3 8 ♗b1 a5 9 ♗d4 a4 10 ♗f5) 8 ♗b1 ♔b4!? 9 ♔d3 (but not 9 ♗f5? a5) 9...b2 (9...a5 10 ♔d4) 10 ♗d4 (10 ♔c2? is a mistake: 10...♔a3 11 ♔c3 ♗d5=, but 10 ♔d4 is possible) 10...♔b3 11 ♗c3 (it is important to prevent a7-a5 – now, Black can only wait) 11...♗g2 12 ♔d4 ♗f3 13 ♗d2 ♗g2 (13...♗d1 14 c6 ♗c2 15 c7+–) 14 ♔e5+–.

4 ♗c2! ♗d5!



A crossroads has been reached: White must decide which way to send the king. To avoid making a mistake, it is important to guess the hidden defensive idea which Black began carrying out with the last move.

On 5 ♔e3?! (and by the way, this position could also have occurred after 3 ♔f2?), Black replies 5...a6!, preparing the stalemate defense 6...♗b3!. True, after 6 ♔d4 ♗b3?, no longer works because of 7 ♗×b4+ ♔b4 8 ♗×b3 (since the c5-pawn is now defended by the king); but Black has the waiting move 6...♗f3!. For example, 7 ♔e5 ♗d1! 8 ♗×b4+ ♔×b4 9 c6 ♗g4 10 ♗f5 ♗f3 11 c7 ♗b7, and the position is drawn: 12 ♗e4 ♗c8 13 ♔d6 a5! 14 ♔e7 a4 15 ♔d8 ♗a6=. Nothing is changed by 7 ♗b3 ♗g4! (but not 7...♗e4? 8 ♔e5 ♗c2 9 ♗×b4+ ♔×b4 10 c6+–) 8 ♔e5 (8 c6 ♔b6=; 8 ♔c3 ♘c6=) 8...♗d1!.

A stronger move than 8 ♗×b4+ would be 8 c6! ♔b6 9 ♗×d1 ♘×c6+ 10 ♔d6. This study was composed during the years when the "two bishops vs. knight" endgame was considered a draw. Now we know it is not: White does have a win, even though it is exceptionally complex. The presence of black pawns on the board is not likely to alter that assessment – but who knows? In any event, you cannot call such an approach either technical or convincing – you should only play this if you are unable to find anything better. But in fact, there is a more forcing, more convincing way for White.

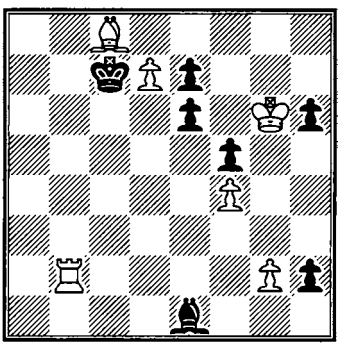
5 ♔d1!!

The king goes to a3 to win the pinned knight. Black's stalemate counterplay comes exactly one move too late. That is why Black would be able to save the game after 3 ♔f2?.

5...a6 6 ♔c1 ♗b3! 7 ♔b2! ♗×c2 8 ♔a3

And mate on b4 is forced.

V. Bron 1947



Win

The pawn at h2 is bound to become a queen, but White can create mating threats against the opposing king. The first few moves will be easy to find.

1 d8♕+! ♔×d8 2 ♖c2!

The right order of moves is important: after 2 ♗×e6? ♔c7, Black's king skips away.

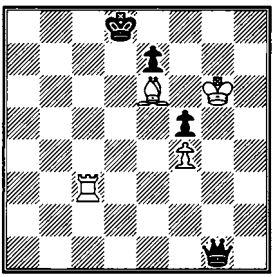
2...h1♕ 3 ♗×e6 ♗c3! 4 ♖×c3 ♕×g2+ 5 ♔×h6!

5 ♔f7? would be far weaker,in view of 5...♕a8; and 6 ♖c8+? ♕×c8 7 ♗×c8 ♔×c8 8 ♔×e7 h5 would lose. So White takes the h-pawn. But now Black has a new defensive resource: playing for stalemate.

5...♕h2+ 6 ♔g6

Of course not 6 ♔g7? ♕b2.

6...♕g1+!



Now the obvious 7 ♔f7? is parried by 7...♕c5!. Taking the queen is stalemate, and 8 ♖c4 is met by 8...♕c6!, putting White in *zugzwang*. If it were Black to move in this position, 9...♕c5 would have to be played, and then White's king would be able to move somewhere. In fact, this position, with Black to move, would have arisen after the less accurate 6...♕g2+?! 7 ♔f7 ♕c6 8 ♖c4 – that is the reason the queen checked from the g1-square.

Now would probably be a good time for White to put together a plan of action. White would like to remove the f5-pawn and play f4-f5. Then, in a situation where the rook and queen face off along the c-file, the bishop will be protected by the pawn, and the king obtains some freedom to maneuver. In some cases, f5-f6 could be played, breaking up Black's stalemating plans.

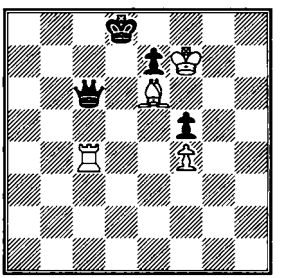
An immediate 7 ♔×f5? does not work, since the king cannot escape the checks: 7...♕b1+ 8 ♔g5 ♕g1+ 9 ♔h6 ♕h1+ 10 ♔g6 (not 10 ♔g7? ♕a1) 10...♕e4+.

But if the rook were on c4, the king would have the g7-square available; nor could Black's queen give check from e4. As we have already seen, the rook can go to c4, forcing the black queen to c5 or c6. We only have to be careful, when we do this, not to fall into *zugzwang*. But how do we avoid that? Here is an idea: move the king, not to f7, but to f8!

7 ♔h7!! ♕h1+ 8 ♔g8 (8 ♔g7? ♕a1) **8...♕g1+**

If 8...♕g2+, then 9 ♔f7! ♕c6 10 ♖c4! – and our goal is attained.

9 ♔f8! (9 ♔f7? ♕c5! 10 ♖c4 ♕c6!=) **9...♕c5 10 ♖c4! ♕c6! 11 ♔f7!**



The first part of the plan is accomplished: we have the required mutual *zugzwang* position, with Black to move.

11...♕c5

11...♕e8+ 12 ♔g7 ♕f8+ does not work because of 13 ♔h7! +–.

12 ♔g6!

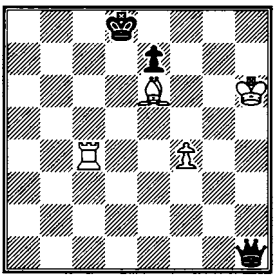
Maneuvering subtly, White has brought the rook to c4; now the f5-pawn can be captured with the king.

12...♕g1+ 13 ♔×f5

Now the second part of the winning

plan is complete: the f5-pawn has fallen. In the third stage, White escapes the checks, and then plays f4-f5.

13...♕b1+ 14 ♔g5 ♕g1+ 15 ♔h6 ♕h1+



16 ♔g7!

The most accurate: once again, the king heads for f8. 16 ♔g6 ♕g1+ 17 ♔f7 ♕c5! 18 f5 ♕c6! would be somewhat less accurate, as White could not play either 19 ♔f8? ♕×e6!=, or 19 f6? ♕e8+ 20 ♔g7 ef!=. On the other hand, this premature occupation of f7 does not cost White the win: a move simply has to be lost by 19 ♔g7! ♕a6 (19...♕g2+ 20 ♔f8 ♕c6 21 ♔f7) 20 ♖c1 (20 ♔g8 is also good) 20...♕a8 21 ♔f7! ♕c6 22 ♖c4! – and Black is in *zugzwang*.

16...♕a1+ 17 ♔g8 ♕g1+ 18 ♔f8

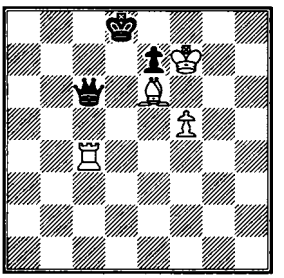
We have already seen the variations after 18 ♔f7 ♕c5! 19 f5 ♕c6! 20 ♔g7!.

18...♕c5 19 f5

Or the moves could be transposed: 19 ♔f7 ♕c6 (19...♕h5+ 20 ♔g7 +–) 20 f5.

19...♕c6! 20 ♔f7!

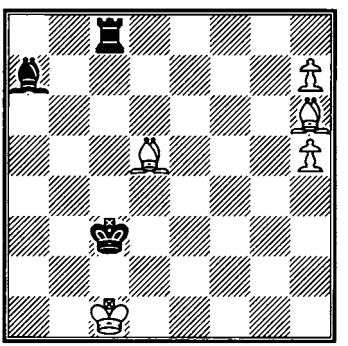
White's plan is close to fulfillment. All that remains is to break up the opposing stalemate by playing f5-f6 at the right moment. And the right moment will be when the black queen is on c5, and the white king on f8. Right now, Black is



in *zugzwang*: 20...♕×e6+ loses to 21 ♔×e6, and 20...♕e8+ 21 ♔g7 ♕f8+ to 22 ♔h7!.

20...♕c5! 21 ♔g8! (but not 21 f6? ♕h5+) **21...♕g1+ 22 ♔f8 ♕c5 23 f6!+–**

G. Kasparyan 1964



Win

If Black's bishop takes over the long diagonal, we can kiss all our hopes of winning goodbye; therefore, the first few moves are forced.

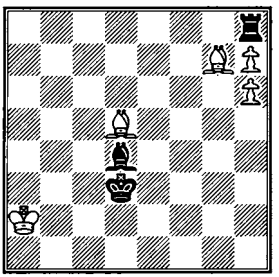
1 ♗g7+ ♗d4 2 h6 ♔d3+ 3 ♔b1!

The choice of squares for the king is defined by the exclusionary method: after 3 ♔d1?, Black forces the draw by 3...♗e3! 4 ♗b2 ♖f8 (4...♗×h6) 5 ♗g2 ♗×h6 (or 5...♗d4).

3...♖b8+!

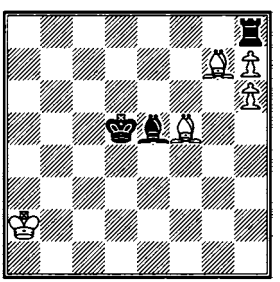
Considering White's threat of 4 ♗g8 (or 4 ♗×d4 ♔×d4 5 ♗g8), Black must put the rook on h8; but as I will show a little later, checking first is better.

4 ♔a2 ♖h8



Now the obvious 5 ♗g8? would cost White the win, as it allows Black to execute a plan of gradually inching the king closer to the h6-pawn: 5...♔e4 6 ♔b3 ♗e5 7 ♔c4 ♔f5 8 ♔d5 ♗f6 9 ♔d6 ♔g6=.

Instead of 6 ♔b3, we could try moving the bishop to the b1-h7 diagonal: 6 ♗b3 ♗e5! 7 ♗c2+ ♔d5 8 ♗f5 (after 8 ♔b3 ♔e6 9 ♔c4 ♗f6 10 ♗g6 ♖d8, White cannot improve the position any further).



The black king's advance upon the pawns is now halted, and White plans to bring the king through the kingside to g6 (this is, in fact, the main plan in this ending). Unfortunately, the opponent has a powerful response: 8...♖b8!. With the king cut off on the edge of the board, it is a draw, for example: 9 ♔a3 ♔d6 10 ♔a4 ♔d5 11 ♔a5 ♔d6 12 ♔a6 ♔d5 13 ♔a7 ♖e8. The king cannot go anywhere from here, and there is also the threat of 14...♖e7+ and 15...♖×g7.

White must immediately occupy the b1-h7 diagonal with the bishop.

5 ♗f7!!

The advantages of White's chosen move show up in the variation 5...♔e4 6 ♗g6+ ♔d5 7 ♔b3 ♗e5 8 ♗f5. We reach almost the same position as in the last diagram, but the king has escaped from the edge of the board, and nothing can now prevent the march to g6.

Now would be a good time to back up a little, and see what would have happened on 3...♖h8 (without 3...♖b8+!). Once again, White should not shut the rook in by 4 ♗g8?, in view of 4...♔e4, followed by ♗e5, ♔f5, ♗f6 and ♔g6=.

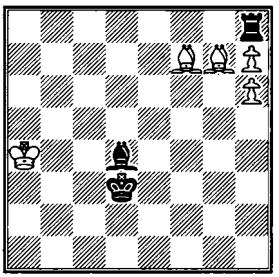
The simplest choice is 4 ♗f7! ♔e4 5 ♗g6+ ♔d5 6 ♗f5 (6 ♔c2 ♗e5 7 ♗f5), or 4...♖b8+ 5 ♔a2 ♖a8+ 6 ♔b3, when we have transposed back into the main line of the study.

But there is another winning possibility as well: 4 ♗b3!?. For example, 4...♖b8!? (4...♔e4 5 ♗c2+ ♔d5 6 ♗f5 ♗e5 7 ♔c2) 5 ♔c1! ♗e3+ (5...♖c8+ 6 ♔d1 ♗e3 7 ♔e1 ♖c1+ 8 ♗d1 ♖c8 9 ♗e2+ ♔e4 10 ♗c4+−) 6 ♔b2 ♗d4+ 7 ♔a3 ♖h8 8 ♗f7 ♔e4 9 ♗g6+ ♔d5 10 ♔b3 ♗e5 11 ♗f5, and once again, we have reached a familiar position, which we know to be won for White.

5...♖a8+!?

Black gives a flurry of checks, hoping to impede the opposing king's march to the kingside.

6 ♔b3 ♖b8+ 7 ♔a4 ♖h8!



There is a delicate trap here for White to fall into: if 8 ♔b5?, intending after 8...♔e4 to reach the basic winning position by 9 ♔c4 ♖c8+ 10 ♔b3 ♖h8 11 ♗g6+ ♔d5 12 ♗f5+−, Black, instead of a rook check, has the outstanding reply 9...♔f5!! 10 ♔×d4 ♖×h7 11 ♗g8 ♖×g7 12 hg ♔f6=. 9 ♔c6 meets the same reply – 9...♔f5! And if 9 ♗g6+ ♔d5 10 ♔a6 ♗e5 11 ♗f5, then 11...♖b8!=, and once again, Black is saved by cutting the White king off on the b-file.

There is one more false lead: 8 ♗g6+? ♔c4 9 ♗e4 ♖b8= – Black threatens a perpetual check on the b-file.

Only the careful retreat of the bishop leads to the goal.

8 ♗a2!! ♔c3

8...♔e4 is no use anymore: 9 ♗b1+ ♔d5 10 ♔b3! ♗e5 (10...♖b8+ 11 ♔c2, threatening 12 ♗a2+) 11 ♗f5 leads to the basic winning position. But now, the h7-pawn is attacked, and on 9 ♗b1, Black can play 9...♖b8 or 9...♔c4.

9 ♗g8!

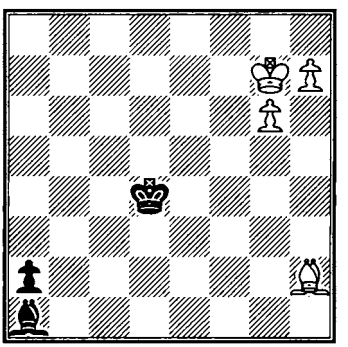
A sudden change of plans. The black king has wandered too far, and cannot get back to g6 in time.

9...♔d3 10 ♔b5 ♔e4 11 ♔c6 ♗e5 12 ♔d7 ♔f5 13 ♔e7(e8)+−, or 13 ♗×e5 ♔×e5 14 ♔e7+−.

4. Endgame Studies

We could have featured many of the preceding studies here – if only because you could hardly call them middlegame studies! And their themes, as well – such as stalemate, *zugzwang*, queening pawns, and creating fortresses – are first and foremost characteristic of the concluding stage of the game. Still, in the examples given in this chapter, the material on the board will be less, but the amount of positional maneuvering will be greater, relying on typical endgame techniques and evaluations.

V. Anufriev, B. Gusev 1986



Draw

First of all, we see that the direct 1 h8♕? ♔e4+ 2 ♔g8 ♗×h8 3 ♔×h8 a1♕+ 4 g7 is a loss. It is well known that a queen wins against a knight pawn; a bishop on the board does not change that

evaluation, especially with the black king standing so close. For example, 3...♔f5 4 ♔h7 ♕a7 6 ♔h8 ♕d4 7 ♔h7 ♕h4+ 8 ♔g8 ♔g6 (or 8...♕×h2).

1 ♔g8!

A much more logical move than 1 h8♕? ("comparison"!), for after the black king retreats, White can hold off queening the pawn, making a useful bishop move first. In other words: the defensive possibilities are increased.

1...♔e4!

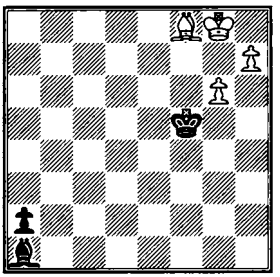
In choosing a square for the king, Black must foresee the contours of the opponent's counterplay. As it turns out, White intended to meet 1...♔d5 with 2 ♗f4!, when Black has no time for 2...♔e6, in view of 3 ♗h6! ♗c3 4 h8♕ (or 4 g7 a1♕ 5 h8♕=) 4...♗×h8 5 g7=. The position after 1...♗h8 2 ♔×h8 a1♕+ 3 ♔g8 is drawn, while after 2...♗b2, White begins hounding the bishop in perpetuity: 3 ♗c1! ♗c3 4 ♗d2! ♗d4 5 ♗e3! ♗e5 6 ♗f4! ♗f6 7 ♗g5!, etc.

2 ♗d6! ♔f5!

After 2...♗b2, the same perpetual pursuit saves White, except along a different diagonal: 3 ♗a3! ♗c3 (3...a1♕ 4 ♗×b2) 4 ♗b4! ♗d4 5 ♗c5! ♗e5 6 ♗d6! ♗f6 7 ♗e7!=. But compared to the 1...♔d5 2 ♗f4 ♔e6 try, here the g6-pawn is attacked. And 3 g7? ♗×g7, of course, loses.

3 ♗f8!

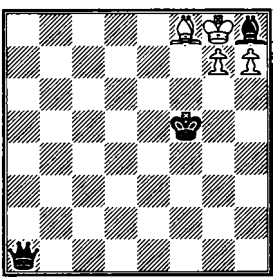
White would have met 3...♔×g6 with 4 h8♕! ♗×h8 5 ♗g7! ♗×g7, stalemate.



3...♗h8!! 4 g7!

After 4 ♔×h8? a1♕+ 5 g7 ♔g6 6 ♔g8, it looks like White's king will be mated. Here is one way: 6...♕h1 7 h8♘+ (7 h8♕ ♕d5#) 7...♔f6 8 ♘f7 ♕d5 9 ♔h8 ♕h5+.

4...a1♕



5 gh♘!

The only way! In this situation, a knight defends the mate threat better than a queen. 5 gh♕? would be bad, in view of 5...♕a2+ 6 ♔g7 ♕b2+ 7 ♔g8 ♕b3+ 8 ♔g7 ♕c3+ (a standard endgame technique for getting the queen closer – we call it a "stairway" – although here 8...♕b7+ 9 ♔g8 ♕d5+ or 9 ♔h6 ♕c6+ would win a little quicker) 9 ♔g8 ♕c4+ 10 ♔g7 ♕d4+ 11 ♔g8 ♕d5+ 12 ♔g7 ♕e5+ 13 ♔g8 ♕e6+ 14 ♔g7 ♕g6#.

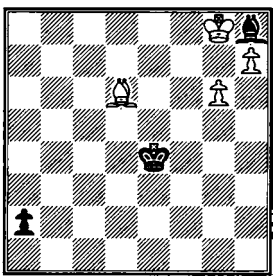
5...♕a2+ 6 ♘f7!

On 6 ♔g7?, Black has various ways to mate, including 6...♕e6!? 7 ♗a3 ♕e5+ 8 ♔g8 ♔f6.

6...♔g6 7 h8♘+!

It might be obvious, but it is still a nice concluding move: in what seemed at first to be a completely "normal" bishop ending, the solution turned out to be a double-knight under-promotion.

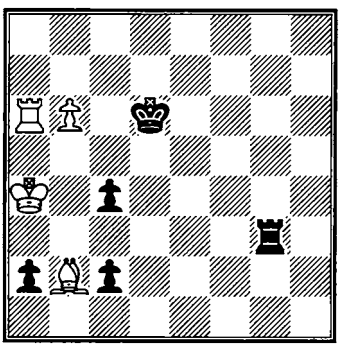
Perhaps we still ought to examine Black's other attempt: 2...♗h8!? (instead of 2...♔f5).



In a similar situation from the other variation (after 1...♔d5 2 ♗f4), the bishop could have been taken. But here, 3 ♔×h8? a1♕+ 4 ♔g8 (4 g7 ♔f5 would be worse still) loses, although it is not quick. The main idea for Black is the same one that would be used without the bishop and the g6-pawn: prepare to get the king closer by ♔f5. The continuation would be 4...♕a8+ 5 ♔g7 ♕b7+ 6 ♔f8! (6 ♔g8 ♔f5! 7 h8♕ ♔×g6−+ ; 6 ♔h6 ♕b2!−+) 6...♕c8+ 7 ♔g7 ♕d7+ 8 ♔h6! ♕e8! 9 ♔g7 ♔f5! 10 h8♘! (Black has an easier time of it after 10 h8♕ ♕×g6+ 11 ♔f8 ♕×d6+ – the rest is a well-known part of endgame theory) 10...♕d7+ 11 ♘f7 ♕e6! 12 ♘h6+ ♔g5 13 ♘f7+ ♔h5. The g6-pawn is lost (the only way to save it would be to give up the bishop), and the "bishop and knight vs. queen" endgame is a loss. Practical players would find it useful to know that with this material imbalance, the only way for White avoid defeat is by reaching the "Karstedt Position": king at g8, bishop at g7, and knight at e5 (which you will find, in my *Endgame Manual*, (2nd ed.) Diagram 14-27, page 289.).

3 g7? ♗×g7 4 ♔×g7 a1♕+ would also be hopeless; so White would have to play 3 ♗f8! a1♕ 4 g7. If Black now plays 4...♔f5, then 5 gh♘!, and the game transposes into the main line of the solution, while after 4...♕a2+ 5 ♔×h8, or 4...♗×g7 5 ♗×g7 ♕a2+ 6 ♔f8, the position is drawn.

G. Kasparyan 1960



Draw

Two black pawns are on the verge of queening. The bishop cannot deal with them both, so the rook must help out. But it is not that easy to bring it back to the defense: 1 ♔b4? ♖b3+ would lose at once. So it must come back via the c-file.

1 b7+ ♔c7 2 ♖c6+! (2 ♖b6? ♖g8 is bad) **2...♔b8!** (2...♔×c6 3 b8♕=) **3 ♖c8+!**

The naive 3 ♖×c4? would be refuted by 3...♖g4! 4 ♖×g4 c1♕ 5 ♗×c1 a1♕+. So before taking the pawn, White diverts Black's king to b7, so

that a *zwischenschach* may later be given with the rook at b4.

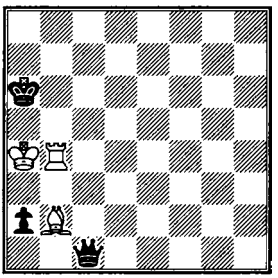
3...♔×b7 4 ♖×c4 ♖g4! 5 ♖×g4 c1♕!

5...a1♕+? 6 ♗×a1 c1♕ 7 ♖b4+ and 8 ♗b2= is an obvious draw.

6 ♖b4+!

On 6 ♗×c1? a1♕+ 7 ♗a3 ♕d1+, the rook is lost immediately. In the variation 6 ♖g7+? ♔c8 7 ♖g8+ ♔d7 8 ♗×c1 a1♕+ 9 ♗a3, it still falls to a fork: 9...♕d1+ 10 ♔b4 ♕d4+ and 11...♕d5+.

6...♔a6!



Had Black played 6...♔c6 instead, then after 7 ♗×c1 a1♕+ 8 ♔b3, the bishop would have been taboo, in view of 9 ♖c4+. But now, 7 ♗×c1? would lose: 7...a1♕+ 8 ♗a3 (otherwise 8...♕×c1 −+) 8...♕d1+ 9 ♖b3 ♕d7+! 10 ♔b4 ♕d4#.

7 ♔b3!!

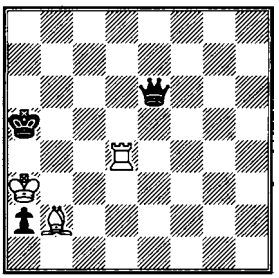
A brilliant *zwischenschach.* White is not afraid of either 7...a1♕ 8 ♗×a1 ♕×a1 9 ♖a4+, or 7...♕b1 8 ♖a4+ ♔b5 9 ♖×a2=.

7...♕e1!?

Black continues to set problems for the opponent. Taking the pawn with the rook leads to mate: 8 ♖a4+? ♔b5 9 ♖×a2 ♕e6+ 10 ♔a3 ♕e3+ (or 10...♕c4); and the bishop cannot retreat to d4 because of 8...♕b1+. There is only one move left:

8 ♖d4! ♕e6+ 9 ♔a3

White has set up a fortress which cannot be broken down, if defended accurately. After the natural 9...♔a5, Genrikh Kasparyan extends the main line of this study for another three moves; but in fact, the solution ought to end here, since what follows no longer observes the principle that White's moves must be "only" ones.

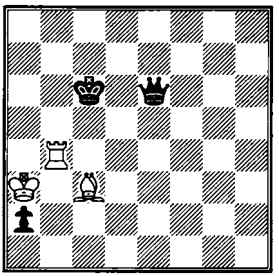


(A) The composer's main line, 10 ♖a4+! ♔b5 11 ♖b4+ (11 ♖d4? ♕a6+) 11...♔c6 12 ♖d4=, with the continuation ♖d4-a4-d4, is convincing enough, but his demonstration that other moves are wrong is not.

(B) After 10 ♗c3+ ♔b5 11 ♖b4+ ♔c6, Kasparyan only looks at 12 ♗b2? ♕e1 −+. ***(D)***

12 ♔b2?! is considerably more stubborn; but here too, Black wins by a series of accurate moves.

12...♕e3! 13 ♖c4+ ♔d5 14 ♖d4+ ♔c5



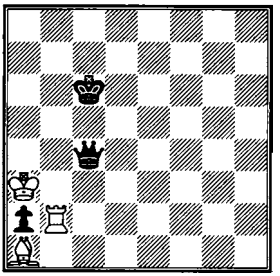
15 ♖a4 ♕e2+ 16 ♔c1 (16 ♔b3 ♕d1+) 16...♕g2 (the beginning of a maneuver aimed at losing a move) 17 ♔d1 ♕f2 18 ♔c1 ♕e2! (*zugzwang*) 19 ♗b2 ♕e6 20 ♔c2 ♔b5 21 ♖d4 (21 ♖a3 ♕e4+) 21...♕e1−+.

The only line that saves White is 12 ♖b3! ♕e2 13 ♗a1! ♕d2; and now, the attempt to get rid of the pawn by 14 ♖b2? fails against 14...♕a5+ 15 ♔b3 ♔b5 16 ♖×a2 ♕b4+ 17 ♔c2 ♕c4+ 18 ♔b1 ♕f1+ 19 ♔c2 ♕e2+ 20 ♔b1 (20 ♔b3 ♕c4+ 21 ♔b2 ♔b4−+) 20...♕d1+ 21 ♔b2 ♔b4−+. However, White can hold the balance by 14 ♖c3+ (as well as 14 ♖h3 or 14 ♖f3 – on any light square, the rook avoids being forked).

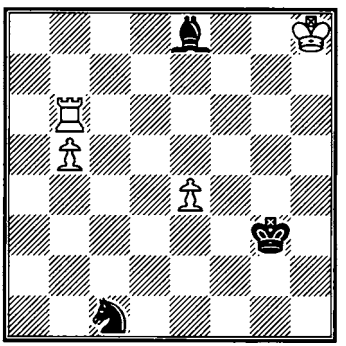
(C) 10 ♗a1 ♔b5 11 ♖b4+ (11 ♔b2 ♔c5 12 ♔a3= is also possible) 11...♔c6 12 ♖b2 (neither 12 ♖d4 nor 12 ♖b3 would lose) 12...♕c4

Now 13 ♖b4? would certainly be bad: 13...♕c2! 14 ♖b2 ♕b1 15 ♖×a2 ♔c5−+; but White could play 13 ♖b3=, or even 13 ♖×a2 ♔c5!?, and now, not 14 ♔b2? ♔b4−+, but 14 ♖h2!=, or 14 ♖f2!= – this time, the rook avoids the fork by staying on the dark squares. ***(D)***

The following study of maneuver by Kasparyan is quite complex. Players who choose to play it out must maintain a significant level of concentration for a long time, calculate subtle variations accurately, and make constant use of the exclusionary method.



G. Kasparyan 1953



Win

1 e5!

It is not too hard to cast aside 1 ♖b8? ♗×b5 2 ♖×b5 ♔f4, when the pawn is lost: 3 e5 ♔f5 4 ♔g7 ♘d3=.

1 ♖c6? ♘d3! looks suspicious: the white pieces find themselves hemmed in. On 2 ♔g7, Black could even try 2...♗×c6 3 bc ♘c5! 4 e5 ♔f4 5 ♔f6, and now either 5...♘e4+ 6 ♔e6 ♘c5+ 7 ♔d5 (7 ♔d6 ♘e4+ 8 ♔d5 ♘c3+) 7...♘a6 8 ♔d6 ♔f5 9 e6 ♔f6 10 e7 ♔f7=, or 5...♘a6 6 e6 (6 ♔e6 ♔e4 7 ♔d6 ♔f5=) 6...♔e4 7 e7 ♘c7=.

1...♘d3 2 ♖b8

2 e6? is a mistake: 2...♘f4! 3 e7 ♗×b5

4 ♖×b5 ♘g6+ 5 ♔g7 ♘×e7, and the knight will not be caught: 6 ♖c5 ♔f4 7 ♔f6 ♘g8+ 8 ♔g7 ♘e7=.

2...♗d7!

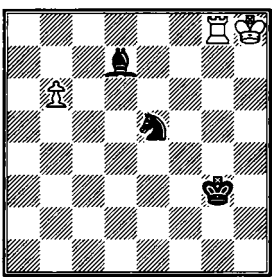
Of course not 2...♗f7? 3 b6 ♘×e5 4 b7 ♘d7 5 ♖d8+−.

3 b6!

3 ♖g8+? is inexact: 3...♔f4! 4 b6 ♘c5=. But now 3...♘c5? is unplayable: after 4 b7, White threatens both 5 ♖g8+ and 5 ♖d8, while after 4...♗g4, 5 e6 decides.

3...♘×e5 4 ♖g8+!

The check is necessary: 4 b7? ♘f7+ 5 ♔h7 ♗f5+ leads to a draw, as White's king must block off the g-file: 6 ♔g7 ♘d6.



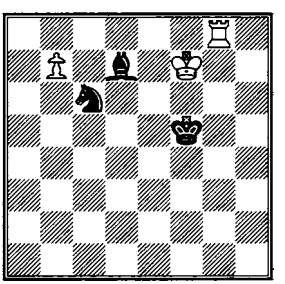
The introduction is nearly complete – now the contours of the study's main play begin to take shape. The natural 4...♔f4? 5 b7 ♘c6 6 ♖c8 loses, since the only possible defense, 6...♘b8 7 ♖×b8 ♗c6, is refuted by 8 ♖f8+. Evidently, Black's king must "stay in the shadow" of its opposite number to avoid checks – on the h-file. But not on just any square: 4...♔h3? would be a mistake: after 5 b7 ♘c6 6 ♖c8 ♘b8 7 ♖×b8 ♗c6 8 ♔g7 ♔g4 9 ♔f6, the white king has a clear path to its pawn.

4...♔h4! 5 b7 ♘c6

Let's work out the direct variation 6 ♖c8? ♘b8! 7 ♖×b8 ♗c6 8 ♔g7 ♔g5 9 ♔f7 ♔f5 10 ♔e7 ♔e5, in order to get a better idea of Black's defensive conception. We have reached a position of mutual *zugzwang*, known from an old study by Troitzky, published in 1898 (which you will find in my *Endgame Manual*, diagram 15-69, page 316). Black to move loses, but it is White's move here, and the material advantage cannot be exploited: 11 ♔d8 ♔d6 12 ♔c8 ♗d7+ 13 ♔d8 ♗c6=.

Instead of taking the knight, White could also play 7 ♔g7 ♔g5 8 ♔f7 ♔f5 9 ♔e7 ♔e5; but here too, White is in *zugzwang*. We will examine this situation later, when we study alternatives to White's best 10th move in the main variation.

6 ♔g7! ♔g5! 7 ♔f7+ ♔f5



An important crossroads. Understandably, White should not continue 8 ♖c8? ♘b8! 9 ♔e7 (9 ♖×b8 ♗c6 10 ♔e7 ♔e5=) 9...♗c6 (9...♔e5= is also possible) 10 ♖f8+ ♔e4! (but not 10...♔e5? 11 ♖×b8+−, when Black is in *zugzwang*) 11 ♖×b8 ♔e5=. So he must choose one of two waiting moves: either 8 ♖f8 or 8 ♖h8.

The comparison method will make our job much easier – if we take into

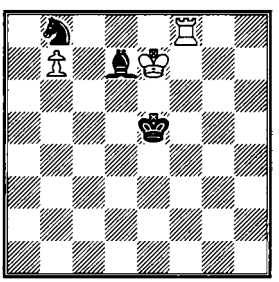
account a defense that Kasparyan failed to mention in his commentary: 8...♗e6+. After 8 ♖f8, 8...♗e6+ 9 ♔g7+ ♔g5 10 ♖f6 wins right away. But after 8 ♖h8? ♗e6+ 9 ♔g7 (no check!), Black draws either by 9...♗c4, followed by 10...♗a6, or by 9...♔g5 10 ♖h6 (10 ♖c8 ♘b8! 11 ♖×b8 ♗d5=) 10...♔f5.

The composer only looked at the knight retreat to b8, showing that after 8 ♖h8? ♘b8 9 ♖c8 (9 ♔e7 ♗c6 10 ♖×b8 ♔e5=), Black draws with the surprising 9...♗a4!!. Our familiar *zugzwang*, with White to move, appears after 10 ♔e7 ♗c6 11 ♖×b8 ♔e5. And on 10 ♖c5+, Black plays 10...♔e4 11 ♖c4+ ♔d5 12 ♖×a4 ♔c6 13 ♖b4 ♔c7=, reaching a fortress position well-known in endgame theory: White cannot exploit the considerable advantage in material, since the king cannot approach the pawn.

8 ♖f8!! ♘b8 9 ♔e7+

This check is the reason why White's rook went to f8. A study of previous variations shows us that 9 ♖×b8? ♗c6 10 ♔e7 ♔e5 or 9 ♖c8? ♗a4!! would cost White the win.

9...♔e5



10 ♖c8!!

One of the key positions of mutual *zugzwang* for this endgame has finally been reached with Black to move! All other attempts are bound to be refuted. We are already familiar with the variations 10 ♖×b8? ♗c6= and 10 ♖h8? ♗a4!! 11 ♖h5+ ♔d4 12 ♖h4+ ♔c5 13 ♖×a4 ♔c6 14 ♖b4 ♔c7=. And if, instead of 11 ♖h5+, we play 11 ♖c8, then after 11...♗d7!, it is White who falls into *zugzwang*. For example, 12 ♖c5+ (12 ♖h8 ♗a4!!) 12...♔d4 13 ♔d6 ♗g4!=, followed by 14...♗f3 (but not 13...♗h3? 14 ♖c2!+−, followed by 15 ♖a2 and 16 ♔c7).

10...♗a4 (10...♗c6 11 ♖×b8 is *zugzwang*) **11 ♖c5+ ♔d4 12 ♔d6**

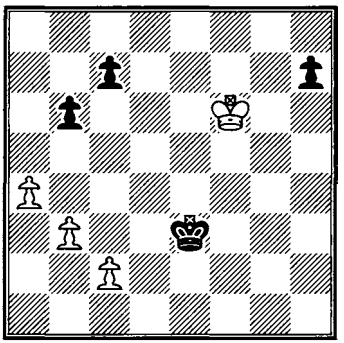
Victory is near: White has succeeded in shutting out the opposing king, while also preventing the bishop from attacking the pawn.

12...♗b3 (12...♔e3 13 ♖c8 ♘d7 14 ♖d8+−) **13 ♖a5+−**

Black is helpless against the threats of 14 ♖a8 and 14 ♔c7.

To conclude this section – two pawn endgame studies. Do not think that having no other pieces on the board but kings and pawns will make your task any easier. On the contrary, these endings are some of the most difficult in the chapter. For instance, the following position was played out with the white pieces not only by many of my students, but also by Garry Kasparov. The only one who was able to solve it was Artur Yusupov.

N. Grigoriev 1934



Win

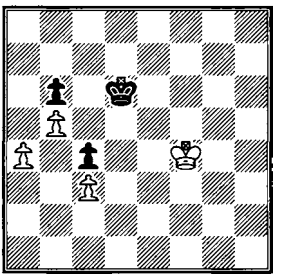
Black threatens to play 1...♔d4 or 1...c5, in reply to 1 ♔g5?, for example. So White's first move is obvious.

1 b4! ♔d4

At first glance, everything is simple. White's queenside pawns will protect themselves after c2-c3. Then White only needs to move to the kingside to take the h7-pawn, and bring the king back again. Of course, we cannot say that the pawns are completely invulnerable: if Black had unlimited time, the king would move to a6, and then play c7-c5 (now that White no longer has the reply b4-b5), trade on b4, and bring the king back to the center. But clearly, this plan would be hopelessly slow.

Black's defensive idea is quite unexpected: c7-c5, answering b4-b5 with c5-c4, after which the king will have a stalemate haven on c5. It turns out that the success of this pawn configuration will hinge on who controls the horizontal opposition after the h-pawn's capture.

The superficial move 2 c3+? would allow Black to win the struggle for the opposition, and obtain a draw. The game might continue: 2...♔d5! 3 ♔g5 c5 4 b5 c4 5 ♔h6 ♔d6 6 ♔×h7 ♔d7 7 ♔h6 (7 ♔g6 ♔e6 8 ♔g5 ♔e5 9 ♔g4 ♔e6) 7...♔d6 8 ♔h5 ♔d5 9 ♔h4 ♔d6! 10 ♔g4 ♔e6 11 ♔f4 ♔d6



12 ♔e4 (12 ♔f5 ♔d5 13 ♔f6 ♔d6) 12...♔c5! (the key to Black's defense!) 13 ♔e3 (13 ♔e5 is stalemate) 13...♔d5! 14 ♔f3 ♔e5 15 ♔g4 ♔e6!, etc.

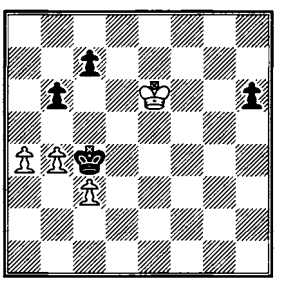
2 ♔e6!

It is essential to take away the d5-square from Black's king.

2...h6 3 c3+!

3 ♔f5? would be premature: 3...c5 4 b5 ♔d5! 5 ♔g6 c4 6 c3 (6 ♔×h6 c3=) 6...♔e5 7 ♔×h6 ♔d6!, and the opposition is in Black's hands.

3...♔c4



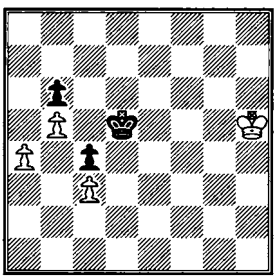
4 ♔e5!

It is important to get the pawn to advance to h5. 4 ♔f6? would be a mistake: 4...c5 5 b5 ♔d5 6 ♔g6 c4 7 ♔×h6 ♔d6!=.

4...h5 5 ♔f5 c6!? 6 ♔g5 ♔d5 7 ♔h4!

A necessary loss of a move: on 7 ♔×h5? c5 8 b5 c4, White falls into *zugzwang* once again.

7...c5 (there is nothing else) **8 b5 c4 9 ♔×h5**



The battle for the opposition is over!

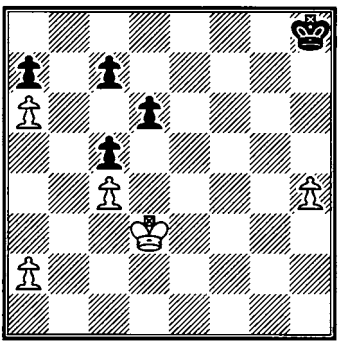
9...♔d6 10 ♔h6!

Of course not 10 ♔g4? ♔e6=, and all the fine work that has gone before would be wasted. Once again, Black is saved by the stalemate defense.

In order to realize the advantage, White employs the standard technique for converting distant opposition into close opposition: keeping the opposition on one of the ranks (in this case, the sixth rank), and when the opposing king gives way, moving the king the opposite way, with an outflanking maneuver.

10...♔d5 (10...♔d7 11 ♔h7 or 11 ♔g5 ♔e6 12 ♔g6) **11 ♔g7! ♔e6 12 ♔g6+–**

V. Chekhover 1956



Draw

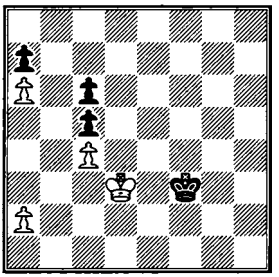
This situation is reminiscent of the preceding study, the only difference being that here, it is White who is fighting for the draw. As in that study, the queenside pawns are invulnerable, in view of c7-c6 and d6-d5. Meanwhile, the Black king aims for the h4-pawn. What can White do against this simple plan?

As in the Grigoriev study, the only chance for the weaker side is playing for stalemate! The setup for the stalemate is: White's king goes to a5, and the pawn to a4. But this would not be useful right away, since Black can easily break the stalemate, e.g., 1 ♔c3? ♔g7 2 ♔b3 ♔g6 3 ♔a4 c6 4 ♔a5 ♔h5 5 a4 d5 6 cd cd–+.

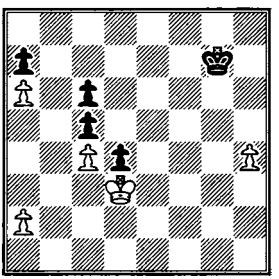
First, we must entice Black's pawn to d4.

1 ♔e4! c6 2 ♔f5 (threatening 3 ♔e6) **2...d5 3 ♔e5** (3 ♔f4? ♔g7–+) **3...d4 4 ♔e4 ♔g7 5 ♔d3!**

Holding on to the h-pawn is hopeless: 5 ♔f4? ♔g6 6 ♔g4 ♔h6 7 h5 (7 a3 ♔g6 8 h5+ ♔h6 9 a4 d3–+) 7...d3 8 ♔f3 ♔×h5 9 ♔e3 ♔g4 10 ♔×d3 ♔f3.



Black will be aiming for this position in all variations. It is not hard to see that White loses the c-pawn, and does not have enough time to bring about a stalemate: 11 ♔c3 ♔e3 12 ♔b3 ♔d4 13 ♔a4 ♔×c4 14 ♔a5 ♔d4 15 a4 c4–+.

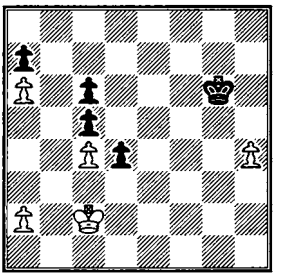


5...♔h6!

The cleverest battle plan for Black, offered in 1979 by Mikhail Zinar, a specialist in pawn endings. The study's author examined 5...♔g6 6 ♔c2 ♔f5!? (or 6...♔h5). We will get to that, but first White must find one more important finesse.

6 ♔c2 ♔g6!

If 6...♔h5 7 ♔b3 ♔×h4 (neither 7...d3 8 ♔c3 ♔×h4 9 ♔×d3 and 10 ♔e4=, nor 7...♔g4 8 h5 ♔f3 9 h6 d3 19 ♔c3! ♔e2 11 h7 d2 12 h8♕= is dangerous for White) 8 ♔a4!, the White plan triumphs: 8...d3 9 ♔a5 d2 10 a4 d1♕ – stalemate.



We have reached the key moment of this study.

If White plays 7 ♔b3?, following the plan, then after 7...♔h5, the same position is reached as after 6...♔h5 7 ♔b3, but with White to move. As paradoxical as it may seem, this puts White in *zugzwang*! Now 8 ♔a4 d3 9 ♔a5 (9 ♔b3 ♔×h4 10 ♔c3 ♔g4 11 ♔×d3 ♔f3–+) 9..d2 10 a4 is useless, since 10...♔g4 will break the stalemate.

Let's test the waiting move 8 a3 (by the way, the same position is reached after 7 a3? ♔h5 8 ♔b3). Black can wait also: 8...♔g6!. Now 9 h5+ ♔h6! duplicates the *zugzwang* we saw two moves earlier: 10 ♔a4 d3 11 ♔a5 d2 12 a4 ♔g5–+, or 10 ♔c2 ♔×h5 11 ♔b3 d3–+. And on 9 ♔b2 (or 9 ♔c2), there follows 9...♔f5! 10 ♔b3 (10 h5 ♔g5 11 ♔b3 ♔h6! –+ is *zugzwang*; or 10 ♔c2 ♔g4! 11 ♔b3 ♔h5! – *zugzwang* again) 10...♔f4! 11 h5 d3 (11...♔e3 is the same thing) 12 h6 ♔e3 13 h7 d2 14 h8♕ d1♕+, and the queen endgame is completely hopeless (15 ♔b2 ♕d4+, or 15 ♔a2 ♕c2+).

Even in what would seem to be purely calculable situations, it is a good idea to take a break from the endless review of variations, and employ some general considerations, for these often show us the right direction to take our search.

Extra tempi play an enormous role in pawn endings, allowing us to give our opponent the move. After 7 ♔b3? ♔h5, *zugzwang* forces White to waste the reserve tempo a2-a3 right away. Too early!

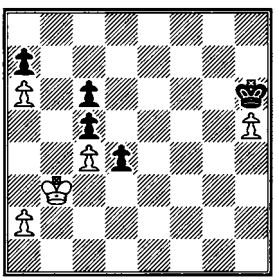
7 ♔b2!! ♔f5

The position after 7...♔h5 8 ♔b3= was examined in the note to Black's 6th move.

8 h5! (but not 8 ♔b3? ♔f4 9 h5 d3 10 h6 ♔e3−+) **8...♔g5 9 ♔b3!**

9 h6? would be a mistake: 9...♔×h6 10 ♔b3 d3! 11 ♔c3 ♔g5 12 ♔×d3 ♔f4−+.

9...♔h6! (9...♔×h5 10 ♔a4=; 9...d3 10 ♔c3=)



We are already familiar with the variations 10 ♔c2? ♔×h5 11 ♔b3 d3−+ and 10 ♔a4? d3 11 ♔a5 d2 12 a4 ♔g5. The time has come to make use of the extra tempo we succeeded in preserving earlier.

10 a3!! ♔g7 11 ♔c2!

Or 11 ♔b2!, but 11 h6+? loses: 11...♔h7! (*zugzwang*) 12 ♔a4 d3 13 ♔a5 (13 ♔b3 ♔×h6 14 ♔c3 ♔g5 15 ♔×d3 ♔f4−+) 13...d2 14 a4 ♔g6! 15 h7 d1♕ 16 h8♕ ♕d2+, and mates. And similar *zugzwangs* occur after 11 ♔a4? ♔h7! 12 ♔b3 (12 h6 d3−+) 12...♔h6−+.

11...♔h7

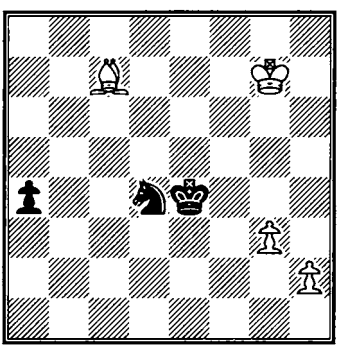
11...♔f6 must be met, not by 12 ♔b2? ♔g5 13 ♔b3 ♔h6!−+ (*zugzwang*), but by either 12 h6 ♔g6 13 h7! ♔×h7 14 ♔b3 d3 15 ♔c3 ♔g6 16 ♔×d3 ♔f5 17 ♔e3 ♔e5 18 a4=, or by 12 ♔b3 ♔g5 13 h6! ♔×h6 14 ♔a4=.

12 ♔b2 ♔h6 13 ♔b3 (finally, Black is the one in *zugzwang*!) **13...♔×h5 14 ♔a4! d3 15 ♔a5 d2 16 a4 d1♕** – stalemate.

5. Cooked Studies

Some cooked studies are actually very good for two-handed play. The only thing that matters is that the refutation must be located close to the end of the main variation, and be sufficiently interesting in its own right – that is, not totally obvious. In such cases, each side will have something to think about. White has to find the author's solution (which will usually be difficult and pretty), while Black has to make "only" moves to keep up the tension, and then find the hidden possibility at the decisive moment to avoid the prepared fate.

V. Yakimchik 1958



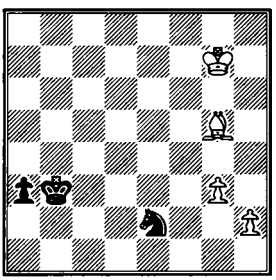
Draw?

On an open board, the bishop finds itself having a surprisingly difficult time stopping a lone passed pawn. This is a rare occurrence: you will find a similar example of this theme in my *Endgame Manual*, Diagram 7-22, page 125 (the conclusion of the game Perelshtein-Vepkhishvili).

1 ♗a5! ♔d3!

1...a3? would be much weaker, in view of 2 ♗b4! (but not 2 ♗c3? ♔d3 3 ♗a1 ♘c2 4 ♗f6 ♘d4−+) 2...a2 3 ♗c3=.

2 ♗b4 ♔c4 3 ♗a3 ♔b3 4 ♗c1 ♘e2 5 ♗g5 a3



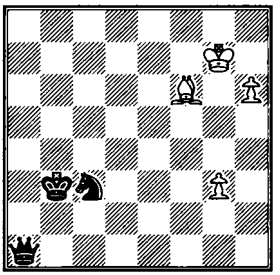
6 ♗f6!

On 6 h4?, Black wins easily by 6...♘×g3! (stopping the h-pawn, while also preventing 7 ♗f6, because of 7...♘h5+) 7 ♔f7 ♘e4 8 ♗h6 a2 9 ♗g7 ♘c3 10 h5 a1♕ 11 h6 ♕b1 12 ♔g8 ♘d5 (or 12...♕g6).

6...♘c3 (6...a2? 7 ♗a1=) **7 h4! a2 8 h5 a1♕ 9 h6**

Here, the composer thought White would draw after something like 9...♕a7+ 10 ♔g6 ♕c7 11 h7=.

But the computer study database kept by van der Heijden shows that the



concluding position is a loss for White. Indeed, Black cannot stop the h-pawn from queening – however, the queen and knight create mating threats.

9...♕a6!!

Just so! The same idea – two pieces attacking the bishop – may also be implemented by 9...♕f1? 10 h7 ♘e4 (for example, 11 ♗e5? ♕f5−+ ; 11 ♗d4? ♕d3−+ ; 11 ♗h4? ♕a1+−+), but here White is saved by 11 ♗b2!!.

10 h7 ♘e4!

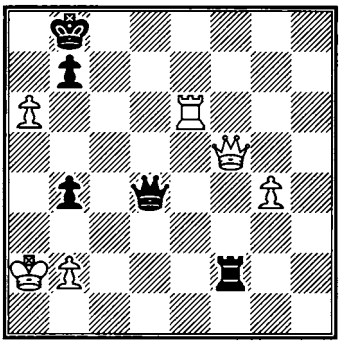
After 10...♘d5? 11 h8♕ ♕×f6+ 12 ♔h7, there is no mate. But now, White is helpless:

11 h8♕ ♕×f6+ 12 ♔g8 ♕g6+ 13 ♔f8 ♘g5! 14 ♕g8+ ♘e6+; 11 ♗e7 ♕b7 12 h8♕ ♕×e7+ 13 ♔g6 ♕e6+ 14 ♔g7 ♕f6+ 15 ♔g8 ♕g6+ 16 ♔f8 ♘g5!; and 11 ♗h4 ♕b7+ 12 ♔g6 ♕c6+ 13 ♔g7 ♕d7+ 14 ♔g6 ♕e6+ 15 ♔g7 ♘d6! 16 h8♕ ♘f5+. ***(D)***

1 ♖e8+ ♔a7

This move is not so easy to make – the black player will no doubt find that his opponent has a spectacular combination ready. But unfortunately, the alternative 1...♔c7? allows White to enter an easily won rook endgame

H. Kuvatov 1940



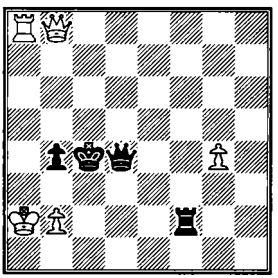
Win?

by 2 ♕a5+! b6 3 ♕e5+ ♕×e5 4 ♖×e5. For example: 4...♔b8 5 ♖e7 ♖g2 6 ♖g7 ♖g3 7 g5 ♔a8 9 g6 b5 9 b3, etc.

2 ♖a8+! ♔b6!

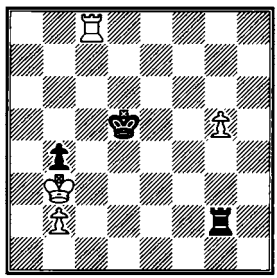
2...♔×a8? 3 ♕c8+ ♔a7 4 ♕×b7#.

3 ♕a5+!! ♔×a5 4 ab+ ♔b5 5 b8♕+ ♔c4!



In our examination of Benko's study, we analyzed the idiosyncrasies of positions with queens and rooks, their two-sided character. White would not mind mating the opposing king; but as long as a forced mate is not there, the various exchanges must be considered and the resulting endgames evaluated.

Trading queens here is not difficult; the question is: can White then exploit the extra pawn in the rook ending? Let's examine the variation 6 ♕g8+ ♕d5 7 ♖c8+ (it is useful to drive the king further away from the b-pawn. After 7 ♕×d5+ ♔×d5 8 ♔b3 ♖g2 9 g5 ♔c5, the draw would be obvious.) 7...♔d4+ 8 ♕×d5+ ♔×d5 9 ♔b3 ♖g2 10 g5



Now 10...♖×g5? would be a mistake, as after 11 ♔×b4 ♔d6 (11...♖g7 12 ♔a5! +−, and the rook has no chance to start giving frontal checks) 12 ♔a4! ♔d7 13 ♖c4! ♖g8 14 b4, Black, who could have drawn with the king on d6, cannot drive White's rook from the c4-square now, and must therefore lose: 14...♖a8+ 15 ♔b5 ♔d6 16 ♔b6+−.

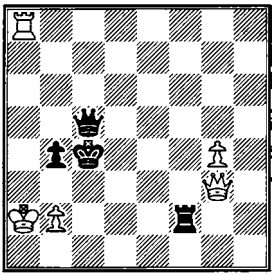
But by playing 10...♔d6 (now threatening to take the pawn) 11 ♖g8 ♔c6 (11...♔d7 12 g6 ♔e7= is possible, too) 12 g6 ♖g4 13 ♔a4 ♔b6 14 b3 ♔a6, Black makes a draw.

6 ♕c7+! ♕c5

The only reply. 6...♔d3 7 ♖d8 ♖×b2+ 8 ♔a1 would be bad. As before, the trade of queens is nothing to fear.

7 ♕g3!

A powerful quiet move. White prevents 7...b3+ and intends an unpleasant queen check from that square.



What can Black do? It is easy to see that after 7...♖×b2+? 8 ♔×b2 ♕d4+ 9 ♔c1!, the checks run out.

Here is the composer's main line: 7...♕d5? 8 ♕b3+ ♔d4 9 ♖d8! ♕×d8 10 ♕d1+, winning the queen. Unfortunately, as van der Heijden's computer study database indicates, the defense can be improved.

7...♔b5! 8 ♖b8+ ♔a5

And now if 9 ♕d3, then 9...♖×b2+! 10 ♔×b2 ♕e5+, winning back the rook.

9 ♕b3

Black's position appears shaky: White has defended the king, and now wishes to carry on with the attack. If necessary, Black may be distracted by the push of the g-pawn. But a tactical shot comes to Black's rescue...

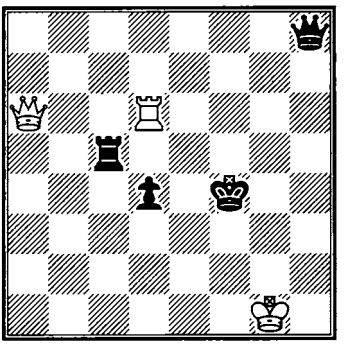
9...♖×b2+!!

After any rook recapture, Black either gives perpetual check, or recovers the rook.

Here is another example, a more complicated one, with the same material. ***(D)***

1 ♖f6+

N. Elkies 1990



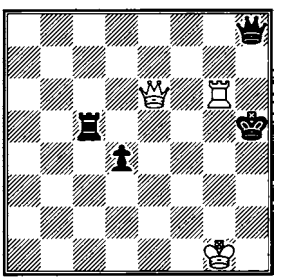
Win?

The best way to start off the attack. It is easy to see that, after other active moves like 1 ♕f1+ or 1 ♖h6, Black is able to defend various ways.**1...♔g5**

The variation 1...♔e3? 2 ♕e6+ ♔d2 3 ♖f2+ (there is also 3 ♕a2+) 3...♔c3 4 ♕e1+ ♔c4 5 ♕c1+ (or 5 ♕f1+) is difficult to work out all the way to mate; but there can be no doubt that is where this is going.

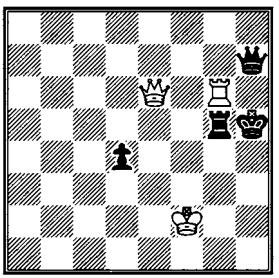
2 ♖g6+ ♔h5 3 ♕e6!

A paradoxical quiet move, which had to be foreseen.



It looks as though White has allowed the trade of rooks by **3...♖g5+**. But in that case, **4 ♔f2!!** would follow, when the rook is immune because of 5 ♕h3+, winning the queen (the computer

affirms that this "queen vs. rook and pawn" endgame is lost for Black). 4...♕f8+ 5 ♖f6 (threatening 6 ♕h3#) 5...♕a3 6 ♖h6# is also bad for Black. The only defense is **4...♕h7!**.



An amazing situation! White cannot win Black's queen; and on 5 ♖f6?, the queen gives check. On the other hand, Black is still not threatening to take the rook, and it is impossible to suggest any other move that does not worsen the position. Thus, White plays for *zugzwang*: **5 ♔f1!! d3 6 ♖f6+–** (here, Black's own pawn prevents the queen from checking).

Note that 4 ♔f1?! (instead of 4 ♔f2!!) would be a significant inaccuracy. After 4...♕h7!, it is White who falls into *zugzwang* now. In the variation 5 ♔f2 d3 6 ♖f6, Black has a check from the side, 5...♕a7+.

Among other studies, this sort of *zugzwang* was first met in a study by Henri Rinck, published in 1926 (White: ♔g5, ♕c1, ♖c5; Black: ♔e7, ♕b8, ♖d8; 1 ♖c7+ ♖d7 2 ♕c5+ ♔d8 3 ♔h6!! +–). Noam Elkies developed and deepened Rinck's idea.

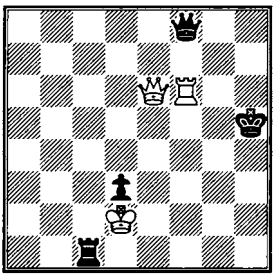
Now, let us suppose that this study position came up in a tournament game, with each side having sufficient time (which would certainly be unlikely, these days). A grandmaster, playing Black, if enough time were spent on the 3rd move, would certainly be capable of calculating the main line accurately. Seeing that it loses by force, the search for an alternative would begin. The grandmaster would quickly establish that the rook could check on the first rank, followed by a series of checks, and that at some point, the rook would have to be sacrificed. And here is there would be a most difficult decision to make.

Could this variation be dealt with using the exclusionary method, starting from the fact that attempting to trade rooks offers no salvation? After it becomes clear that there is may be no perpetual, White wins without exercising any serious effort: it will not be difficult choosing where to retreat the king. After 3...♖g5+, accuracy and resourcefulness would have to be demonstrated, so Black would still have practical chances. Of course, it would be nice if the line beginning with the move 3...♖c1+ could be calculated to the finish, but this would not necessarily happen, and then decisions would have to be made intuitively.

Analyzing this variation, Elkies decided that it was a win for White. But then, he wrote his friend Peter Jansen, who was working with Deep Thought, the strongest computer program of the day, and asked him to find out if the program was able to solve this study – and the computer found the draw for Black!

3...♖c1+! 4 ♔f2! (White would even lose after 4 ♔g2?? ♕a8+) **4...♕f8+!** 4...♖c2+? is weak: 5 ♔e1 ♖c1+ 6 ♔d2+–.

5 ♖f6 ♖c2+ 6 ♔f1 (the king must approach the rook on light squares) **6...♖c1+ 7 ♔e2 d3+! 8 ♔d2**



8...♕b4+!

There is nothing else. On 8...♖c2+?, White can reply either 9 ♔d1+− or 9 ♔×d3+−.

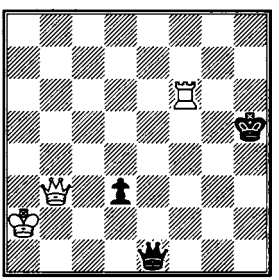
9 ♔×c1 ♕c3+ 10 ♔b1 ♕c2+

The same result follows 10...♕b4+ 11 ♔a2 ♕a4+ 12 ♔b2 ♕b4+.

11 ♔a1 ♕a4+ 12 ♔b2 ♕b4+ 13 ♕b3 ♕d2+ 14 ♔b1!

14 ♔a3 ♕a5+ is useless. The king must return to b2, since 15 ♕a4? allows 15...♕c3+ followed by 16...♕×f6.

14...♕e1+ 15 ♔a2!



Elkies went on to examine 15...♕d2+? 16 ♕b2 ♕a5+ 17 ♕a3 ♕d2+ 18 ♔b3, when the king escapes the checks. Here, the computer offered a surprising defense.

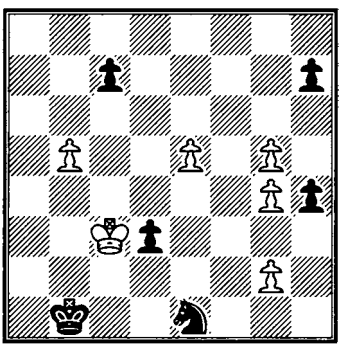
15...♕e2+!! 16 ♕b2

16 ♔a3 ♕e7+ or 16 ♔a1 ♕e1+ 17 ♕b1 ♕a5+ offers White nothing.

16...d2! =

After a lengthy series of checks, this sort of quiet move is very easy to overlook. From e2, Black's queen takes away the checking squares b5 and e5 from the opposing queen; nor does White gain anything from 17 ♖f5+ ♔g4. So White must force the draw by, for example, 17 ♖d6 d1♕ 18 ♖×d1 ♕×d1.

P. Farago 1946



Win?

White is obviously playing to win here. This however cannot be done "in comfort" – that is, by preventing Black's counterplay with ♔c1 and d3-d2. On 1 ♔d2?, both 1...♘×g2= and 1...♘f3+ 2 gf h3= are good.

Pushing the e-pawn at once would be even worse: 1 e6? ♔c1 2 e7 d2 3 e8♕ d1♕ 4 ♕e3+ ♔b1, and Black wins.

Before queening the passed pawn, White must insert two *zwischenzugs* (and in the exact order), expanding the potential of the future white queen.

1 b6!!

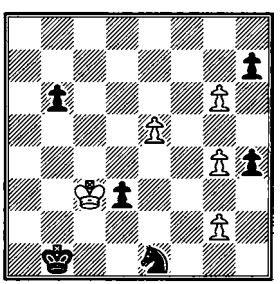
But not 1 g6?, in view of 1...♔c1! 2 gh d2 3 h8♕ d1♕ 4 ♕h6+ ♔b1.

1...cb

Of course not 1...♔c1? 2 b7! d2 3 b8♕, threatening 4 ♕b2#.

2 g6!!

One might think White could already play 2 e6 ♔c1 3 e7 d2 4 e8♕, since 4..d1♕? 5 ♕e3+ ♔b1 6 ♕×b6+ leads to mate. But Black has a clever defense: 4...♘c2! 5 ♕b5 d1♘+!, and every path the king might take to escape the checks is mined with knight forks: 6 ♔d3 (6 ♔b3 ♘d4+; 6 ♔c4 ♘a3+) 6...♘f2+ 7 ♔c3 (7 ♔e2 ♘d4+) 7...♘d1+ (or 7...♘e4+), with perpetual check.



Now what should Black do? We can reject 2...♔c1? out of hand: 3 gh d2 4 h8♕ d1♕ 5 ♕h6+ ♔b1 6 ♕×b6+.

The composer's solution was **2...hg 3 e6 ♔c1** (3...♘f3 is refuted most simply by 4 e7! d2 5 e8♕ d1♕ 6 ♕b5+) **4 e7 d2 5 e8♕ ♘c2** (5...d1♕ 6 ♕e3+ ♔b1 7 ♕×b6+) **6 ♕×g6! d1♕ 7 ♕h6+** (or 7 ♕g5+ ♔b1 8 ♕b5+) **7...♔b1 8 ♕×b6+** and mates.

But this is not all there is to the study. While testing it, I found defensive resources the composer did not consider.

Black can escape the mate by playing 2...♘f3?!. This move works out after 3 g7? d2 4 g8♕ d1♕ 5 ♕×h7+ ♔c1, when White has to play 6 gf=, since 6 ♕h6+? ♘d2 actually loses. On the other hand, after 3 gf hg 4 e6 d2! 5 ♔×d2 h3 6 e7 h2 7 e8♕ h1♕ 8 ♕×g6+, White reaches a winning queen endgame. On 8...♔a1 the most accurate move is 9 ♕×b6!, considering that in the variations 9...♕×f3 10 ♕d4+ ♔a2 11 ♕a4+ ♔b2 12 ♕c2+ and 9...♕g2+ 10 ♔e1! ♕×f3 (10...♕h1+ 11 ♔e2 ♕g2+ 12 ♕f2) 11 ♕d4+ ♔b1 (11...♔a2 12 ♕f2+) 12 ♕d1+, the queens come off.

2...h3!!

Only this answering intermediate pawn pitch retains saving chances for Black.

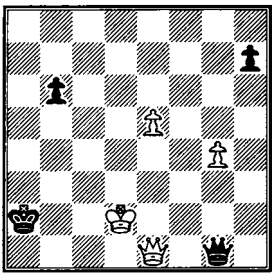
3 g7!

This is the only way for White to continue fighting for the win. 3 gh3? ♘f3 4 g7 d2 5 g8♕ d1♕ 6 ♕×h7+ ♔c1 7 ♕h6+ ♘d2 8 ♕×b6 leads to a draw.

3...d2!

Black has to divert the white king in order to avoid getting mated.

4 ♔×d2 hg 5 g8♕ g1♕ 6 ♕b3+ ♔a1 7 ♕a3+ (7 e6 ♕f2+ 8 ♔d1 ♘f3=) **7...♔b1 8 ♕c1+ ♔a2 9 ♕×e1**



Now we are in a queen ending, where White has a solid positional advantage. But it remains an open question whether White will be able to exploit the advantages of the position, or Black will be able to draw. I do not know the answer; I expect that the situation would become just a matter of playing it out, with the outcome depending upon the relative endgame strengths of the two players.

Here are some sample variations:

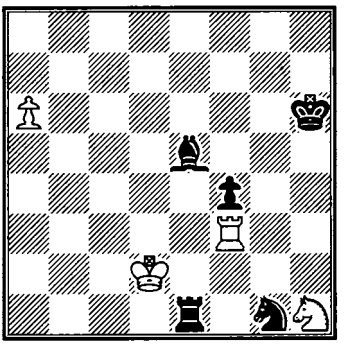
On 9...♕×g4, 10 ♕f2! ♕b4+ 11 ♔d3+ ♔a3 12 ♕e3! ± would be uncomfortable for Black.

A stronger continuation would probably be 9...♕d4+ 10 ♔c2 ♕c4+ (10...♕a4+ 11 ♔d3 ♕d7+ 12 ♔e3 b5 also deserves consideration) 11 ♕c3 ♕e2+ 12 ♔c1 ♕f1+ 13 ♔d2 ♕g2+ (13...♕f2+ 14 ♔d1! would be worse) 14 ♔d3 (14 ♔d1 ♕×g4+) 14...♕f3+ 15 ♔c4 ♕×g4+ (15...b5+?! 16 ♔b4 ♕×g4+ 17 ♔×b5) 16 ♔b5, although here too, Black's position remains difficult. *(D)*

1 ♖a3!

There is nothing better. 1 ♔×e1? ♘×f3+ 2 ♔e2 ♘d4+ 3 ♔d3 ♘c6 4 ♔e4 ♗b8 or 1 ♖f2? ♖a1 2 a7 ♔h5! 3 ♖h2+ ♔g4 4 ♖g2+ ♔f3 5 ♖×g1 ♖×a7 would be hopeless.

G. Kasparyan 1958



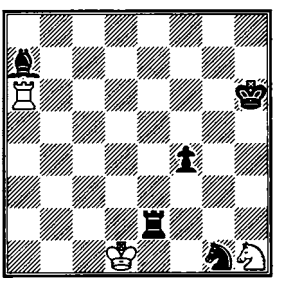
Draw?

1...♖e2+ 2 ♔d1 ♗b8 3 a7

White will win the piece back, but the position remains difficult thanks to the badly placed knight, imprisoned in the corner of the board.

3...♗×a7 4 ♖a6+!

A necessary *zwischenschach*, in order to secure the rook quick access to the g7- and h7-squares. 4 ♖×a7? ♖h2 5 ♔e1 ♘h3! (but not 5...♖×h1? 6 ♔f2=) 6 ♔f1 ♔h5, with 7...♔g4 to follow, is lost.



4...♔h5

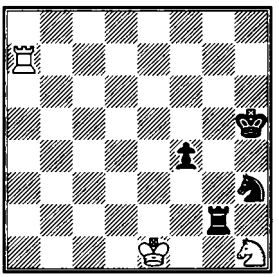
This move looks like a no-brainer.

5 ♖×a7 ♖g2!

Black must meet the threat of 6 ♖g7

(now it becomes clear why the king did not go to g5). 5...♖b2? 6 ♖g7 ♔h4 (6...♘f3 7 ♘g3+!) does not work, in view of 7 ♔c1!.

6 ♔e1! ♘h3

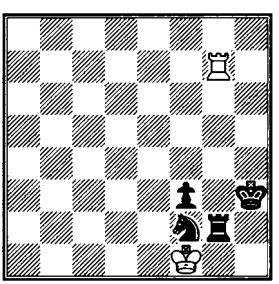


The battle appears to be over now, as nothing can save the knight. But here, surprisingly, it gallops straight to its doom.

7 ♘f2! ♘×f2 (7...♖×f2 8 ♖h7+ ♔g4 9 ♖×h3=) **8 ♔f1! f3 9 ♖f7!**

The only move. On 9 ♖a2?, Black had prepared 9...♘g4! 10 ♖×g2 ♘e3+. And 9 ♖h7+? ♔g6−+ or 9 ♖a3? ♔g4−+ would be useless.

9...♔g4 10 ♖g7+ ♔h3



Continuing the checks now would be pointless: 11 ♖h7+? ♔g3 12 ♖g7+ ♘g4−+.

11 ♖×g2! fg+ 12 ♔g1=

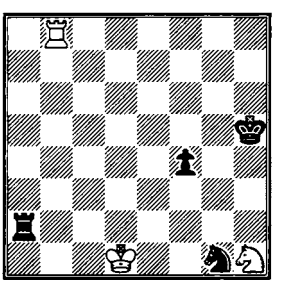
Unexpectedly, Black is in *zugzwang*. Any knight retreat, or 12...♔g3, leads to stalemate.

Let's go back to the position after White's 4th move. In a practical game, I doubt that the paradoxical move **4...♗b6!!** would have entered either player's head. Is it not stupid? White was going to take the bishop next move anyway, so why allow the opportunity to take it with tempo? Only after considering the position do you see that in fact, there is no tempo loss involved. On the next move, the rook still has to go either to the seventh or eighth rank in order to get to the g- and h-files. But then it moves from the a-file to its neighbor, and this factor takes on decisive significance.

5 ♖×b6+ ♔h5 6 ♖b8

6 ♖f6 ♔g5 7 ♖f8 ♖a2! would change nothing.

6...♖a2!



6...♖g2 7 ♔e1 ♘h3 8 ♘f2! would transpose to the main line of the study.

7 ♖g! ♔h4!

Recall the note to the 5th move of the main variation. If Black's rook were on b2, White could attack it with ♔c1; but here, that move is not available.

Genrikh Kasparyan was a great composer and an outstanding analyst. To his credit, he did see the hidden resource 4...♗b6!!. But he believed White could draw this as well. Unfortunately, his analysis of the rook endgame that arises by force contains a hidden error.

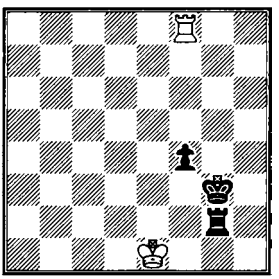
8 ♘f2!

8 ♔e1 ♖a1+ and 9...♘h3 would be bad.

8...♖×f2 9 ♖×g1 ♔h3! 10 ♖g8

After 10 ♔e1, 10...♖g2! 11 ♖h1+ ♔g3 decides.

10...♖g2! 11 ♖f8 ♔g3 12 ♔e1



Kasparyan continued 12...♖g1+? 13 ♔e2=. But Black has another move.

12...♖f2! 13 ♖f7 ♔g2! (threatening 14...♖f1+ 15 ♔e2 f3+) **14 ♖g7+ ♔f3 15 ♖a7 ♖b2**, and White loses, because the king is on the "long side." For those who do not know or do not remember what this means and why it is so important, I recommend rereading the very first examples in the chapter on rook endings from my *Endgame Manual*. And on this purely practical note, we end this chapter.

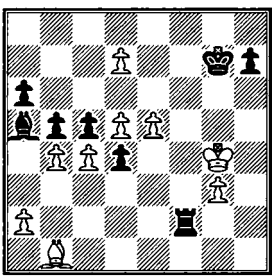
Part IV

From Steinitz to Morozevich

Chapter 7

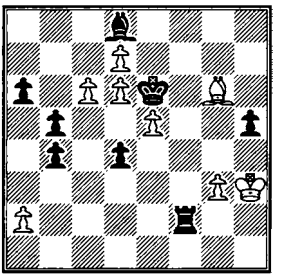
Studies by Practical Players
Oleg Pervakov

I wanted to call this last chapter, "Studies by and for Practical Players." But the more I wrote of it, the more I saw that I had to change that title. Undoubtedly, the majority of the fifty studies, composed by world champions and grandmasters and presented here are of practical value. But it turns out there are also exceptions! Freed from the need to acquire the next point, or the next title, players do not mind "easing off the gas," and giving free rein to their fantasy. Moving the pieces about in such studies, your fingertips feel an almost childish glee at the clever people who decided to "go gangsta" – in this case, at the chessboard. What sort of wild-looking positions and ideas can they come up with, that could never appear in a game? Or does it just seem that way?



No, this is not a study – it is a position from the "rapid" game **Gelfand-Mamedyarov** (Nice 2008). White has just played 37 b3-b4!, and the game might have continued like this:

37...cb 38 c5 h5+ 39 ♔h3 ♔f7 40 c6 ♔e7 41 d6+ ♔e6 42 ♗g6 ♗d8



43 ♗f7+!! ♖×f7! 44 c7 ♗×c7? (44...♖×d7! 45 c8♕ d3=) **45 dc ♔×d7 46 e6+!**

And three years before that... Well, let's be patient.

At the Summit of Olympus

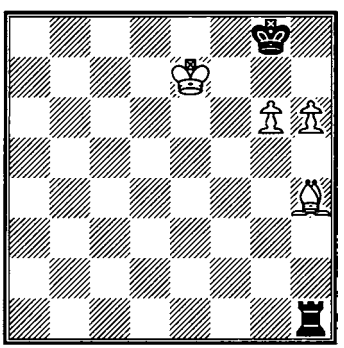
Standing at the summit – of anything – is the hardest part. That goes for the summit of the chess pyramid, as well. The world champion has many things to worry about; but the chief worry is how to stay on top. There is certainly no time for study composition, is there? But champions have also found the time to be creative – and not just when there was a real opponent sitting across the board from them. Many of their studies

are widely known, but even many years later, they have not lost their resonance.

Wilhelm Steinitz

At the start of his chess career, the man who would become the first world champion composed two studies, which nevertheless have found a place in many endgame manuals. Here we present the best-known one. Outwardly, it looks rather elementary. But we must remember that this study appeared long before modern criteria and requirements for endgame study composition were formulated.

No. 1 W. Steinitz 1862



Win

1 h7+

After 1 ♗g5, White would be unable to push the pawn to the queening square.

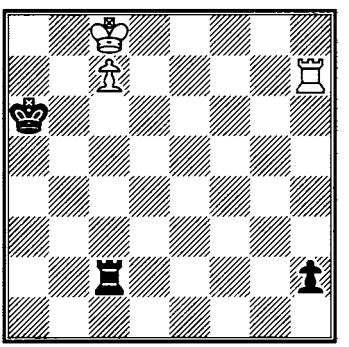
1...♔g7 2 h8♕+! ♔×h8 3 ♔f7 ♖f1+ 4 ♗f6+ ♖×f6+ 5 ♔×f6 ♔g8 6 g7, and it is the other pawn that queens.

Steinitz said something interesting about chess composition: "The study of this beautiful part of our art is quite useful for the development and strengthening of practical play... Some of the greatest players, such as Morphy, Anderssen, Blackburne etc., paid a great deal of attention to this subject, which has grown into almost a separate art. What is especially worthy of note, is that a more brilliant style of play usually arises in those masters who combine practical play with the study of composition."

Emanuel Laker

In his *Chess Manual*, Lasker devotes over half of the chapter on "The Aesthetics of Chess" to composition. The second world champion composed many studies and problems.

No. 2 Em. Lasker 1890



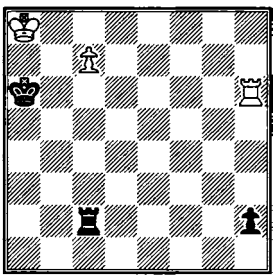
Win

Lasker's most famous study. In this simple-looking and most natural rook endgame, the second world champion managed to execute an interesting systematic advance which had great practical significance. Not surprisingly, this discovery was later to be employed by many players, who successfully ended their games "*à la* Lasker."

1 ♔b8

White cannot wait. After 1 ♖h3? ♔a7, Black would be safe.

1...♖b2+ 2 ♔a8! ♖c2 3 ♖h6+



3...♔a5!

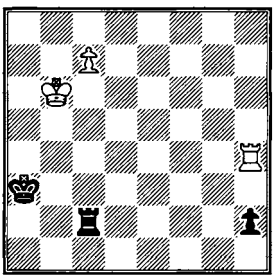
The b-file is off-limits: 3...♔b5 4 ♔b7.

4 ♔b7(b8)

The micro-duals on this and White's 7th moves are insignificant.

4...♖b2+ 5 ♔a7 ♖c2 6 ♖h5+ ♔a4 7 ♔b6(b7) ♖b2+ 8 ♔a6 ♖c2 9 ♖h4+ ♔a3 10 ♔b6!

Step by step, the White king seizes more territory away from the opponent.



10...♖b2+

Black must immediately defend against the threatened 11 ♖×h2.

11 ♔a5!

The king has dealt successfully with both its required functions: it has defended the pawn, and now plays an active part in the attack.

11...♖c2 12 ♖h3+! ♔a2

Black's king has been pushed onto the same rank as the rook, and now White can quietly snap off the pawn.

13 ♖×h2, with a winning "queen vs. rook" endgame, even though that might not be the easiest win from a practical standpoint.

Note, by the way, that neither the course of the struggle nor its final outcome would change, if the white rook and the black pawn were on any other file from e- through h- in the starting position.

José Raúl Capablanca

In his younger days, the third world champion would have liked to devote himself to composition. But in Capablanca's words, the study he created was so difficult that no one could solve it. "From that day on, I took no more interest in composition, for I thought it pointless to compose studies if no one could solve them."

Capablanca was mistaken. The reason no one could solve his study was that – it had no solution! Later attempts were made to correct Capablanca's effort; indeed, these did result in one sound position. Unfortunately, the author's idea could not be wholly reproduced.

Alexander Alekhine

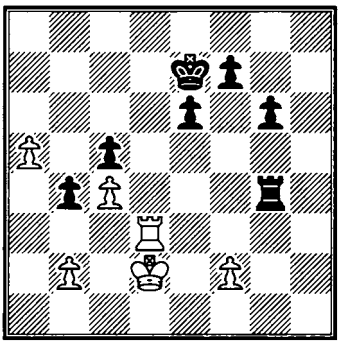
In the preface to F. Lazard's collection, *My Problems and Studies* (Paris, 1928), the fourth world champion wrote: "I

hold the deepest sympathy with the idea of composition itself. I would be happy to create all alone, without the necessity – as occurs in a game – of making my own plans dependent upon my opponent's, in order to achieve anything of value. Ah, this opponent – this co-participant bound to ourselves! His ideas of beauty are always different from ours, while his means (strength, imagination, technique) are so often insufficient to be an active partner of our own intentions! How many disappointments he brings to a genuine artist in the chess business, one who aims for more than just a win, but most of all to create a work that will have unsurpassed value. What suffering (of a kind unknown to any other form of art or science), to feel that your idea, your fantasy must inevitably be restricted, in the natural order of things, by the thought and fantasy of another..." He goes on to say: "The breath of genuine artistry, freed from everything connected with our own subjective personality, is expressed in joyous completeness in the work of the composer: in his own problem, his own study, composed by himself alone!"

Unfortunately, Alekhine's constant striving to be at the top of the game left him no time to spend on composition; the champion only "breathed" lightly upon it.

It often happens that a game, or the analysis which follows, will produce study-like positions. Some do not require any sort of further finishing work – they stand before us practically ready-made. Others are more like diamonds in the rough, awaiting further polishing. Alekhine had those kinds of positions, too.

No. 3 A. Alekhine 1933



Win

This is a bit of a study, composed from motifs taken from the ending of a game played by the world champion in a simultaneous exhibition at Groningen, 1932. The win here is achieved thanks to the self-sacrificing play of the White rook.

1 a6 ♖h4 2 ♖d8! ♖×d8 3 a7

The attempt to stop the pawn on the eighth rank was unsuccessful. Black also loses the battle for the a-file.

1...♖g1 2 a7 ♖a1 3 ♖a3!

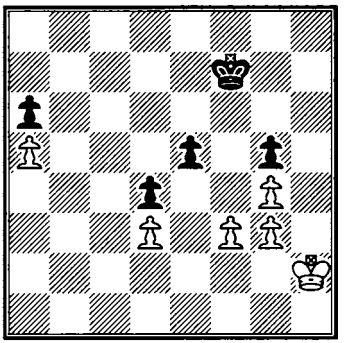
Max Euwe

In contrast to his predecessor, the fifth World Champion composed a number of studies. ***(D)***

This is a study on the theme of corresponding squares. On the queenside, these are b3 and c5. On the kingside, everything depends upon White's ability to get in f4, and after the pawns are exchanged, to put the king on f3 – at that moment, Black must be able to play ♔g5.

1 ♔g1!

No. 4 M. Euwe 1924



Win

Occupying the corresponding square. After 1 ♔g2? ♔f6!, White can forget about winning.

1...♔g7

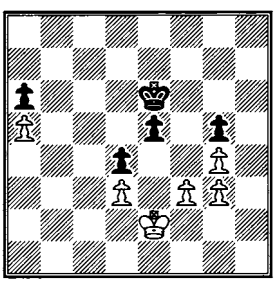
On the other reply, 1...♔f6, the only way to win is 2 ♔g2! ♔g6 3 ♔f2! ♔f6 4 ♔e2.

2 ♔f1! ♔f7 3 ♔e1! (3 ♔f2? ♔g6!; 3 ♔e2? ♔f6!) **3...♔e7 4 ♔f2!**

There is no point in going to the queenside yet: 4 ♔d2? ♔e6! 5 ♔c2 ♔d5(d6) 6 ♔b3 ♔c5!.

4...♔f6 5 ♔e2! ♔e6

Black must make a decision. After 5...♔g6 6 ♔d2(d1), White goes to the queenside. But now, the black king is far away from the g5-square, and the pawn break decides.

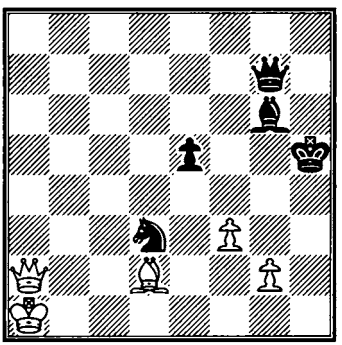


6 f4! ef 7 gf gf 8 ♔f3 ♔e5 9 g5 ♔f5 10 g6 ♔×g6 11 ♔×f4, and wins.

Mikhail Botvinnik

The man who would become the sixth world champion published his first opus at 14. In all, he composed fifteen studies.

No. 5 M. Botvinnik, S. Kaminer 1925



Win

1 g4+ ♔h4 2 ♗h6!

A standard middlegame tactical blow. In addition to the attack on the queen, White threatens mate by ♕h2. So the bishop must be taken.

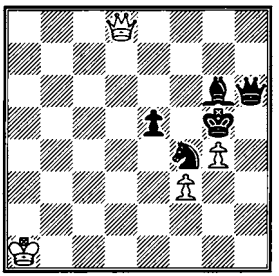
2...♕×h6

But now the h6-square is blocked, and White carries out the concluding attack.

3 ♕h2+ ♔g5 4 ♕d2+ ♘f4 5 ♕d8#! ***(D)***

A most unexpected mate, which would be no shame to overlook, even in a game!

In a critical article that influenced the development of composition in the

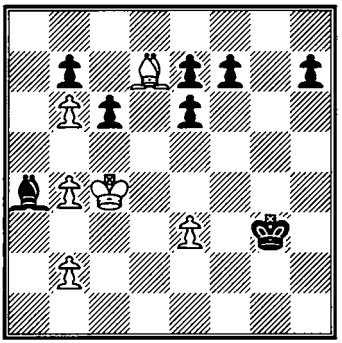


USSR, Botvinnik wrote: "...Even masters must give due attention to study composition. Solving a study teaches us concrete thinking and accuracy in calculation. Any points or false leads must be dealt with quickly, so as not to be distracted from the right path."

Vassily Smyslov

In the realm of study composition, Vassily Vassilievich is a champion among champions. Once he gave up his tournament career, he turned to composition. In 2005, he published a collection entitled *My Studies*, containing 114 of the seventh world champion's compositions. I recall how, while I was working on the collection's first edition (Smyslov had asked me to serve as editor), Vassily Vassilievich paid a visit to the offices of *64* to borrow photographs and drawings from the editorial archive for a future book. When he was done, Smyslov telephoned his wife at home, to tell her he was coming – but then decided to demonstrate his latest study. The position was set up at once, and we all got into the analysis. An hour passed, then two... Nadezhda Andreevna, husbandless, had to phone several times before Vassily Vassilievich would head for home. And there on the table lay the envelope of pictures and drawings, forgotten by us all...

No. 6 V. Smyslov 2001



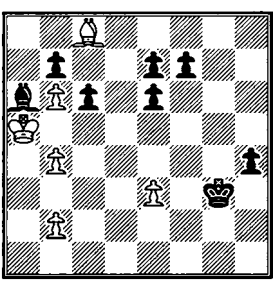
Draw

This bishop endgame appears absolutely hopeless for White, who is down two pawns. Mostly, however, White has no way to stop the h-pawn from marching in. Nor does it look like the pseudo-attacking move 1 ♗c8 will frighten Black, in view of 1...♗b5+ and 2...♗a6. On the other hand, White has nothing else – so let's play that move, if only out of desperation.

1 ♗c8 ♗b5+

Which way does the king go? There is no point in chasing the h-pawn, and it has nothing to do in the center, either. Is that all there is? How about

2 ♔b3! ♗a6 3 ♔a4 h5 4 ♔a5! h4



5 b5! cb

Forced. After 5...♗×b5 6 ♗×b7 h3 7 ♗a8! h2 8 b7 h1♕ 9 b8♕+ ♔f2 10 ♕×b5, White is home free.

6 b4!

Now the contours of White's stalemate defense begin to take shape. By walling the king in along with Black's bishop, the hope is to be able to give away all the rest of the pieces.

6...h3 7 ♗×e6! h2 8 ♗d5 e5!

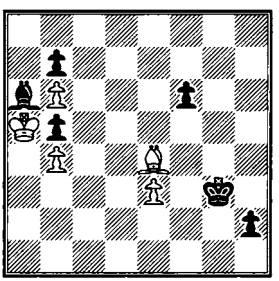
A clever resource. The straightforward 8...♔f2 9 ♗h1 f5 runs into 10 e4!, with a draw. Now the guidelines of the drawing position are clear. It is based on *zugzwang*. At f2, the king blocks the f-pawn's path to the queening square, and Black lacks just one tempo to be able to mate White.

9 ♗h1 e4! 10 ♗×e4

White must hurray; after 10 ♗g2? f5 11 ♗×e4 ♔f2 12 ♗h1 ♔g1, Black wins.

10...f6!

A last trap. White would have a simpler task after 10...f5 11 ♗h1 ♔f2 12 e4!.



11 ♗d5!

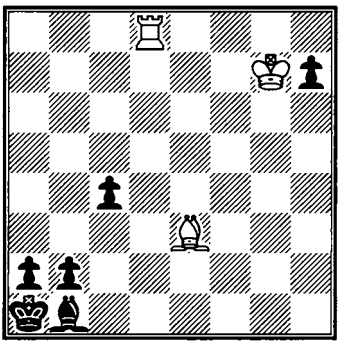
Disabling Black's plan. Not 11 ♗h1? f5! 12 e4 f4 13 e5 f3 14 e6 f2 15 e7 f1♕ 16 e8♕ ♕a1#.

11...♔f2

Unfortunately, Black was in *zugzwang*.

12 ♗h1! ♔g1 13 ♗f3! f5 14 e4, draw.

No. 7 V. Smyslov 2003



Win

The b2-pawn looks like the weakest point of the black king's defense. So 1 ♗d4 suggests itself, when Black has a resourceful defense: 1...♗c2! 2 ♖b8 ♗b3 3 ♖f8 ♔b1 4 ♖f1+ ♗d1! 5 ♖×d1+ ♔c2.

The correct idea is...

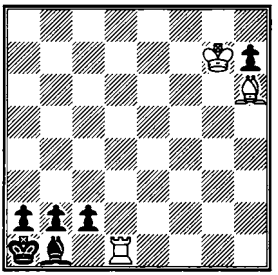
1 ♖d1! c3

otherwise, White still gets to Black's Achilles heel: 1...h5 2 ♗d4 h4 3 ♖d2.

2 ♗h6!

After 2 ♗d4? c2 3 ♖c1 h5 4 ♔f6 h4 5 ♔e5 h3, White's king stumbles over its own bishop, and there is not enough time to go around: 6 ♔d5 h2 7 ♔c4 h1♕ 8 ♖×h1 c1♕+ 8 ♖×c1 – stalemate.

2...c2

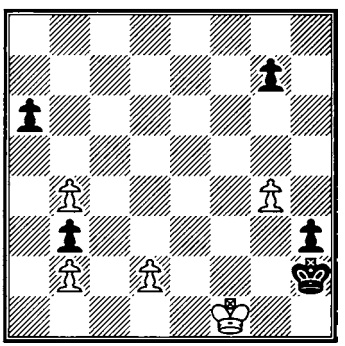


3 ♖c1! bc♕ 4 ♗×c1 h5

Now the path to the c3-square is clear!

5 ♔f6 h4 6 ♔e5 h3 7 ♔d4 h2 8 ♔c3 h1♕ 9 ♗b2#!

No. 8 V. Smyslov 2004

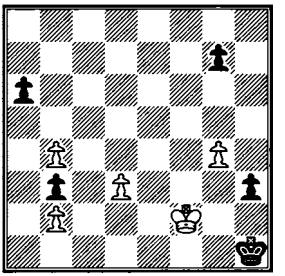


Win

After the obvious **1 ♔f2 ♔h1**, the move 2 d4 also looks completely natural. But it lets the win slip, as will become clear after 11(!) moves. Another mistake would be 2 g5? a5! 3 b5 a4 4 b6 a3 5 b7 ab 6 b8♕ b1♕ 7 ♕g3 ♕f5+! – White has lost control of the f5-square.

The humble **2 d3!!** is the move that leads to the win. ***(D)***

Black's counterplay is aimed at achieving stalemate. True, the straightforward 2...h2 is impossible,

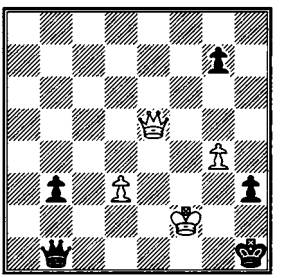


because White has a quick mate. That leaves two other pawn moves.

(A) 2...a5 3 b5 a4 4 b6 a3 5 b7 ab 6 b8♕ b1♕

And now, White's queen goes "up the staircase" to approach the black king.

7 ♕b7+ ♔h2 8 ♕c7+ ♔h1 9 ♕c6+ ♔h2 10 ♕d6+ ♔h1 11 ♕d5+ ♔h2 12 ♕e5+ ♔h1



13 ♕e4+!

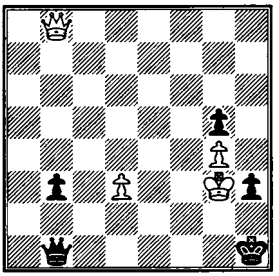
This check became possible once the b1-h7 diagonal was closed on move 2!

13...♔h2 14 ♕f4+ ♔h1 15 ♕f3+ ♔h2 16 ♕g3+ ♔h1 17 ♕×h3#

(B) 2...g5 3 ♔g3! a5 5 b5 a4

If the king runs to the corner, 4...♔g1 5 ♔×h3 a4 6 b6 a3 7 b7 ab 8 b8♕, Black will lose the newly-minted queen: 8...b1♕ 9 ♕h2+ ♔f1 10 ♕h1+.

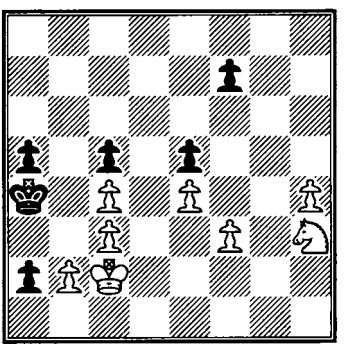
5 b6 a3 6 b7 ab 7 b8♕ b1♕



And now, the queen descends to its doom via a different "staircase."

8 ♕b7+ ♔g1 9 ♕b6+ ♔h1 10 ♕c6+ ♔g1 11 ♕c5+ ♔h1 12 ♕d5+ ♔g1 13 ♕d4+ ♔h1 14 ♕e4+! ♔g1 15 ♕e2 (15 ♕e3+ would only delay the inevitable end), and wins.

No. 9 V. Smyslov 2004



Win

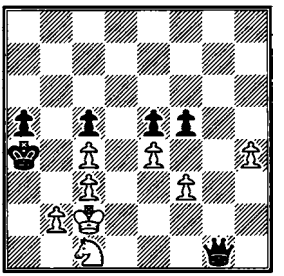
1 ♘f2!

The knight hurries to take part in creating a mating cage for the black king.

1...a1♕ 2 ♘d3 ♕g1 3 ♘c1!

Two bricks left to put in – ♔b1 and ♔a2 – and Black's king will be totally helpless.

3...f5!



Most resourceful counterplay! On 4 ef?, Black continues 4...e4 5 fe ♕f2+ 6 ♔b1 ♕×b2+ 7 ♔×b2 – stalemate. The same thing occurs after 4 ♔b1? f4 5 ♔a2 ♕d1 6 b3+ ♕×b3+ 7 ♘×b3. But White has a worthy response:

4 f4!! ef

Or 4...fe 5 ♔b1 ♕d1 6 ♔a2 ♕c2 7 f5 e3 8 f6 e2 9 f7 e1♕ 10 f8♕ ♕e×c3 11 ♕e8+ ♔b4 12 ♕b5#.

5 ♔b1!

It is too early for 5 e5? f3 6 ♔b1, in view of 6...♕×c1+.

5...♕d1

Now after 5...♕×c1+ 6 ♔×c1 f3 7 ♔d2, the king is close enough to neutralize Black's pawns; and on 5...f3 6 ♔a2 ♕f2 7 ♘b3, there is no defense to the threat of 8 ♘×c5+ ♕×c5 9 b3#.

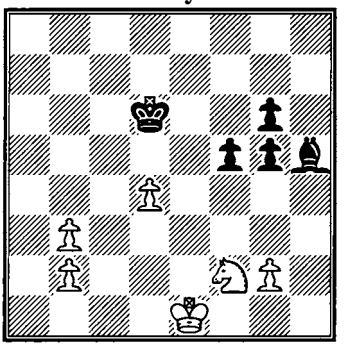
6 ♔a2 ♕c2, and the pawn marches on to victory: **7 e5 f3 8 e6 f2 9 e7 f1♕ 10 e8♕#**. ***(D)***

White must first shut the black bishop out of the game.

1 g4!

The hasty 1 b4? does not win: 1...g4 2

No. 10 V. Smyslov 2005



Win

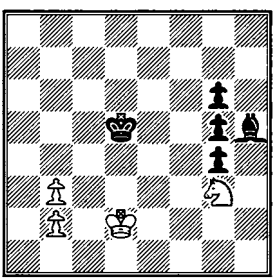
♘d1 (2 b5 g5 3 ♘d3 ♗e8) 2...g3 3 ♘c3 g5 4 b5 ♗g6! 5 b6 ♔c6 6 ♘d5 ♔b7! 7 ♘e7 ♗h7 8 d5 ♔×b6 9 d6 ♔b7 10 d7 (10 ♘d5 ♔c8 11 ♘f6 ♗g6 12 b4 f4 13 ♔e2 ♗d3+!) 10...♔c7 11 ♘d5+ ♔d8 12 ♘f6 ♗g6 13 b4 f4 14 b5 ♗d3 15 b6 ♗a6.

1...fg

Betting on the pawn does not work out: 1...♔d5 2 gh gh 3 ♘h3 g4 4 ♘f4+ ♔×d4 5 ♘×h5.

2 ♘e4+ ♔d5 3 ♘g3 ♔×d4

The pieces stand frozen in the wings, awaiting the duel of kings.



5 ♔e3!

And now, if White makes a misstep with 5 ♔d3?, it would be the perfect time to make a run for the kingside: 5...♔e5! 6 b4 ♔f4 7 b5 ♔×g3 8 b6 ♔f2 9 b7 g3 10 b8♕ g2 11 ♕b6+ ♔f1 12 ♕f6+ ♔e1! (the key square is reached!) 13 ♕×g5 ♔f1 14 ♕f4+ ♔e1, and draws.

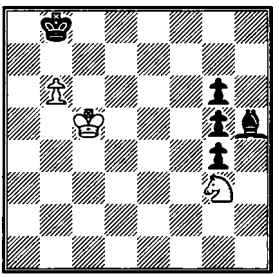
5...♔c5

Zugzwang, alas: 5...♔e5 6 b4 ♔d5 7 ♔d3 ♔e5 8 b5.

6 ♔d3 ♔b4 7 ♔c2 ♔c5 8 ♔c3 ♔b5 9 b4 ♔a4!

Stalemate tricks, such as 10 ♔c4?, should also not be ignored in a game.

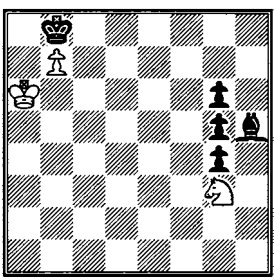
10 b5! ♔×b5 11 b4 ♔c6 12 ♔c4 ♔b6 (12...♔d6 13 ♔b5) **13 b5 ♔c7 14 ♔c5 ♔b7 15 b6 ♔b8**



16 ♔b5!

White's king, having pushed its rival to the edge of the board, must go to a6, leaving the c6-square for its assistant.

16...♔b7 17 ♔a5 ♔b8 18 ♔a6 ♔a8 19 b7+ ♔b8



20 ♘e2!

The knight has the final say. 20 ♘e4? g3 21 ♘c5 ♗e2+ 22 ♔b6 would have hit a discordant note, in view of 22...♗b5! 23 ♔×b5 ♔c7 24 ♔a6 g2 25 ♔a7 g1♕, drawing.

20...g3 21 ♘d4, and wins.

Mikhail Tal

Ernest Pogosiants, International Grandmaster of Composition, tells the following story.

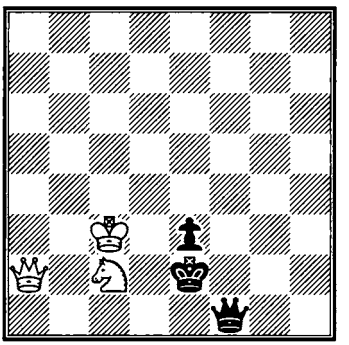
"One day, Mikhail Tal and I were analyzing a fragment of a study, and sat there deep into the night. I thought the position was a draw; but Tal stubbornly sought to win. Of course, there was a vast difference in our strengths; but nevertheless, I nearly always managed to find the draw. This would make Tal even more determined. Absolutely confident of his intuition, he broke down the position, move after move. By three o'clock in the morning, we finally reached the proper diagnosis: White wins. And the rest was, as they say, a matter of simple technique.

And now, the eighth world champion's version:

"I kept on finding spectacular variations, supporting my assessment of the position. Pogosiants was right in a different way. He was able to turn our many hours of analysis into a pleasing study."

That is the story of the creation of Tal's only study. These days, two such noted grandmasters would have no need to sweat over such analysis – now all they need to do is look in the readily available six-piece endgame tablebase, and there is your answer.

No. 11 M. Tal, E. Pogosiants 1969



Win

1 ♘d4+

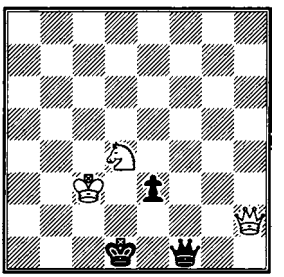
White must stop Black's king from fleeing through f3.

1...♔e1 2 ♕h2!

Threatening to catch the queen in a fork with 3 ♘c2+ ♔d1 4 ♘×e3+.

2...♔d1!

Black holds off bringing the queen to f2 for as long as possible. On 2...♕f2 3 ♘c2+ ♔e2 4 ♕h5+ ♔f1 5 ♕h1+, we are back in the main line of the study. And 2...e2 would lose quickly after 3 ♘c2+ ♔d1 4 ♕d6+.



3 ♕h7!

A nice quiet move, is it not? The queen appears to be leaving the main event, but in fact it works on both wings from the h7-square. The hasty 3 ♕h5+? is parried simply by 3...e2.

3...♔e1

On 3...♕e1+ 4 ♔b3 ♕d2, White should not send the queen to the center immediately: 5 ♕e4? e2 6 ♘f3 e1♕ 7 ♘×e1 ♕e3+ 8 ♕×e3 is stalemate. To win, the check must first be given – 5 ♕h1+! ♕e1, and only then play 6 ♕e4 ♕d2 7 ♘f3.

4 ♕h4+!

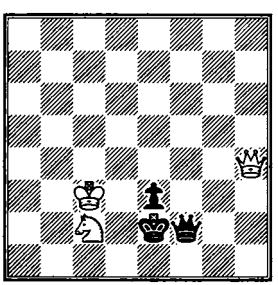
White has another stalemate waiting after the familiar 4 ♕e4? – 4...♔f2! 5 ♕f3+ ♔g1 6 ♘e2+ ♔h2 7 ♕×f1.

4...♕f2

Black must still put the queen on f2. The variation 4...♔d1 5 ♕e4! ♕e1+ 6 ♔b3 ♕f2 (6...♕d2 7 ♘f3 was dealt with above) ends in mate: 7 ♕b1+ ♔d2 8 ♕c2+ ♔e1 9 ♕c1#.

5 ♘c2+ ♔e2

Now all is ready for the final attack.



6 ♕h5+! ♔f1 (6...♕f3 7 ♘d4+) **7 ♕h1+ ♕g1**

Black can avoid the knight mate (7...♔e2 8 ♘d4#), but it is the strongest White piece that will deliver the final blow.

8 ♕f3+ ♕f2 9 ♘×e3+ ♔e1

9...♔g1 10 ♕d1+ ♔h2 11 ♘g4+ – that is no mate, that is a fork!

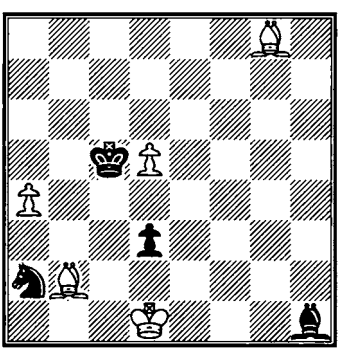
10 ♕d1#

Anatoly Karpov

The twelfth world champion quite recently made us happy with his first study. Before that, Anatoly Evgenievich was noted for problems.

In the chapter entitled, "Left Bank – Right Bank," we presented the conclusion of the game Anand-Karpov from the 1994 Rapid/Blindfold" tournament in Monaco. The motifs from this endgame were used to construct the following study – not without the assistance of two grandmasters of composition, many-time world champions Nikolai Kralin and Andrei Selivanov.

No. 12 A. Karpov, N. Kralin, A. Selivanov 2004



Win

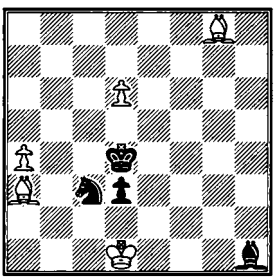
First, note the cramped position of the black knight. Winning it should be quite easy. But after the natural 1 d6? ♔×d6 2 ♗×a2 ♗d5!, trading the light-squared bishops results in a known drawing position, while attempting to avoid the exchange costs White the last pawn, 3 ♗b1 ♗b3+ 4 ♔d2 ♗×a4. So we have to work smarter.

1 ♗a3+! ♔d4!

A worthy reply. Black's king counterattacks, since retreat would spell the knight's doom: 1...♔b6 2 ♔d2! ♔a5 3 d6 ♗c6 4 ♗×a2. Black also loses on 1...♘b4 2 d6 ♗c6 3 ♗b3 ♔×d6 4 ♗×b4+ ♔e5 5 ♔d2 ♗d5 6 ♗d1.

2 d6 ♘c3+

The first critical moment. Which way does the king go – right or left?



3 ♔e1!

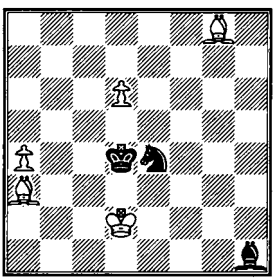
Going left turns out to be hazardous to its health: after 3 ♔c1? ♔e3! 4 ♗c5+, the king would take the key e2-square, allowing Black to save the position at the last moment: 4...♔e2 5 ♗c4 ♗c6 6 a5 ♘e4 7 ♗b4 ♘×d6! 8 ♗×d6, and now 8...♗d5! 9 ♗b5 ♗c6! 10 ♗a6 ♗b7, and White cannot get rid of the "stuck-on-you" bishop.

3...d2+!

A quarter-century ago, the position after 3...♗c6 4 ♗b2 ♗×a4 5 ♗e6 ♔c5 6 d7 ♗×d7 7 ♗×d7 was universally considered drawn – until computers showed us otherwise. Now the two bishops can deal not only with a solo knight, but even with a pawn companion as well.

4 ♔×d2 ♘e4+

Two moves later, White is once again faced with the same difficult choice.



5 ♔e2!

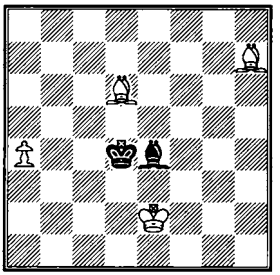
In this case, White has nothing better than consistency – rightward, ever rightward! After 5 ♔c2? ♘×d6 6 ♗×d6 ♗d5! 7 ♗h7 ♗e4+ 8 ♗×e4 ♔×e4 9 a5 ♔d5 10 a6 ♔c6 11 ♗c5 ♔c7 12 ♗a7 ♔c6, White is one little tempo short.

Here is how that needed tempo will be won.

5...♘×d6 6 ♗×d6 ♗d5 7 ♗h7! ♗e4 *(D)*

8 ♗c5+!

A *zwischenschach* can be a terrible weapon in the right hands – that is to say, in clear heads.



8...♔d5 9 ♗×e4+ ♔×e4 10 a5 ♔d5 11 a6 ♔c6 12 ♔d3! ♔c7 13 ♗a7 ♔c6 14 ♔c4

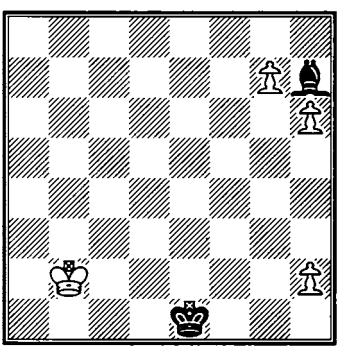
Curtains! A memorable performance, featuring outstanding play by all the acting pieces.

Grandmaster Study-Composers

Siegbert Tarrasch

This German grandmaster and world championship candidate at the close of the 19th and early 20th centuries also earned wide renown as a theoretician. As editor of a number of chess magazines and columns for various periodicals, he not only participated in the selection of interesting problems and studies sent in for solvers, he also tried his own hand at composing them.

No. 13 S. Tarrasch 1921



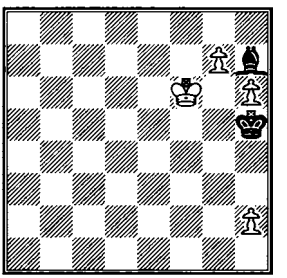
Win

The solution is uncomplicated, but memorable.

1 ♔c3 ♔f2 2 ♔d4 ♔f3

Black's king cannot reach the h-pawn in time: 2...♔g2 3 ♔e5 ♔×h2 4 ♔f6 ♔g3 5 ♔f7, and White wins.

3 ♔e5 ♔g4 4 ♔f6 ♔h5



5 g8♕! ♗×g8 6 ♔g7 ♔g5 6 h3!

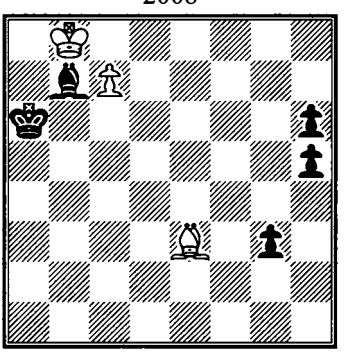
A necessary loss of time, in order to set up a position of mutual *zugzwang*.

7...♔h5 8 h4

Now it is Black to move – and therefore lose.

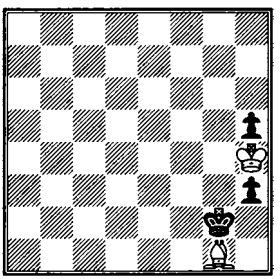
And here is that same Tarrasch idea expressed in a contemporary study.

No. 13a N. Kralin, O. Pervakov 2008



Draw

If the white king is ever going to break out of its prison, sooner or later the c7-pawn will have to be given up. It is logical to do this at once, before the black pawns have a chance to get moving. And after 1 c8♕?! ♗×c8 2 ♔×c8 ♔b5 3 ♔d7 ♔c4 4 ♔e6 ♔d3 5 ♗f4 g2 6 ♗h2 ♔e4 7 ♔f6 ♔f3 8 ♔f5 h4! 9 ♔g6 h3 10 ♔h5 g1♕ 11 ♗×g1 ♔g2 12 ♔g4! h5+ 13 ♔h4, it looks as though White has achieved the draw – this, with colors reversed, is the mutual *zugzwang* from the Tarrasch study.



But it is all just a thematic false lead. Instead of 9...h3?, Black has better: 9...♔g4! 10 ♔×h6 ♔h3 11 ♗g1 ♔g3, and wins.

It would be pointless to waste time taking the pawn: 1 ♗×h6? h4 2 ♗f4 ♔b6! 3 c8♕ ♗×c8 4 ♔×c8 ♔c6 5 ♗b8 ♔d5 6 ♔d7 ♔e4 7 ♔e6 ♔f3 –+. So what is the solution?!

1 ♗f4!! g2!

If now 1...h4, White can procede with 2 c8♕ ♗×c8 3 ♔×c8 ♔b5 4 ♔d7 ♔c4 5 ♔e6 ♔d3 6 ♔f5, and draws.

2 ♗e3!

It turns out that to reach the goal, White has to give away two tempi! The whole focus is on the fact that Black's pawn is stronger at g3 than at g2! Strange but true! The bishop must hold the pawn precisely from e3, to keep Black's king from becoming active: 2 ♗h2? ♔b6! 3 c8♕ (3 ♗g1+ ♔c6 –+) 3...♗×c8 4 ♔×c8 ♔c6 5 ♔d8 ♔d5 6 ♔e7 ♔e4 7 ♔f6 ♔f3, and wins – compare the 1 c8♕ variation.

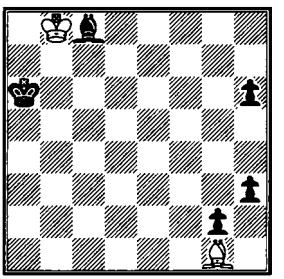
2...h4 3 ♗g1!

Occupying the key square at once. White cannot allow the second h-pawn to get to h5 with the bishop on g1: 3 ♗f2? h3 4 ♗g1 h5 5 c8♕ ♗×c8 6 ♔c7!? ♔b5 7 ♔d6 ♔c4 8 ♔e5 ♔d3 9 ♔f4 h2! 10 ♗×h2 ♔e2 11 ♔g3 ♔f1 12 ♔h4 ♗g4!, and Black wins.

3...h3

After 3...h5 4 ♗f2 h3 5 ♗g1, the pawn must quit the h5-square, and that is enough for White to draw: 5...h4 6 c8♕ ♗×c8 7 ♔×c8 ♔b5 8 ♔d7 ♔c4 9 ♔e6 ♔d3 10 ♔f5 ♔e2 11 ♔g4 ♔f1 12 ♗h2 g1♕+ 13 ♗×g1 ♔g2 14 ♔×h4.

4 c8♕! ♗×c8



5 ♔c7!!

A tempo is worth more than a bishop! The obvious capture leads to the Tarrasch position, but this time it is lost for White: 5 ♔×c8?! ♔b5 6 ♔d7 ♔c4 7 ♔e6 ♔d3 8 ♔f5 ♔e2 9 ♔g4 ♔f1 10 ♗h2 g1♕+ 11 ♗×g1 ♔g2! (now it is

Black who declines to take the bishop!) 12 ♔h4 h5! – a second thematic false lead.

5...♔b5 6 ♔d6 ♔c4 7 ♔e5 ♔d3 8 ♔f4 h2

The draw is obvious after 8...♔e2 9 ♔g3 ♔f1 10 ♔h2.

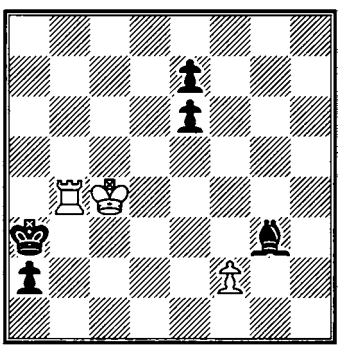
9 ♗×h2 ♔e2 10 ♔g3 ♔f1 11 ♔h4!

The pawn remains at h6, where Black is unable to protect it. Draw.

Oldrich Duras

This Czech grandmaster was one of the strongest players of the early 20th century. After 1914, he gave up tournament play, and extended his chess activity in the fields of journalism and composition. Duras published over fifty studies, many of them rightly considered classics of the genre.

No. 14 O. Duras 1925

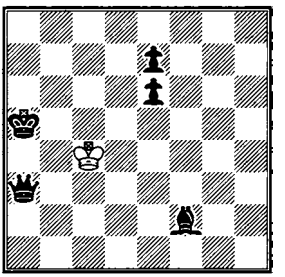


Draw

The pawn can only be stopped at the price of irreplaceable losses in material. Stalemate ideas to the rescue!

1 ♖b3+ ♔a4 2 ♖b7 ♗×f2 3 ♖b4+ ♔a5 4 ♖b3! ♗c5!

Black searches for a way to prolong the battle. After 4...a1♕ 5 ♖a3+ ♕×a3, we have our first stalemate.



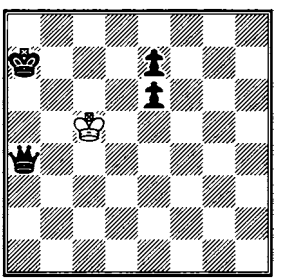
5 ♖b8 ♔a6

The same stalemate occurs again after 5....♗a7 6 ♖b3 a1♕ 7 ♖a3+ ♕×a3.

6 ♔×c5 ♔a7 7 ♖b4! a1♕

If Black underpromotes with 7...a1♖, White draws easily with 8 ♔c6.

8 ♖a4+ ♕×a4

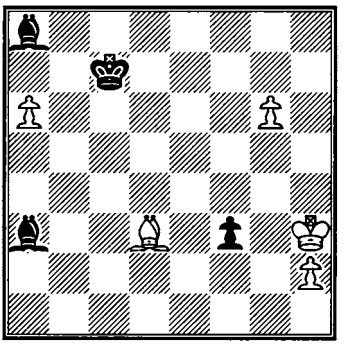


This second stalemate is also a looking-glass stalemate. In composition parlance, this means that all the squares around the stalemated king are clear of pieces. ***(D)***

The battle of the bishops in this study makes a great impression.

1 g7 ♗d5 2 a7 ♗e6+

No. 15 O. Duras 1933



Win

Black gets the bishop off the a8-h1 diagonal with tempo, intending to continue 3...♔b7. The immediate 2...♔b7 would be penalized by 3 ♗e4!.

3 ♗f5!

White sacrifices the bishop to leave the opponent no time for a king move.

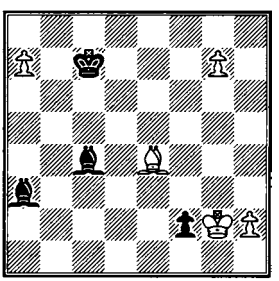
3...f2!

In turn, Black stirs up counterplay, since the position is obviously lost after 3...♗×f5+ 4 ♔g3.

4 ♔g2 ♗d5+ 5 ♗e4!

The sacrificial melody goes right on playing! 5 ♔f1? would be a mistake as after 5...♗c5, it is Black who wins.

5...♗c4



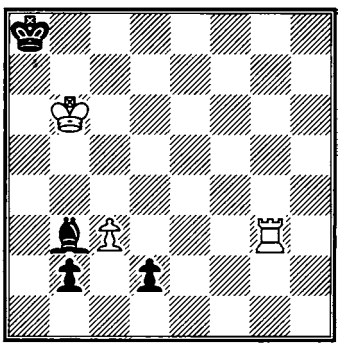
6 ♗d3!

Sacrifice number three...

6...♗d5+ 7 ♔f1 (7 ♔×f2? ♗c5+) **7...♔b7 8 ♗e4!**

And the fourth sacrifice decides.

No. 16 O. Duras 1939



Draw

The only thing that can stop Black's pawns from taking that last step to the queening square is a mate threat. But Black can successfully ward off eighth-rank attacks, for example: 1 ♖f3? ♗f7 2 ♖f1 ♔b8 3 c4 ♔c8 4 c5 ♗h5, and wins. First, let's try "irritating" the Black king on the a-file.

1 c4! ♗×c4 2 ♔c7! ♔a7

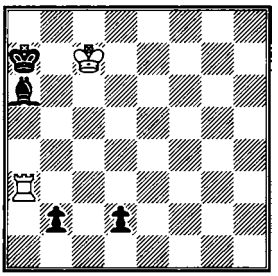
Underpromoting to a knight fails: 2...b1♘ 3 ♖g5 ♔a7 4 ♖a5+ ♗a6 5 ♖d5.

3 ♖a3+ ♗a6 *(D)*

Black has met all the threats on the a-file, but White has a saving stalemate idea.

4 ♖b3! d1♕

Black must follow along. 4...♔a8 5



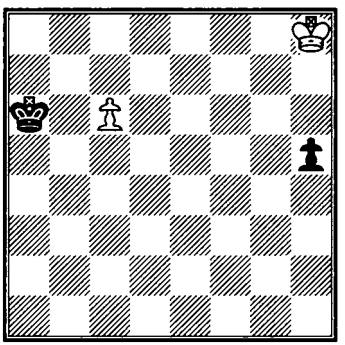
♖a3 leads to a repetition, while the knight underpromotion with 4...d1♘ is parried by 5 ♖b4!.

5 ♖b7+ ♔a8 6 ♖b8+ ♔a7 7 ♖b7+ ♗×b7

It is either stalemate, or perpetual check.

Richard Réti

Another Czech grandmaster, famous in the world of composition first and foremost for his pawn-endgame masterpiece, which was solved by "Réti's maneuver" – or, as we call it, "chasing down two rabbits."

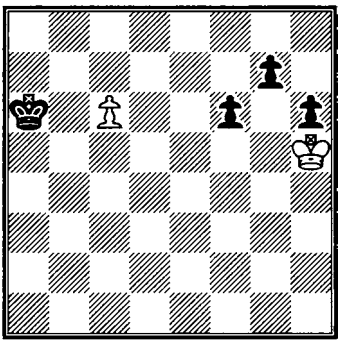


Draw

For accuracy's sake, we note that Réti was not the first to discover this idea; but his study is unexcelled for its cleanliness of form and clarity of play.

And seven years later, Réti gave his discovery an even more paradoxical twist.

No. 17 R. Réti 1928



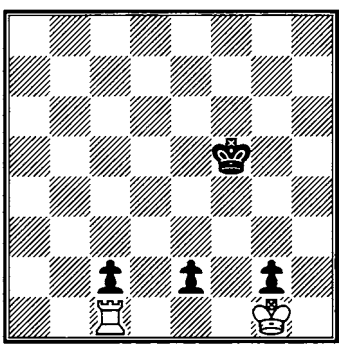
Draw

White's king successfully holds off three connected passed pawns!

1 ♔g6! ♔b6 (1...h5 2 ♔×g7 h4 3 ♔×f6; 1...f5 2 ♔×g7 f4 3 ♔f6 f3 4 ♔e7) **2 ♔×g7 h5** (2...f5 3 ♔f6 f4 4 ♔e5 f3 5 ♔d6) **3 ♔×f6 h4 4 ♔e5! ♔×c6 5 ♔f4**

In all, Réti composed some 100 studies, most of which have found a place not only in the treasury of composition, but in several endgame manuals.

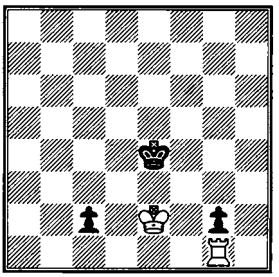
No. 18 R. Réti 1928



Win

It looks as if White's king could quietly take the g2-pawn, and then go after the others: 1 ♔×g2? ♔e4 2 ♔f2 ♔d3 3 ♔e1, and Black is in *zugzwang*. Does it win? Not quite. It turns out that we have overlooked the unexpected: 2...e1♕+! 3 ♔×e1 ♔d3, when the draw becomes obvious.

The correct line is **1 ♔f2! ♔e4 2 ♔×e2 ♔d4 3 ♖g1(a1) ♔e4**



4 ♖e1!

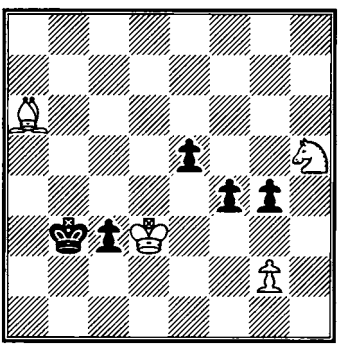
Without this move, setting the rook up in ambush, the win is impossible.

4...♔d4

On 4...♔e5, White holds the battery's fire: 5 ♔e3!; and on 4...♔f4, 5 ♔f2 wins.

5 ♔d2 and wins.

No. 19 R. Réti 1928



Draw

Black's pawns are very dangerous. White needs powerful countermeasures, as we can see from the variation 1 ♗b5? e4+ 2 ♔e2 f3+ 3 gf c2! 4 ♗a4+ ♔×a4 5 ♔d2 ♔b3 6 ♔c1 ef 7 ♘g3 f2 8 ♘f1 ♔c3.

1 ♘g3!

At the cost of a piece, White breaches the black pawn chain.

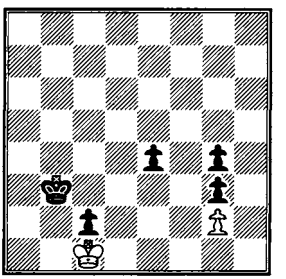
1...fg 2 ♗b5 e4+

The continuation 2...c2 3 ♗a4+ ♔×a4 4 ♔×c2 would lead back into the main line of the study.

3 ♔e2!

The overly active 3 ♔e3? gets White a cold shower: 3...♔a3!. But now that move can be answered simply by 4 ♔d1.

3...c2 4 ♗a4+ ♔×a4 5 ♔d2 ♔b3 6 ♔c1



6...♔c4

6...♔c3 or 6...e3 would end the study immediately, by stalemate.

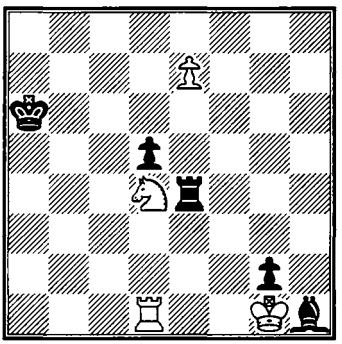
7 ♔×c2 e3 8 ♔d1

8 ♔c1 ♔c3 9 ♔d1 ♔d3 would not change the play, only extend it.

8...♔d3 9 ♔e1 e2

And it is still stalemate!

No. 20 R. Réti 1924



Win

This study is an outstanding example of cooperation between rook and knight.

1 ♘f5

After 1 ♘c6? ♔b6 2 ♖c1 (2 ♘b4 d4) 2...d4, White's pieces are tightly bound to the defense. But now at the very least 2 ♘d6 ♖×e7 3 ♖a1+ ♔b6 4 ♘c8+ is threatened.

1...♔a5! 2 ♖b1!

White cannot improve the position after 2 ♔h2 d4 3 ♖×d4 (3 ♘×d4 g1♕+ 4 ♔×g1 ♖×e7, and the bishop on h1 covers the c6-square just in time) 3...♖e1 4 ♖g4 ♖e6, since 5 ♔h3 is met at once by 5...g1♕! 6 ♖×g1 ♗e4.

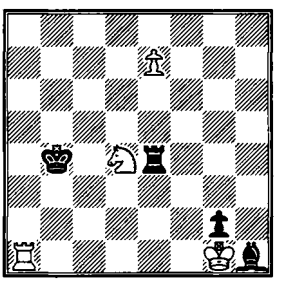
2...d4!

Even standing a good bit apart, White's rook and knight still act as though there were a thread holding them together. This is beautifully demonstrated in the following variations: 2...♖e5 3 ♘d4! ♖e4 (3...♖e3 4 ♔f2 ♖×e7 5 ♘c6+) 4 ♘b3+! ♔b4 (4...♔a6 5 ♘c5+) 5 ♘d2+; 2...♔a6 3 ♘d6 ♖×e7 4 ♖a1+ ♔b6 5 ♘c8+; and 2...♔a4 3 ♘d4 ♖×e7 4 ♖a1+ ♔b4 5 ♘c6+.

3 ♘×d4 ♔a4

The best chance. White's task would be simpler after 3...♔a6 4 ♘c2 (4 ♘f5 wins, too) 4...♖×e7 5 ♘b4+ ♔b5 6 ♘d5+, or 3...♖e3 4 ♖a1+ ♔b6 5 ♘f5 ♖e6 6 ♘d6 ♖×e7 7 ♘c8+.

4 ♖a1+ ♔b4



5 ♖c1!

5 ♘f5? is weak. After 5...♔b3, the worst is over for Black. But now the Black rook cannot abandon the e4-square, owing to the fork, and the king also does not have any squares. Now the play separates into two symmetrical variations, involving echoing rook sacrifices.

(A) 5...♔a5 6 ♖c5+! ♔b4

Black is also not saved with 6...♔a4 7 ♖c4+, or 6...♔b6 7 ♖c6+ ♔a5 8 ♖e6.

7 ♖e5! ♖×e5 8 ♘c6+

(B) 5...♔a3 6 ♖c3+! ♔b4

6...♔b2 7 ♖c2+ ♔a3 8 ♖e2 is similar to what we saw above.

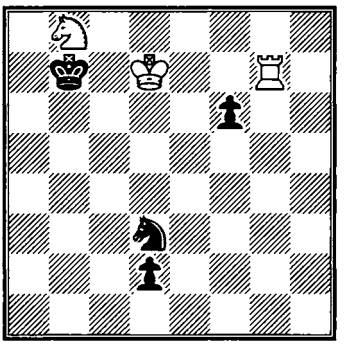
7 ♖e3! ♖×e3 8 ♘c2+

Masterly work!

Aron Nimzovich

A candidate for the world championship in the 1920s and 1930s, he contributed a great deal towards the development of chess. His researches were crowned with many positional discoveries, while his book, *My System*, remains a priceless manual for chessplayers to this day. Nimzovich also composed a few studies, including this one:

No. 21 A. Nimzovich 1923



Draw

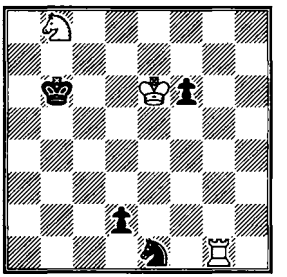
1 ♔e6+!

The king gets off the d-file with tempo, while simultaneously occupying an important position for the construction of the perpetual-check mechanism.

1...♔b6

If Black takes the knight, White has time to stop the passed pawn: 1...♔×b8 2 ♖g1 ♘e1 3 ♖g8+ ♔c7 4 ♖g7+ ♔c6 5 ♖d7.

2 ♖g1 ♘e1



3 ♖g4!

The perpetual-check mechanism goes into operation.

3...d1♕ 4 ♖b4+ ♔a5

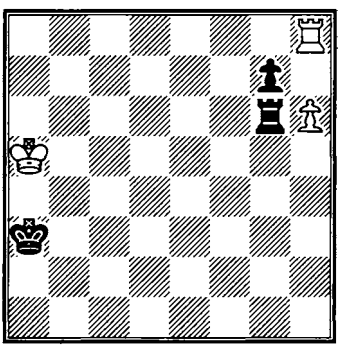
Or 4...♔c5 5 ♘a6+ ♔c6 6 ♘b8+.

5 ♘c6+ ♔a6 6 ♘b8+

Nicholas Rossolimo

Citizen of the world. He was born in Kiev in 1910. After the 1917 Revolution, he turned up in Paris; later, he moved to America, where according to rumor, he worked at one time as a waiter in New York. In 1953, he became a grandmaster. In his younger days, he composed a few studies which had great practical value.

No. 22 N. Rossolimo 1927



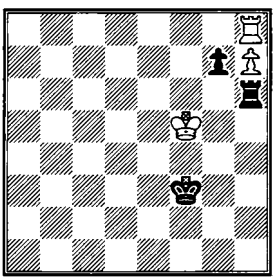
Win

The motif for this study comes up often in practical games, once the pawn reaches the seventh rank.

1 h7 ♖h6 2 ♔b5

Now and henceforward, White uses the threat of check, followed by promoting the pawn, to force Black's king to stay in the opposite number's shadow.

2...♔b3 3 ♔c5 ♔c3 4 ♔d5 ♔d3 5 ♔e5 ♔e3 6 ♔f5 ♔f3

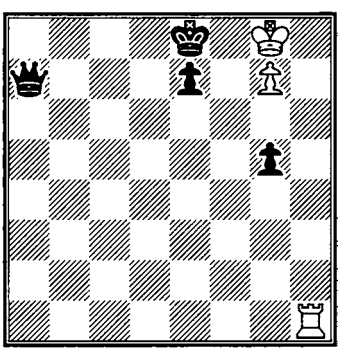


The kings marched together back to their own side; now the issue is decided by the creation of a battery.

7 ♖f8! ♖×h7 8 ♔g6+

This is why the white king was aiming for the f5-square: thanks to the discovered check, Black loses the rook.

No. 23 N. Rossolimo, S. Kaminer
1928



Win?

While in this study, we find an instructive duel between rook and queen.

1 ♔h7

In contrast to the preceding example, here the creation of the battery does not win: after 1 ♖h8? ♕d4 2 ♔h7+ ♔d7 3 g8♕ ♕h4+, White's king cannot escape the checks.

1...e6!

1...e5 2 ♔h8 loses at once.

2 ♖b1 ♕c7!

White threatened 3 ♖b8+ ♕×b8 4 g8♕+.

3 ♖b2!

This takes away the c2-square from the queen. On 3 ♖b8+? ♔e7! 4 g8♕, Black is saved by the unexpectedly created "queen+king" battery: 4...♔f6+! 5 ♔h8 ♕h2+ 6 ♕h7 ♕×b8+.

3...g4

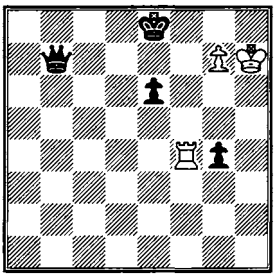
After 3...e5, White can now play 4 ♖b8+, with Black's own pawn blocking the queen's path to h2.

4 ♖f2!

Now an attack from the other side is threatened – 5 ♖f8+.

4...♕b7 5 ♖f4!

On 5 ♖f8+? ♔e7 6 g8♕ ♕b1+ 7 ♔h8 ♕h1+ 8 ♔g7 ♕a1+ 9 ♔g6 ♕b1+ 10 ♔g5 ♕c1+, White cannot escape the perpetual check, since 11 ♖f4 is met by 11...e5!.



A critical position has been reached. The authors considered it to be won for White, and at first sight, this would seem to be so: White's king successfully escapes the checks:

5...♕b1+ 6 ♔h6 ♕h1+ 7 ♔g6 ♕b1+ 8 ♔g5 ♕b5+ 9 ♔h6.

But after the clever **5...♕c7!**, Black obtains a draw:

6 ♖f8+ ♔e7 7 g8♕ ♕c2+!

This accurate check allows the Black queen to accomplish its mission. 7...♕h2+? loses after 8 ♔g6 ♕c2+ 9 ♔h5 ♕h2+ 10 ♔g5 ♕e5+ 11 ♔×g4 ♕e2+ 12 ♔g3 ♕e3+ 13 ♔g2!, and the rook can join in the king's defense next move. 10...♕d2+ in this variation would not save Black either, in view of 11 ♖f4!, when the queen's position on d2 proves fatal after 11...e5 12 ♕f7+ ♔d6 13 ♕f6+ ♔d5 (13...♔d7 14 ♕×e5) 14 ♕d8+.

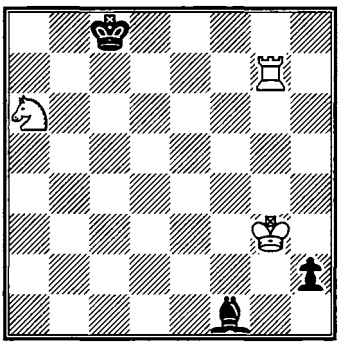
8 ♔h6 ♕d2+! 9 ♔h5! ♕d5+!

It is not too late to err: 9...♕h2+ 10 ♔g5 +−.

10 ♔h4 ♕h1+ 11 ♔g5 ♕d5+ 12 ♔×g4 ♕g2+! with perpetual check.

In my opinion, this is one of those studies that really does not require fixing – just change the colors, and the task, and it will do fine.

No. 24 N. Rossolimo 1928



Win

Two threats – the capture of the knight and the queening of the pawn – push White into forcing play.

1 ♖g8+ ♔b7 2 ♘c5+ ♔b6!

The king has to attack the knight on the diagonal. On 2...♔c6, the rook check wins: 3 ♖c8+.

3 ♘a4+!

The White knight also needs to choose its moves carefully. After 3 ♘d7+? ♔c7! (but not 3...♔c6? 4 ♘b8+), the draw is obvious.

3...♔b5 4 ♘c3+ ♔b4 5 ♘a2+!

On 5 ♘d5+, Black would have replied with the familiar 5...♔c5!. But 5...♔c4? would lose, in view of 6 ♘e3+! ♔d3 7 ♘g4! h1♕ (7...h1♘+ 8 ♔h2) 8 ♘f2+.

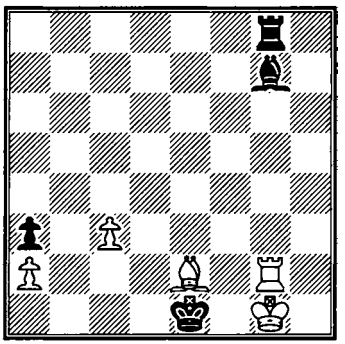
5...♔b3 6 ♘c1+ ♔b2

The king has trapped the knight after all. But now the Black bishop finds itself in danger.

7 ♔×h2! ♔×c1 8 ♖g1

This was the first study in which a white knight and black king executed a systematic movement, a discovery which was to find creative resonance among many composers.

No. 25 N. Rossolimo 1930



Win

How to exploit the "eternal" g-file pin? White's king cannot leave its shelter on g1, in view of an immediate ♖h8+ in reply; and if the bishop attacks the black rook, it will be counterattacked itself. The variation 1 ♗c4? ♖c8 2 ♗e6 ♖c7! would only seem to confirm these musings. But there is a path to victory, nonetheless. An original systematic movement decides.

1 ♗a6!

A rather difficult move, which puts Black in *zugzwang*. On 1...♔d1, the black king is on a white square, which makes 2 ♗c4 ♖c8 3 ♗b3+! possible. So Black has no choice.

1...♖a8 2 ♗b7

I think even a beginning player could not lose the rook ending after 2 ♖×g7 ♖×a6.

2...♖g8 3 ♗c6! ♖c8

We have already seen what happens after 3...♔d1: 4 ♗d5 ♖d8 5 ♗b3+.

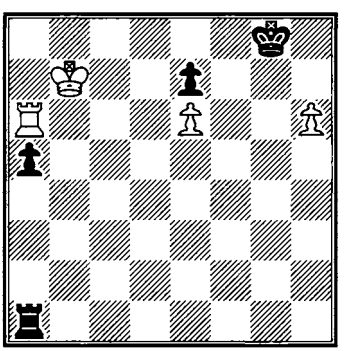
4 ♗d7 ♖g8 5 ♗e6! ♖e8 6 ♗f7

Now the g8-square is under control, so White wins easily.

Paul Keres

Known the world over, the Estonian grandmaster Paul Keres composed more than two hundred problems and more than thirty studies, many of which having been awarded prizes and other acknowledgements in international tourneys. Such accomplishments would be a source of pride to any "professional" composer. Keres published his first problem at the age of 13. But Paul Petrovich achieved his greatest creative successes in study composition. He created a number of notable compositions, which had practical significance as well. In the first USSR composition championship, Keres took third place in the study division.

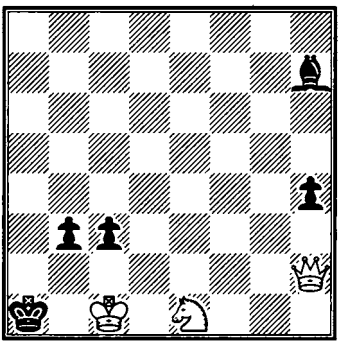
In what may be his best-known composition,



Win

Keres successfully synthesized Emanuel Lasker's idea with the conclusion of a study by Grigoriev (*Shakhmaty v SSSR*, 1938). Keres did not shun combinative studies, either.

No. 26 P. Keres 1936



Win

White has a huge advantage in material, and – the apparently insoluble problem of how to stop the threatened 1...b2+. Tactics to the rescue!

1 ♘c2+! ♔a2

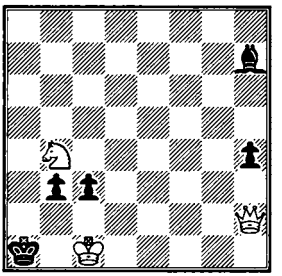
If Black takes the knight, then the bishop finds itself on a vulnerable square: 1...♗×c2 2 ♕b8!, and Black can no longer play 2...b2+, in view of 3 ♔×c2.

2 ♘b4+ ♔a1

Black's king tries to hide in the corner again, since the active 2...♔a3 runs into 3 ♘d3! ♗×d3 4 ♕d6+ ♔a2 5 ♕d5!, forcing mate. ***(D)***

Has not White's play reached a dead end, since nothing has been done to prevent the crushing check at b2?

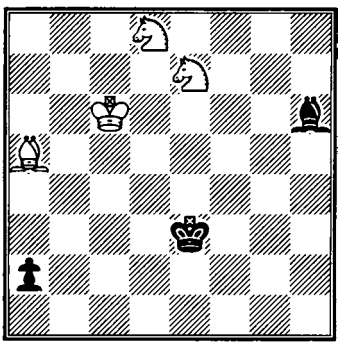
3 ♕a2+!!



A spectacular queen sacrifice, placing Black's king in a mating net.

3...ba 4 ♘c6 and Black is defenseless.

No. 27 P. Keres 1946



Win

1 ♘d5+

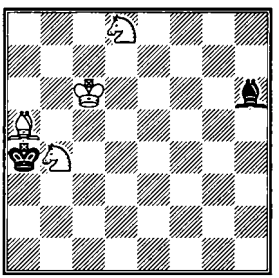
The immediate 1 ♗c3? would allow Black to gain time: 1...♔d3 2 ♗h8 ♔c2 3 ♘d5 ♗d2 4 ♘e6 ♔b1, when neither knight can do anything to stop the passed pawn.

1...♔d3!

Completely unexpected! Black's king jettisons its last foot-soldier, and throws itself into battle against the overwhelming force of the enemy. Black might have held on to the pawn, but the price would have been steep, as after 1...♔d4 2 ♗c3+ ♔d3 3 ♗h8 ♔c2

4 ♘e6 ♗d2 5 ♘d4+ ♔b1 6 ♘b3 ♗c1 (6...♔c2 7 ♘×d2 ♔×d2 8 ♘b4) 7 ♘c3+, White's pieces complete their encirclement, and start to destroy the black army.

2 ♘b4+ ♔c3 3 ♘×a2+ ♔b3 4 ♘b4 ♔a4!



5 ♘b7!

The attempt to defend the bishop with the king leads to a curious positional draw: 5 ♔b6? ♗e3+ 6 ♔a6 ♗d2 7 ♘dc6 ♗e1 8 ♔b6 ♗f2+! 9 ♔c7 ♗e1 10 ♔d6 ♔b5!, when the pin on the e1-a5 diagonal becomes eternal.

5...♗d2

It looks as though Black has achieved the objective. The knight on b4 is attacked, while getting the king to c4 allows stalemate: 6 ♔c5? ♗e1 7 ♔c4 ♗×b4 8 ♗×b4. But White has a sterling resource.

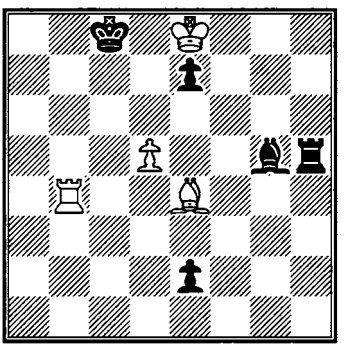
6 ♘c2! ♗×a5 7 ♘c5#!

Keres was asked numerous times to judge the strongest composition tourneys, including the USSR Championships. At one of the first, in 1957, this over-the-board grandmaster was awarded the title of International Arbiter of Composition. Keres' study composition and articles did a lot to popularize "the poetry of chess" in Estonia.

David Bronstein

A noted grandmaster and world championship candidate who loved composition very much. When Bronstein would drop in to the editors' offices of *64*, he would invariably ask me to show him some new study. "How I envy you, my friend," David Ionovich loved to repeat during our sessions, "that you can occupy yourself with pure art."

No. 28 D. Bronstein 1959



Draw

1 ♗f5+!

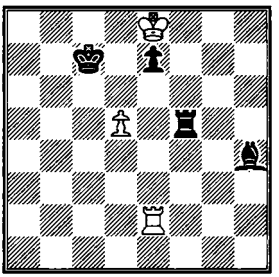
On 1 ♖b1? ♗h4 2 ♗f3, Black has the *zwischenschach* 2...♖h8+, winning.

1...♔c7 2 ♖e4 ♗h4!

A double attack, on the e1-square as well as the bishop at f5. If Black tries to play on the pin by 2...♖h2 3 ♗g4 ♖h4, White would also have a *zwischenschach*: 4 ♖c4+ ♔d6 5 ♗×e2.

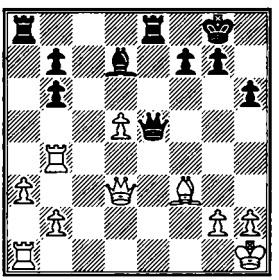
3 ♖×e2 ♖×f5 ***(D)***

Looking at this position gives one the overwhelming urge to resign. Nevertheless, we shall keep on seeking a means of salvation...

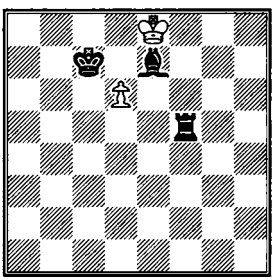


4 ♖×e7+!!

A shattering blow! One is immediately reminded of the move 24...♖×a3!! from the game **Mikenas-Bronstein** (33rd USSR Championship, Tallinn 1965):



4...♗×e7 5 d6+!



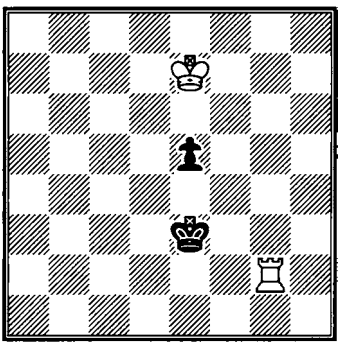
Unexpectedly, the board is filled with a shower of possible stalemates:

5...♗×d6; **5...♔×d6**; **5...♔c6 6 de ♔c7** (7...♔d6 8 ♔d8 ♖a5 9 e8♘+!); **5...♔c8 6 d7+ ♔c7** (6...♔b7 7 ♔×e7 ♖e5+ 8 ♔d6) **7 d8♕+ ♗×d8**

Yuri Averbakh

USSR Champion in 1952, a participant in the Candidates' Tournament of 1953, and the author of a number of books, among them the multi-volume work *Chess Endgames*. In recent years, Yuri Lvovich has taken a serious interest in the history of chess – where, just as in the endgame, he has made a number of interesting discoveries.

No. 29 Y. Averbakh 1981



Win

1 ♔e6!

It is too early for 1 ♖g5? ♔f4 2 ♔f6 e4 3 ♖f5+ ♔g3 4 ♖e5 ♔f3, and draws; the king will choose between the d- and f-files a little later on.

1...e4 2 ♖g5!

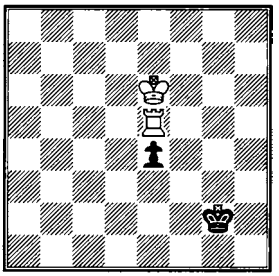
The point of the study. 2 ♖g8? ♔f3 3 ♖f8+ ♔g2 is weak, as the rook cannot go after the pawn from the 8th rank here. Now the play subdivides:

(A) 2...♔f3 3 ♖f5+!

An important *zwischenschach* to gain time.

3...♔g2 4 ♖e5!

Attacking this pawn from behind is the key to victory.



4...♔f3 5 ♔d5 e3 6 ♔d4 e2 7 ♔d3

(B) 2...♔d3 3 ♖d5+ ♔c2 4 ♖e5! ♔d3 5 ♔f5 e3 6 ♔f4 e2 7 ♔f3

A pleasing discovery, with two echo-variations. Clearly, the duals – 6 ♔d4(c4) and 6 ♔f4(g4) are academic to the king marches, and have no bearing on the point of the play.

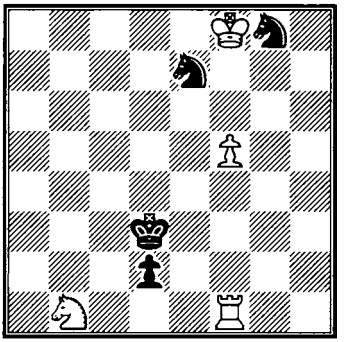
Igor Zaitsev

Grandmaster Igor Zaitsev needs no recommendation from us. Many-time participant in the USSR Championships, trainer to Tigran Petrosian and Lev Polugaevsky, for many years assistant to Anatoly Karpov; a brilliant analyst, and the author of numerous ideas in the openings. One variation of the Ruy Lopez bears his name.

Igor Arkadyevich is a passionate advocate of study composition. His enormous creative output includes this excellent composition. ***(D)***

It does not take much calculation to see that White will have to give up the knight for Black's passed pawn. This

No. 30 I. Zaitsev 1962



Win

can be done in different ways. For example, we can either solve the problem right away – 1 ♘×d2? ♔×d2 – or, conversely, get Black's king as far from the kingside as possible: 1 ♖d1 ♔c2 2 ♖×d2+ ♔×b1.

This latter line looks most natural and promising. So let's extend it: 3 ♖f2 ♔c1 – and now it becomes clear that on 4 f6 ♘×f6 5 ♖×f6, the knight on e7 wriggles safely away from the White duet via the d5-square. Note that, with Black's king on d2, the knight would perish as a result of the pin: 5...♘d5 6 ♖d6. So would 1 ♘×d2? ♔×d2 be the right track after all? No! We'll come back to this position at the end of the solution.

The correct line is **1 ♖f3+! ♔e2**.

1...♔c2 changes nothing.

2 ♘×d2 ♔×d2 3 f6 ♔e2!

After 3...♘×f6 4 ♖×f6 ♘c8 5 ♖a6, White easily hunts down the offside knight.

4 f7! ♔×f3 5 ♔g7!

Both knights stand close to the white pawn, and yet both are helpless to deal with it.

5...♘f5+ 6 ♔g6!

Of course White still has to observe elementary caution: 6 ♔h8? ♘ge7!.

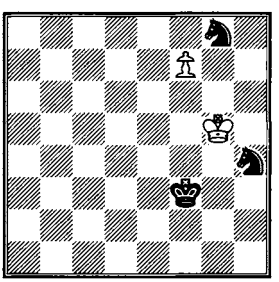
6...♘h4+

The same answer follows 6...♘ge7+.

7 ♔g5!

Black's arguments are now exhausted. The queen soon to appear on the board will easily deal with the two knights, as the 6-piece tablebase will confirm.

Observe the concluding diagram. The error in 1 ♘×d2? ♔×d2 is now obvious: after 2 f6 ♔e2! 3 f7 ♔×f1 4 ♔g7 ♘f5+ 5 ♔g6 ♘h4+ 6 ♔g5, the f3-square is

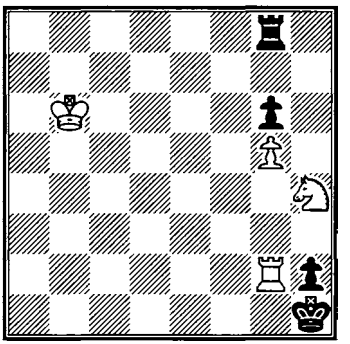


clear, and Black has the saving check 6...♘f3+! available, when White's king cannot escape the fork: 7 ♔g4(g6) ♘e5+; 7 ♔f4 ♘e7; 7 ♔f5 ♘h6+; and 7 ♔h5 ♘f6+.

Pal Benko

The winner of the 1948 Hungarian Championship eventually emigrated to the USA, acquired American citizenship, won the New World's Open Championship many times, participated in the Candidates' tournaments... But even then, a large share of his talents were dedicated to composition. Once he ceased to participate in tournaments, he gave himself completely over to study composition.

No. 31 P. Benko 1982



Win

In view of the threatened 1...♖h8, White's rook has to move somewhere along the second rank. But where? We can eliminate the b2- and f2-squares immediately, because of 1...♖b8+ and 1...♔g1 respectively, That leaves four squares – a2, c2, d2 and e2. The wide-ranging 1 ♖a2 immediately suggests itself, but that move lets slip the win. We shall explain why a little later.

1 ♖e2!! ♖b8+

White easily puts a halt to the "berserker" rook after 1...♔g1 2 ♘f3+ ♔f1 3 ♖×h2 ♖b8+ 4 ♔c5 ♖b5+ 5 ♔d4 ♖b4+ 6 ♔d5 ♖b5+ 7 ♔e4 ♖b4+ 8 ♘d4.

2 ♔c5 ♖b1

Black's other possibility of counterplay involves the check 2...♖c8+. Then 3

♔d6! ♖c1 (3...♖d8+ 4 ♔e7 ♖d1 5 ♔f7 ♖f1+ 6 ♔×g6 ♔g1 7 ♖g2+ ♔h1 8 ♔h5 ♖f8 9 ♖a2 ♔g1 10 ♖a1+ ♖f1 11 ♘f3+) 4 ♔e5 ♖f1 5 ♔e4 ♔g1 6 ♖g2+ ♔h1, and here the accurate move is 7 ♖c2! ♔g1 8 ♘f3+ ♖×f3 9 ♔×f3 h1♕+ 10 ♔g3, and wins.

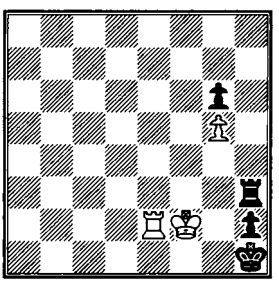
3 ♔d4!

The pawn is worth more than a knight: 3 ♔d5? ♖b5+ 4 ♔e4 ♖×g5 draws. On 3 ♘f3?, Black has a saving stalemate resource: 3...♖b2! (but not 3...♖b5+? 4 ♔d4 ♖b4+ 5 ♔e5 ♖b5+ 6 ♔e6 ♖b6+ 7 ♔f7 ♖b7+ 8 ♔×g6 ♖g7+ 9 ♔h5 ♖h7+ 10 ♔g4, and White wins.)

3...♖b4+ (3...♖g1 4 ♘f3) **4 ♔e3 ♖×h4**

On 4...♖b3+ 5 ♔f4 (5 ♔f2? ♖b2!) 5...♔g1 6 ♖g2+ ♔h1, play transposes into the 2...♖c8+ variation, 7 ♖c2! ♔g1 8 ♘f3+ ♖×f3 9 ♔×f3 h1♕+ 10 ♔g3.

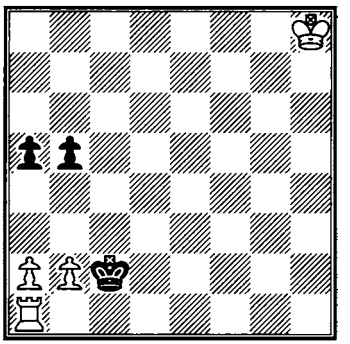
5 ♔f3 ♖h3+ 6 ♔f2



This is the right time to return to that first move. On 1 ♖a2? ♖b8+ 2 ♔c5 ♖b1 3 ♔d4 ♖b4+ 4 ♔e3 ♖×h4 5 ♔f3 ♖h3+ 6 ♔f2, the position of White's rook on a2 is what saves Black: 6...♖a3! 7 ♖e2 ♖a2! 8 ♖×a2 is stalemate.

But now the e3-square is controlled by the king, so after **6...♖e3 7 ♔×e3**, White wins easily.

No. 32 P. Benko 1999

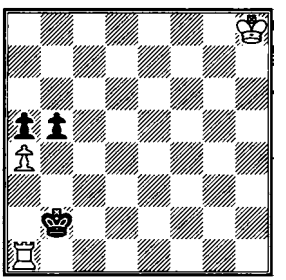


Win

White is a rook ahead, yet the path to victory is certainly not strewn with rose petals. The b-pawn is attacked, but advancing it leads only to a draw: 1 b3? ♔b2 2 ♖h1 ♔×a2 3 ♖h3 (3 ♖h5 b4!) 3...♔b2 4 ♔g7 a4, or 1 b4? ab 2 ♖h1 ♔b2 3 ♖h2+ ♔a3 4 ♔g7 b3 5 ab ♔×b3 6 ♔f6 b4 7 ♔e5 ♔c3 8 ♖h3+ ♔c4!.

1 a4! ♔×b2

The win after 1...b4 is simple: 2 ♖h1 ♔×b2 3 ♖h5 ♔a3 4 ♖×a5 b3 5 ♔g7 b2 6 ♖b5.



Now the natural 2 ab? ♔×a1 3 b6 a4 4 b7 a3 5 b8♕ a2 brings White nothing but disappointment. But it is a bit early for Black to celebrate:

2 ♖a3!!

This is not so much a move as a dessert! This is how White wins the decisive tempo.

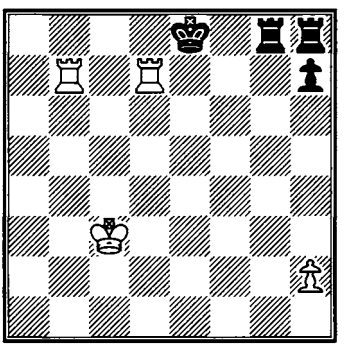
2...♔×a3

We already know about 2...b4 3 ♖h3 b3 4 ♖h5 ♔a3 5 ♖×a5 b2 6 ♖b5.

3 ab a4 4 b6 ♔b2 5 b7 a3 6 b8♕+

To an old position of M. Grünfeld (1903), he has virtuosically added one move.

No. 33 P. Benko 2000



Win

First, we see that the seventh-rank attack holds no promise: 1 ♖e7+? ♔d8!, or 1 ♖dc7 ♔d8 2 ♖f7 ♔c8! (but not 2...♔e8? 3 ♖be7+ ♔d8 4 ♖a7 ♔e8 5 ♖fb7+−) 3 ♖a7 ♔b8=.

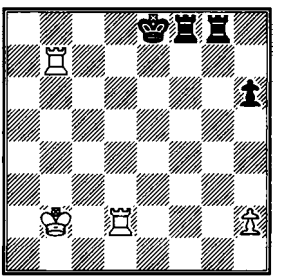
1 ♖d2!

An elegant rook retreat along the d-file! On 1 ♖d4?, the analogous solution does not work. After 1...♖f8 2 ♔c4 ♖hg8 3 ♔b4 h5 4 h4, Black has, in addition to 4...♖g4, the move 4...♖f1, when the rook gets out to White's back rank. Nor does 1 ♖d1 work out after 1...♖f8 2 ♔c2 ♖f2+ 3 ♔b1 0-0 (do not forget about the possibility of castling!).

1...♖f8 2 ♔c2!

Both sides are playing for *zugzwang* here. It works for Black after 2 ♔b2? ♖hg8 3 h3 h6! 4 h4 h5. The white king must leave the b-file, where the rook sheltered it, and expose itself to check: 5 ♔a2 ♖f6 6 ♖c2 (6 ♖b8+ ♔f7 7 ♖d7+ ♔e6) 6...♖a6+ 7 ♔b2 ♖a8, draw. Once again, going for the mate does not work, because Black can still castle: 2 ♖a2? ♖f3+ 3 ♔d4 0-0!.

2...♖hg8 3 ♔b2 h6



4 h3!

Losing a move is the most useful weapon in the battle for mutual *zugzwang*. The variation 4 h4? h5 5 ♔a2 ♖f6 was examined previously.

4...h5 5 h4 ♖h8

Black has to retreat. On 5...♖f6, the simplest win is 6 ♖c2 ♖d6 7 ♖c8+ ♖d8 8 ♖×d8+ ♔×d8 9 ♖b8+.

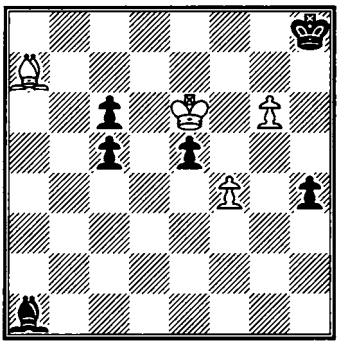
6 ♔a2 ♖hg8 7 ♖a7 ♖h8 8 ♖b2

8 ♖g2 ♖hg8 9 ♖b2 would just make the win one move longer. ***(D)***

In this sharp bishop endgame, we shall witness extraordinary events.

1 f5!

No. 34 P. Benko 2003

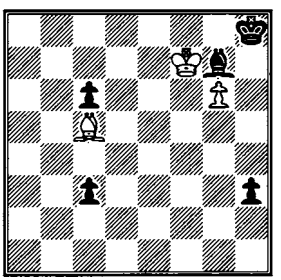


Draw

1 fe? is wrong: 1...♔g7 2 ♗×c5 h3 3 ♗g1 ♔×g6 4 ♔d6 ♔f5 5 e6 ♗f6 6 ♗h2 c5 7 ♔×c5 ♔×e6 8 ♔c4 ♗e5 9 ♗g1 ♔f5, and the black king arrives on g2.

1...e4 2 ♔f7! e3

The following variation is not without interest: 2...h3 3 ♗b8 e3 4 ♗f4! e2 5 ♗g5 e1♕ 6 f6 ♕e8+ 7 ♔×e8 ♗×f6 8 ♔f7! ♗g7 9 ♗f4 c4 10 ♗d6! c3 11 ♗f8 ♗f6 12 ♗e7 ♗e5 13 ♗d6 ♗d4 14 ♗c5 ♗g7.



15 ♗f8, and the black bishop will be pursued forever.

3 ♗×c5

The time for 3 f6? has not yet come. After 3...♗×f6 4 ♗×c5, the h-pawn advances: 4...h3!.

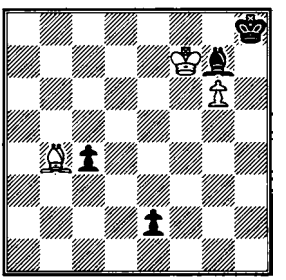
3...e2!

Now 3...h3? would come too late, in view of 4 ♗e7, when Black gets mated.

4 f6! ♗×f6 5 ♗e7 ♗e5 6 ♗×h4 c5 7 ♗g3!

Black's bishop must be driven from e5. The hasty 7 ♗e1? c4 8 ♗b4 c3 9 ♗d6 would lose, in view of 9...e1♕.

7...♗g7 8 ♗e1 c4 9 ♗b4



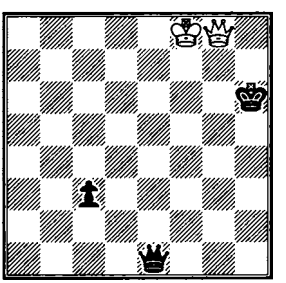
9...c3

The first stalemate occurs after 9...♗e5 10 ♗f8 e1♕ 11 ♗g7+! ♗×g7.

10 ♗f8 ♗×f8

Afrer 10...♗e5 11 g7+ ♗×g7, White's bishop can stop the pawn: 12 ♗×g7+ ♔h7 13 ♗×c3.

11 ♔×f8 e1♕ 12 g7+ ♔h7 13 g8♕+ ♔h6



With a pawn at c3, the queen endgame is usually a loss, but here, White has a defense.

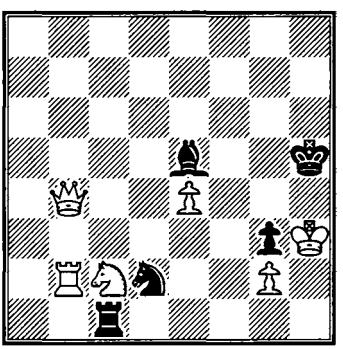
14 ♕e6+! ♕×e6

The second stalemate.

The Polgar Sisters

Former women's world champion Zsuzsa Polgar, the oldest of the sisters, also long ago relocated from Hungary to America, opened her own chess school in a New York suburb, and became director of an institute for chess education at Texas Tech University. As a result, Susan (as she is known in the USA) has practically ceased tournament play; but she has not forgotten her love of studies, instilled in her by her father.

No. 35 Zsu. Polgar 1988



Draw

White's material advantage is close to being virtual – it will cost a great deal to get out of the looming threat of mate. Let's trying giving back the lesser amount first: 1 ♖b1? ♖×b1 2 ♕×b1 ♘×b1 3 ♘e3 ♘c3! 4 ♘c4 ♗f4!, and Black retains the pawn with an easy win.

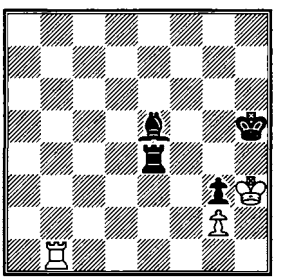
1 ♘e1!

The knight is not a help to White, but a burden!

1...♖×e1 2 ♖b1! ♘×e4

Black seeks a way to continue the fight, since 2...♖×b1 3 ♕×b1 ♘×b1 is stalemate.

3 ♕×e4! ♖×e4



The position has simplified considerably, but stalemating ideas continue to hang in the air.

4 ♖b4 ♗d4 5 ♖b5+!

White cannot slacken the reins for an instant. For example, after 5 ♖b3 ♗f2! 6 ♖b5+ ♔g6 7 ♖g5+ ♔f6 8 ♖f5+ ♔e6 9 ♖f6+ ♔d5 10 ♖d6+ ♔c5 11 ♖c6+ ♔b5, the "berserker" rook does not work.

5...♗e5 6 ♖b4 ♖e1 7 ♖b1 ♖e4

Black must repeat the position. 7...♖×b1 is stalemate, and if 7...♖e2, 8 ♖e1!.

8 ♖b4 ♗d4 9 ♖b5+ A positional draw.

Judit Polgar, the strongest woman player of our time, made solving studies

a part of her tournament preparation from her earliest years. When she was only 12, the youngest of the sisters dealt mercilessly with several works by a classic study composer, Alexei Troitsky.

"Papa was to blame for that," says Judit, "for giving us all those interesting works by Troitsky, Kubbel, Kasparyan, and other lesser-known authors to solve. Naturally, when you have a lot to solve, then you also refute a lot of them."

1997 marked Judit's successful debut as a composer. The impetus for composing her first study was her game against Alexei Shirov from the Dortmund tournament of 1996. In that game, a curious variation ending in mutual *zugzwang* remained hidden in the notes; this was later refined into a study.

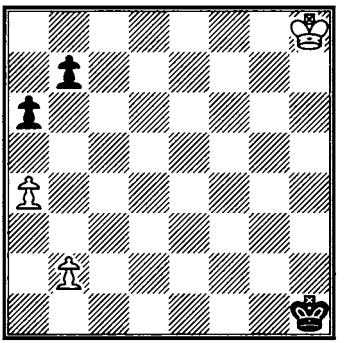
"I believe I have managed to make something that will stand," continued Judit. "I love studies which uncover the beauty of chess. But unfortunately, in today's chess world, which is so focused on results, there are few who share my enthusiasm. I can only hope that someday, this situation will change for the better." ***(D)***

The introduction is as natural as it is obvious – both kings march over to the queen's wing through the center of the board.

1 ♔g7 ♔g2 2 ♔f6 ♔f3 3 ♔e5 ♔e3

The Black king falls not one step behind its opposite number. The attempt to stabilize the pawn structure

No. 36 J. Polgar 1997



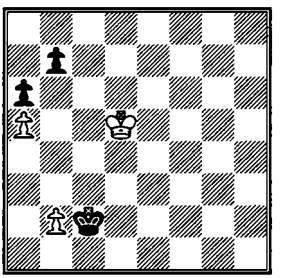
Win

would put Black in *zugzwang*: 3...a5 4 ♔d6 ♔e4 5 ♔c7 ♔d4 6 ♔×b7 ♔c5 7 ♔a6 ♔b4 8 b3.

4 a5!

Here, the automatic 4 ♔d5? would have let slip the win in view of 4...a5!.

4...♔d3 5 ♔d5 ♔c2



The critical position. One might already guess that the rest will be a question of mutual *zugzwang*. And the basic principle of this kind of struggle is to slow down, to give the opponent the move. It is precisely this goal that is served by the following modest king move.

6 ♔d6!

After the obvious 6 ♔c5?, it is just a draw: 6...♔b3! 7 ♔b6 ♔a4! 8 b3+ ♔b4.

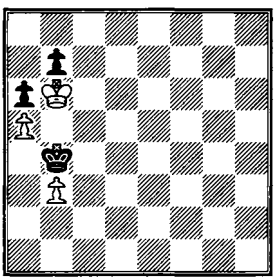
6...♔b3 7 ♔c5!

Another important factor: White makes effective use of one of the most widely-used techniques in pawn endings: the "shoulder-block." One would think it would be simpler to attack the b7-pawn at once by 7 ♔c7. But then, the black king would take the initiative by curtseying: 7...♔b4! 8 ♔b6 ♔a4 9 b3+ ♔b4, with a mutual *zugzwang* that favors Black.

7...♔a4

Unfortunately, it cannot go to b4 now.

8 ♔b6 ♔b4 9 b3!



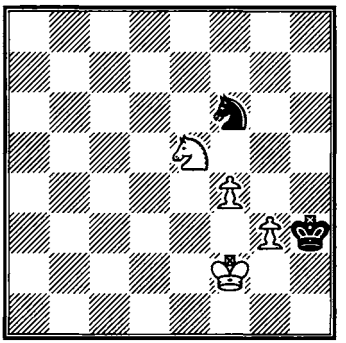
Black loses because of being on move.

Perhaps the ending of the following game will inspire Judit to create her next study. ***(D)***

In Polgar's words, two moves before, she had been ready to resign. But here, instead of the winning 61 f5! ♘e4+ 62 ♔f3(e3) ♘×g3 63 f6, when the pawn queens, Grischuk made what turned out to be the decisive error:

61 ♔f3? ♘g4!

A. Grischuk – J. Polgar
Biel 2007



White to move

"After making this spectacular move, I still thought my position was lost. But Alexander's long think made me look deeper into what was happening on the board. My calculations showed that we had constructed a drawing study!" (Polgar)

62 ♘d3 ♘h2+ 63 ♔e4 ♘g4 64 ♘e5 ♘f6+ 65 ♔f3 ♘g4

White cannot break the bonds of this positional draw. He makes one last try, setting Black a transparent trap.

66 ♘c4 ♘h2+ 67 ♔e4 ♘f1

Of course not 67...♘g4? 68 ♘e3!, when White wins.

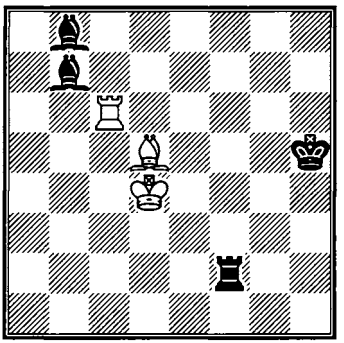
68 ♘e3 ♘×g3+, and four moves later, a draw was agreed.

Jan Timman

The Dutch grandmaster is famously passionate about study composition. A collection of 40 of his studies was published in Germany in the mid-1990s. Every year, Timman's collection expands – clearly, he is following in the

footsteps of Smyslov and Benko, which allows us to hope that Timman the chessplayer is bound to continue his career as Timman the composer.

No. 37 J. Timman 1984

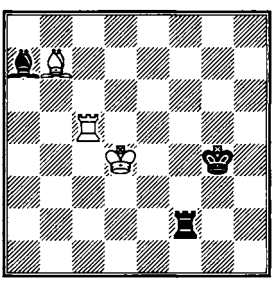


Draw

The rook is attacked. If it retreats, Black plays 1...♖d2+. So White must submit to a pin.

1 ♖c5 ♗a7 2 ♗×b7+ ♔g4!

Black cannot win the rook at once: 2...♖f5 3 ♗d5 ♖f4+ 4 ♔e5 – counter-attack. And on 2...♔h4, White can consolidate by 3.♗e4!.



3 ♗a6!!

On the a6-f1 diagonal, White's bishop can successfully ward off the assaults of the black rook: 3...♖b2 4 ♗c4!, or 3...♖a2 4 ♗b5!. But on the g8-a2 diagonal, it would be useless: 3 ♗c8+? ♔g3 4 ♗e6 ♖h2, and Black wins. Now the play divides:

(A) 3...♖f4+ 4 ♔d5 ♖f5+ 5 ♔c6! ♖×c5+ (5...♗×c5 6 ♗c8) **6 ♔b7**

Black loses the bishop – draw.

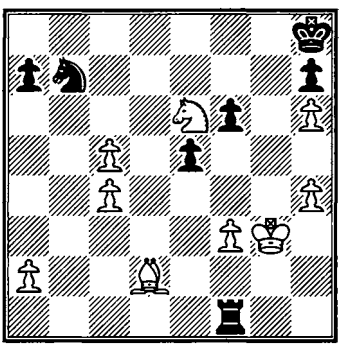
(B) 3...♔g3 4 ♗d3! ♖f3! 5 ♗g6!

Only here is the bishop out of danger. 5 ♗h7? would lose to 5...♖f7 6 ♗e4 ♖c7.

5...♖f6 6 ♔e5

Black's rook comes under the attack of the white king – draw.

No. 38 J. Timman 1999



Win

The doubled white pawns on the c-file and the black knight on b7 reminds one of the famous ending Ortueta-Sanz, Madrid 1934.

1 ♗b4

Before advancing the pawn, White takes "x-ray" control of the d6-square. 1 c6? ♘d6.

1...♖b1

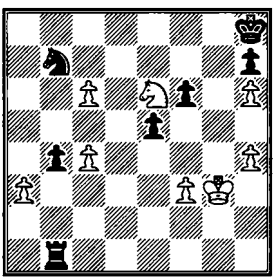
Best. Attempting to bring the rook into play on any other file does not work:

1...♖g1+ 2 ♔f2 ♖g8 (2...♖c1 3 c6 ♖×c4 4 c7 ♖c6 5 f4! e4 6 f5; 2...♖b1 3 a3; 2...♖d1 3 c6 ♘d6 4 ♔e2) 3 c6 ♘d8 4 ♗e7! ♘×e6 5 ♗×f6+; 1...♖c1 2 c6 ♖×c4 3 c7 ♖c6 4 ♔g4 ♔g8 5 ♔f5 a5 6 ♗a3 a4 7 ♗b4; and 1...♖d1 2 c6 ♘d6 3 ♗×d6 ♖×d6 4 c7 ♖c6 5 ♔g4 ♖×c4+ 6 ♔f5.

2 a3!

It is too soon to "play like Sanz": 2 c6? ♖×b4 3 c5!? ♘×c5 4 c7 (4 ♘×c5 ♖c4), and Black's saving line is 4...♘e4+! 5 fe ♖c4=.

2...a5 3 c6 ab



4 c5! ba

Now 4...♘×c5 does not work: 5 c7 (5 ♘×c5? ba 6 c7 ♖g1+) 5...♘e4+ (5...♖g1+ 6 ♔f2 ♖g8 7 ♘d8) 6 fe ♖c1 7 ab, and the b-pawn runs to the aid of the pawn at c7. The continuation 4...♖g1+ 5 ♔h3 ♖g8 6 cb ba 7 ♘d8! ♖×d8 8 c6 a2 9 c7 leads back into the main line of the solution.

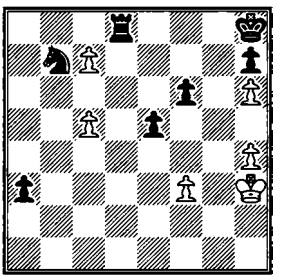
5 c7 ♖g1+ 6 ♔h3!

The treachery in Black's check is demonstrated by the variation 6 ♔f2? ♖g8 7 ♘d8 ♖×d8 8 c6 ♖d2+! 9 ♔e3 ♘d6.

6...♖g8

Mate is not far off after 6...a2 7 ♘g5!.

7 ♘d8! ♖×d8



8 c6!

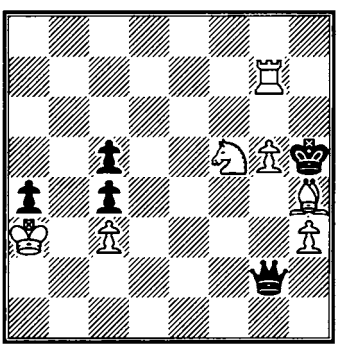
Yet another blow *à la* Ortueta-Sanz!

8...♖g8 9 cb a2 10 b8♕! a1♕ 11 ♕×g8+ ♔×g8 12 c8♕+ ♔f7 13 ♕d7+!

Here is why White queened the b-pawn first: now Black's king cannot reach the saving square e6.

13...♔g6 14 ♕g7+ ♔h5 15 ♕f7+ ♔×h6 16 ♕×f6+ ♔h5 17 ♕g5#

No. 39 J. Timman 2004



Win

This study was part of the World Team Championship, and made it into the Final, where it took 11th place.

1 ♖h7+? ♔g6 is premature, as White's bishop will prevent the knight from forcing Black's queen into a fork. First, White needs to get rid of the "fifth column" in its own ranks.

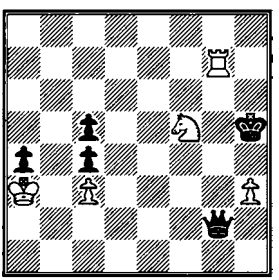
1 ♘g3+! ♔×h4 2 ♘f5+ ♔h5

Now we have reached the same position, but without the interfering extra piece (which was the theme of the championship).

3 ♖h7+ ♔×g5!

Now that 3...♔g6 loses, because of 4 ♘h4+, Black tries a last chance – playing for stalemate.

4 ♖g7+ ♔h5



5 h4!

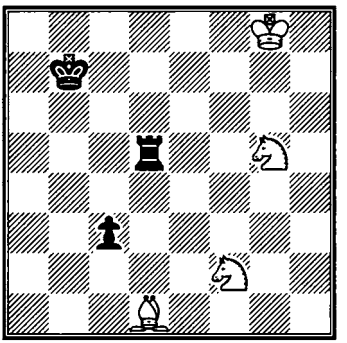
Avoiding the stalemate trap 5 ♖×g2?, White gets the win.

5...♕g1 (5...♕c2 6 ♖g5#) **6 ♖g5+** (6 ♖×g1?) **6...♕×g5 7 hg**

Daniel Stellwagen

This 21-year-old compatriot of Timman's has barely begun his great journey, but he has already gained notice in the composing field. His co-author is the noted Dutch/Israeli international master of both chess and composition, Yochanan Afek.

No. 40 D. Stellwagen, Y. Afek 2002



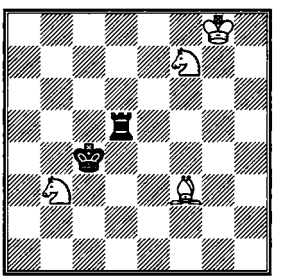
Win

Two knights and a bishop against a rook is known not to be a win. White's only chance is to exploit the pin.

1 ♗f3 ♔c6 2 ♘d3 c2

2...♔d6 loses trivially to 3 ♘f7+ ♔e6 4 ♘f4+ ♔f5 5 ♗×d5! (5 ♘×d5? c2 6 ♘d6+ ♔g5 7 ♘e4+ ♔h4) 5...♔×f4 6 ♗b3 ♔e3 7 ♘e5.

3 ♘f7! c1♕ 4 ♘×c1 ♔c5 4 ♘b3+! ♔c4



How does White strengthen the position? Look closer at the diagram. What if it were Black to move here? There are no reasonable continuations for Black, which means White only needs to avoid disturbing the *zugzwang*.

6 ♔h8!!

White must, in its turn, avoid pins, such as 6 ♔f8? ♖f5; or 6 ♔g7? ♖d7.

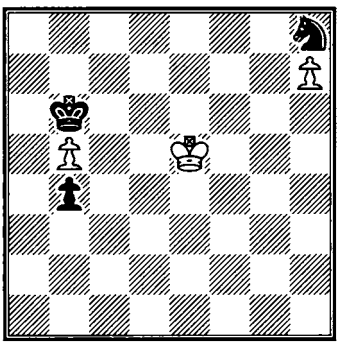
But now any rook move is punished by a fork:

6...♖d7(d3) 7 ♘e5+; 6...♖b5(f5) 7 ♘d6+

John Nunn

The 1980 English champion became the official World Champion in 2007. So what about Vishy Anand? No, no one is after the title the Indian player won in Mexico. Nunn is the best solver of problems and studies on the planet. And of course, the English grandmaster has his own studies as well.

No. 41 J. Nunn 1986



Draw

The natural 1 ♔f6? b3 2 ♔g7 b2 3 ♔×h8 b1♕ loses for White – the white b-pawn is the cause: 4 ♔g7 ♕g1+ 5 ♔f7 ♕d4 6 ♔g8 ♕g4+ 7 ♔f7 ♕f5+ 8 ♔g7 ♕g5+ 9 ♔f7 ♕h6 10 ♔g8 ♕g6+ 11 ♔h8 ♔c5 12 b6 ♕f7 13 b7 ♕f8#.

1 ♔d4!

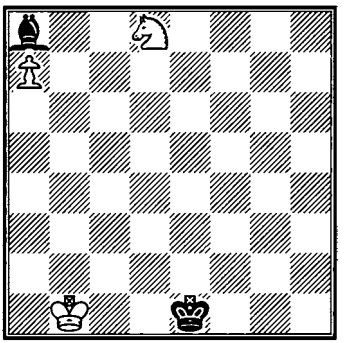
This wonderful gift of a pawn plus two tempi is not going to make Black happy.

1...♔×b5 2 ♔e5 b3 3 ♔f6 b2 4 ♔g7 b1♕ 5 ♔×h8

And now, the draw is obvious.

At the start of the 1990s, Nunn became one of the first to employ computer tablebases to construct studies. He is responsible for a number of very interesting 5-piece positions.

No. 42 J. Nunn 1995



Win

Despite the presence on the board of both a knight and a bishop, the play proceeds as if it were a pawn endgame.

1 ♔c1!

Taking the close opposition. 1 ♔c2? is bad: 1...♔e2! 2 ♔c3 ♔e3! 3 ♔c4 ♔e4! 4 ♔c5 (4 ♘f7 ♔f5! 5 ♔c5 ♔e6) 4...♔e5! 5 ♔b6 (5 ♘c6+ ♔e6!) 5...♔d6! is a draw.

1...♔f2!

Trying to provoke White into an error. Black's bishop is ideally placed at a8, as the following variations show: 1...♗h1 2 ♔c2 ♔e2 3 ♔c3 ♔e3 4 ♔c4 ♔f4 5 ♔c5 ♗a8 (5...♔e5 6 ♘c6+) 6 ♔d6; 1...♗d5 2 ♔c2 ♔e2 3 ♔c3 ♔e3 4 ♔b4 ♔d4 5 ♔b5! ♗a8 6 ♔b6! and wins.

2 ♔b2!

Taking the distant opposition. After 2 ♔d2? ♔f3! 3 ♔d3 ♔f4! 4 ♔d4 ♔f5! 5 ♔c5 ♔e5!, it is a draw again.

2...♔e2 3 ♔c2! ♔f3

Black also loses after 3...♔f2 4 ♔b3 ♔f3 5 ♔b4! ♔f4 6 ♔b5! ♔f5 7 ♔b6!.

4 ♔b3!

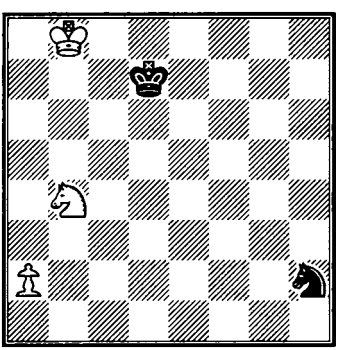
It is like dancing, as the two kings move farther and farther up the board.

4...♔e3 5 ♔c3! ♔f4 6 ♔b4! ♔e4 7 ♔c4! ♔f5 8 ♔b5! ♔e5 9 ♔c5! ♔f6

The e6-square is controlled by the knight, so White wins this dance marathon.

10 ♔d6

No. 43 J. Nunn 1995



Win

1 a3!!

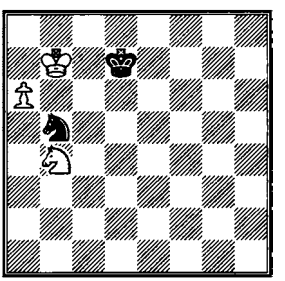
A surrealistic move! But there is a wholly logical basis to it. After 1 a4? ♘f3! 2 a5 ♘d4! 3 a6 ♘b5!, we have a mutual *zugzwang*. 4 ♔b7 (4 ♘c2 ♔c6! 5 ♘d4+ ♔b6!) 4...♘d6+! 5 ♔b6 ♘c8+!, and White cannot improve the position. And 1 ♔b7? does not work either: 1...♘f3 2 a4 ♘d4 3 a5 ♘b3 4 a6 ♘c5+, forking the pawn.

1...♘f3

Black is not saved by 1...♔d8 2 a4! ♘f3 3 a5! ♘e5, in view of 4 ♔b7! (4 a6? ♘d7+!) 4...♘d7 5 ♘d3, nor by 1...♔d6 2 a4! ♘f3 3 a5 ♘d4 4 a6.

2 a4 ♘d4 3 a5 ♘b5 4 a6 ♔d6 5 ♔b7! ♔d7

On 5...♔c5, White wins by 6 ♘d3+! ♔c4 7 ♘f4 ♘d6+ 8 ♔c6 ♘c8 9 ♘d5 ♘a7+ 10 ♔b7.



6 ♘c2!

The decisive knight maneuver.

6...♘d6+ 7 ♔b8 ♘b5 8 ♘a3! ♘d4 9 ♘c4 ♘c6+ 10 ♔b7!

And we have reached a known theoretical position by André Cheron (1952).

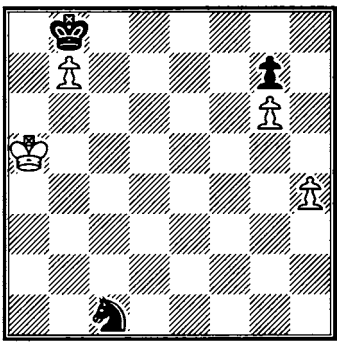
10...♘d8+ 11 ♔b6, and wins.

Jonathan Speelman

This English grandmaster had his only study published in the specialty

magazine *EG*, which is devoted entirely to study composition.

No. 44 J. Speelman 1978

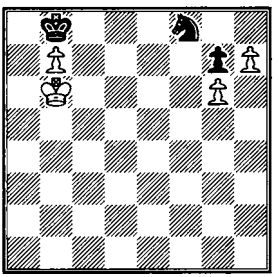


Win

1 h5 ♘b3+

Black pins drawing hopes on stalemating counterplay. The variation 1...♘d3 is not without interest, either: 2 h6 ♘e5 3 hg ♘c6+ 4 ♔a6(b5) (4 ♔b6? ♘e7 would be a mistake, as White would be in *zugzwang*) 4...♘e7 5 ♔b6 ♘g8 6 ♔c6 ♘f6 7 ♔c5! (7 ♔d6? ♘e8+) 7...♔×b7 8 ♔d4 ♔c6 9 ♔e5 ♘g8 10 ♔e6 ♔c7 11 ♔f7, and wins.

2 ♔b6 ♘d4 3 h6 ♘e6 4 h7 ♘f8



5 h8♗!

Otherwise – 5 h8♕(♖)?; or 5 h8♘? ♘×g6 6 ♘×g6 – stalemate.

5...♘e6

White's task is simpler after 5...♘×g6 6 ♗×g7 or 5...♘d7+ 6 ♔a6 ♘c5+ 7 ♔b5 ♘×b7 (7...♘d7 8 ♗×g7) 8 ♔c6 ♔c8 9 ♗×g7 ♘a5+ 10 ♔b5 ♘b7 (10...♘b3 11 ♗c3) 11 ♗f8.

6 ♔c6!

6 ♔a6? is a mistake: 6...♘c7+ 7 ♔a5 (7 ♔b6 ♘d5+=) 7...♔×b7 8 ♗×g7 ♔c6 with a draw.

6...♘d4+ (6...♘d8+ 7 ♔d7) **7 ♔c5!**

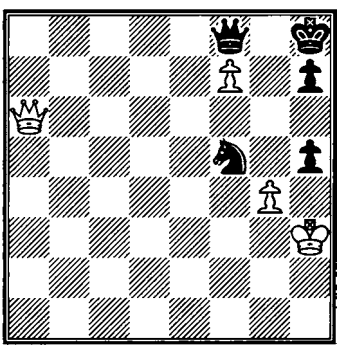
Accuracy to the end! 7 ♔d5? ♘f5!=.

7...♘e6+ 8 ♔b6 ♘f4 9 ♗×g7 ♘d5+ 10 ♔c5 and wins.

Valery Salov

This well-known Russian player and sometime candidate, having taken up permanent residence in sunny Spain, sent this study greeting.

No. 45 V. Salov 1998



Win

1 ♕a1+!

A pretty, wide-ranging introduction. After 1 ♕f6+? ♘g7 2 ♔h4 hg, the mutual *zugzwang* is in Black's favor.

1...♘g7 2 ♕f6!

Now Black must commit first.

2...♕a3+

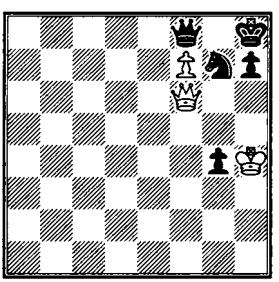
Play ends quickly after 2...hg+ 3 ♔h4.

3 ♔h4 ♕f8 4 ♔g5! hg

Black tries to strip away the white king's pawn cover. After 4...♕c5+ 5 ♔h6 ♕e3+ (5...♕f8 6 gh) 6 g5, the checks run out.

5 ♔h4!

Once again, we have a position of mutual *zugzwang*, but with Black to move.



5...g3 6 ♔h3!

Using the g-pawn for cover, just like a shield.

6...♕c8+ (6...g2 7 ♔×g2) **7 ♔×g3 ♕c7+**

Or 7...♕b8+ 8 ♔g2! ♕a8+ 9 ♔g1!.

8 ♔f3!

And now the king maneuvers so as not to grant Black's queen the chance to put in a check along the rank.

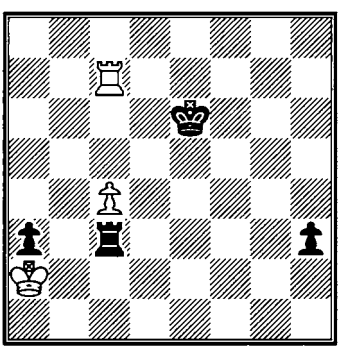
8...♕b7+ 9 ♔f2! ♕a7+ 10 ♔f1!

The king's elegant maneuver forced the queen to abandon the 8th rank, and lose control of the f8-quare. Victory!

Alexei Shirov

The Spanish chess federation is also now represented by a Rigan grandmaster and one who has been part of the top ten chessplayers in the world. In 1998, Shirov decided not to fall behind his former and current countryman, and also gave us a study to enjoy.

No. 46 A. Shirov 1998



Draw

In this study, White finds a curious way of winning an extra tempo.

1 ♖c5!

The chief aim of this move is not at all to cut Black's king off on the fifth rank. Let's look at another natural continuation:

1 ♖h7? ♔f5 2 c5 ♔g4 3 ♖g7+ ♔f3 4 ♖h7 ♔g2 5 ♖g7+ ♔h1 6 ♖c7.

The defense 6 ♖g5 is refuted by the accurate 6...♔h2! (6...h2? lets the win slip: 7 ♔b1 ♖c4 8 ♔a2 ♖c1 9 ♔×a3 ♖g1 10 ♖h5 ♖g4 11 c6 ♖c4 12 ♖h6 ♔g2 13 ♖g6+ ♔h3 14 ♖h6+) 7 ♔b1 (7 ♖h5 ♔g3 8 ♖g5+ ♔h4) 7...♖g3 8 ♖d5 ♔g1 9 ♖d1+ ♔f2 10 c6 h2 11 ♖d2+ ♔g1 12 c7 ♖c3 13 ♖d1+ ♔g2 14 ♖d2+ ♔g3.

6...h2 7 c6 ♖c1! 8 ♔×a3 (White has no time to push the pawn: 8 ♖c8 ♔g2 9 ♖g8+ ♔f3, etc.) 8...♔g2 9 ♖g7+ ♔f3 10 ♖h7 h1♕ 11 ♖×h1 ♖×h1 12 ♔b4 ♖c1 13 ♔b5 ♔e4 14 ♔b6 ♔d5 15 c7 ♔d6, and Black wins.

1...♔f6 2 ♖h5 ♔g6 3 ♖h8 ♔f5

By comparison with the 1 ♖h7? variation, White's rook is now on h8.

4 c5 ♔g4 5 ♖g8+ ♔f3 6 ♖f8+(h8) ♔g2 7 ♖g8+ ♔h1

With White's king on a2, the exchange of rooks would result in a drawn pawn endgame: 7...♖g3 8 ♖×g3+ ♔×g3 9 c6.

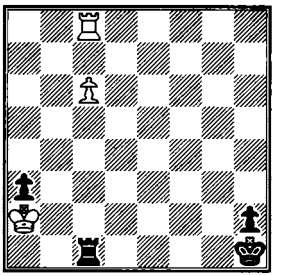
8 ♖c8!

If 8 ♖g5? ♔h2 9 ♔b1, now 9...♖g3! wins: 10 ♖×g3 ♔×g3 11 c6 h2 12 c7 h1♕+ (notice the check!)

8...h2 9 c6 ♖c1 (9...♖g3 10 ♖d8) ***(D)***

10 c7!

This is the outcome of that farseeing rook maneuver, beginning with 1 ♖c5!



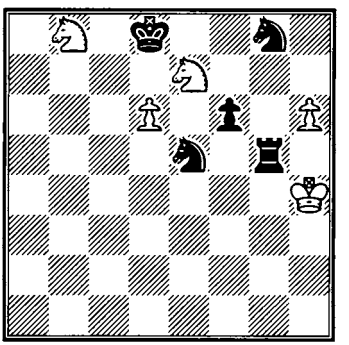
– the pawn has managed to get to c7, and now the draw is obvious.

10...♔g2 11 ♖g8+

Vladimir Akopian

With the death of the great Genrikh Kasparyan, Armenia thirsted for study-composition victories. Perhaps its hopes will be realized in Akopian, who has already won, with his teammates, Olympic gold in 2006 and 2008?

No. 47 V. Akopian 2001



Draw

All White's hopes are pinned to the h-pawn, but it is too early to give it the high sign: 1 h7? ♘f3+ 2 ♔h3 ♖h5+ 3 ♔g4 ♖h4+ 4 ♔×f3 ♘×e7.

1 ♘bc6+ ♔e8!

The knight on e5 has enough to do on the king's wing: 1...♘×c6? 2 h7.

2 d7+!

And White, in turn, does not have enough time to execute the trade: 2 ♘×e5? ♘×h6; therefore, Black's king is drawn into check.

2...♔×d7 3 ♘×e5+

Take my knights – any knight!

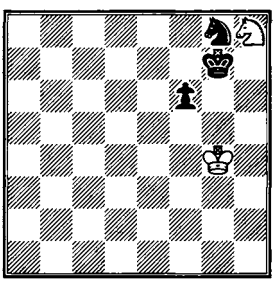
3...♔×e7

There is a choice, but the outcome would be the same, either way: 3...♖×e5 4 ♘×g8 ♔e6 5 h7 ♖e1 6 ♘×f6 – draw.

4 h7 ♖g1 5 h8♕ ♖h1+

The clever 5...♔e6!? runs into a worthy response, 6 ♘f7!.

6 ♔g4 ♖×h8 7 ♘g6+ ♔f7 8 ♘×h8+ ♔g7



The knight perishes in the corner, but its falling banner is seized by the white king.

9 ♔f5! ♔×h8

After 9...♘h6+ 10 ♔e6 f5 11 ♘f7, the knight gets back in the game.

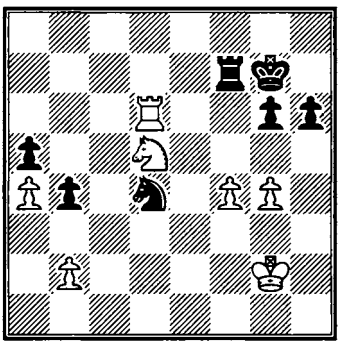
10 ♔g6!

Zugzwang. Black must give up the last pawn, and it is a draw.

Alexander Morozevich

This two-time Russian Champion, and one of the world's strongest grandmasters, has just one study to his credit – for now – composed at the age of 16.

No. 48 A. Morozevich 1994



Win

Right from the starting position we can see that this study came from an actual game.

1 f5!

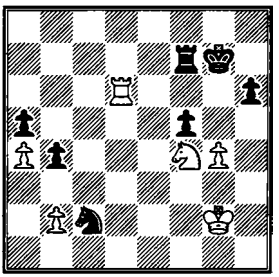
White's pieces are ideally placed in the center, so it is obvious that everything is in place for an attack on the king. The small-minded transposition into a rook or pawn endgame would lead to a draw: 1 ♖a6 ♘e2 2 ♖×a5 ♘×f4+ 3 ♘×f4 ♖×f4 4 ♔g3 ♖d4, or 1 ♔g3 ♘e2+ 2 ♔f3 ♘×f4 3 ♘×f4 g5 4 ♖d4 ♖×f4+ 5 ♖×f4 gf 6 ♔×f4 ♔f6 7 b3! (here, White might even lose: 7 ♔e4? ♔g5 8 ♔f3 ♔h4 9 b3 ♔h3! 10 ♔f4 ♔g2)

1...gf

White threatened 2 ♖×g6+ ♔h7 3 ♘f6+.

2 ♘f4 ♘c2

Morozevich only examines this move. But Black also has the interesting possibility 2...♘b3!?. It seems White must reply 3 g5 hg 4 ♘e6+ ♔f6! 5 ♘d8+ ♔e7 6 ♘×f7 ♔×f7, when at first glance, White's winning chances seem no better than Black's chances to draw. The knight occupies a very strong position at b3, defending the a5-pawn and controlling the c5-square.



3 g5!

It is instructive to see how White sacrifices one pawn after another to clear the squares needed for the attack. 3 ♘h5+? ♔f8 or 3 ♘e6+? ♔h7 would be overhasty.

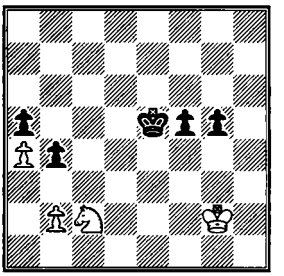
3...hg 4 ♘e6+ ♔g6

Otherwise, Black has to give up the exchange: 4...♔g8(h8) 5 ♖d8+ ♔h7 6 ♘×g5+; 4...♔h6(f6) 5 ♘d8+.

5 ♘d4+ ♖f6! 6 ♖×f6+ ♔×f6 7 ♘×c2 ♔e5 *(D*

)8 ♘a1!

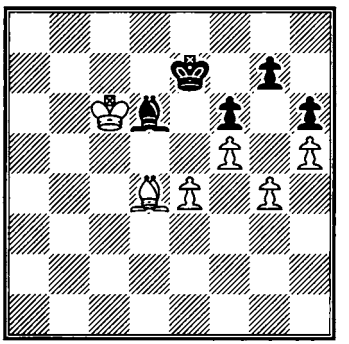
A pretty final setup! The knight has time to capture the pawn at a5, so White wins.



Duets

Alexander Belyavsky and Adrian Mikhalchishin grew up together and attended the famous Lvov Chess School, under the tutelage of Viktor Kart. Now both of them play for Slovenia. It is no surprise, then, that the two friends have also composed studies together.

No. 49 A. Belyavsky, A. Mikhalchishin 1992



Win

1 g5!

Going into the pawn endgame will not win for White: 1 ♗c5? ♗×c5 2 ♔×c5 ♔d7 3 ♔d5 ♔e7 4 ♔c6 ♔e8 5 ♔d6 ♔d8 6 ♔e6 ♔e8.

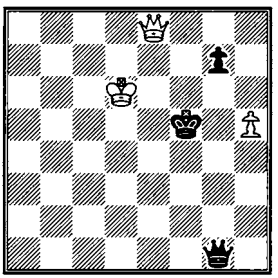
1...hg

1...fg loses at once to 2 ♗×g7 g4 3 e5.

2 ♗×f6+! ♔×f6

If Black accepts the bishop sacrifice, the end comes quickly: 2...gf 3 h6 ♔f7 4 ♔×d6 g4 5 e5 g3 6 e6+.

3 ♔×d6 g4 4 e5+ ♔×f5 (4...♔f7 5 e6+ ♔e8 6 f6 gf 7 h6) **5 e6 g3 6 e7 g2 7 e8♕ g1♕**



8 ♕e5+!

The other attack does not work, 8 ♕f7+? ♔e4 9 ♕d5+ ♔f4!=.

8...♔g4 9 ♕×g7+ and White wins.

Curiously, when the authors showed this study to international master Viktor Zhelyandinov, he said, "Chess is not checkers – you're not forced to capture!" – and suggested **1...♗f4!** for Black. In that case, the win is achieved in a no less interesting way.

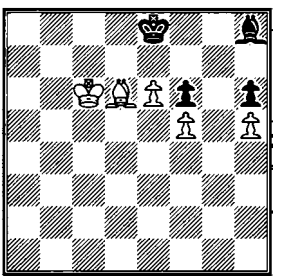
2 gf+ gf 3 ♔d5 ♔f7 4 ♔c4! ♗d6

Black has to leave the c1-h6 diagonal. After 4...♗c1 5 ♔d3 ♔g7 6 ♗c5 ♗f4 7 ♗e3! ♗e5 8 ♔c4, the white king marches unstoppably to e6, the bishop moves to d6, and then the break e4-e5 decides.

5 ♗e3 ♗f8 6 ♔d5 ♗g7 7 ♗c5 ♗h8 8 ♗a3 ♗g7 9 ♗d6 ♗h8 10 e5 ♗g7

A classic pawn ending arises after 10...fe 11 ♗×e5 ♗×e5 12 ♔×e5 ♔e7 13 f6+, and White wins by triangulating with the king.

11 e6+ ♔e8 12 ♔c6 ♗h8



Black's pieces have fallen back to their final line, but the defense cannot be broken down by positional means alone. However, there is a pretty shot which leads to the goal.

13 ♗f8! ♔×f8 14 ♔d7

Boris Gelfand and Emil Sutovsky also lived in the USSR at one time – the former in Minsk, the latter in Baku. This study, however, was composed by them as Israeli citizens. ***(D)***

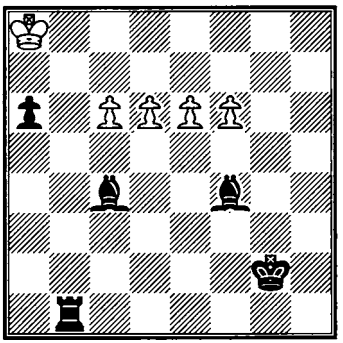
1 e7!

The pawns are easily neutralized after 1 d7? ♖b8+ 2 ♔a7 ♗×e6.

1...♗f7 2 d7 ♖b8+

Inaccurate play could even lose for Black: 2...♗d5? 3 e8♕ (beauty does not always save the world: 3 d8♘? ♖e1 4 ♔a7 ♗×c6 5 ♘×c6 ♗g5 6 f7 ♗×e7 7 ♘×e7 ♖×e7+) 3...♗×c6+ 4 ♔a7 ♖b7+ 5 ♔×a6 ♖×d7 6 f7+–.

No. 50 B. Gelfand, E. Sutovsky
2005



Draw

3 ♔a7 ♗c7 4 ♔×a6!

It is still too early to promote, 4 d8♕? ♖×d8 5 ed♕ ♗×d8 6 ♔×a6 ♗d5!. The king needs to be activated first.

4...♗b6

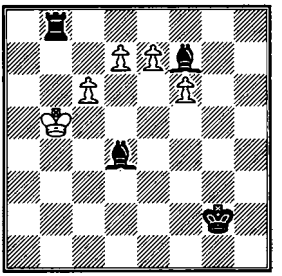
Meanwhile, Black cannot get the king over to the field of battle. 4...♔f3 5 ♔a7! ♔e4 6 d8♕ ♖×d8 7 ed♕ ♗×d8 8 ♔b8 ♗×f6 9 c7 ♗e5 10 ♔b7 ♗d5+ 11 ♔b6 ♗e6 12 ♔b7 is a draw.

5 ♔b5 ♗d4+

The bishop intends to take part in the attack; it would have been excluded had it remained on the eighth rank. 5...♗d8+ 6 ♔a6! ♗c7 7 ♔a7! (7 d8♕? ♗×d8!) 7...♔f3 8 d8♕ ♖×d8 9 ed♕ ♗×d8 10 ♔b8(b7). ***(D)***

6 ♔a5!

Of course, there would be no point in wandering into the mating net: 6 ♔a6? ♗c4+ 7 ♔a5 ♗c3+ 8 ♔a4 ♖a8# – but what is wrong with 6 ♔a4? The problem is that Black successfully eliminates both of White's new-minted

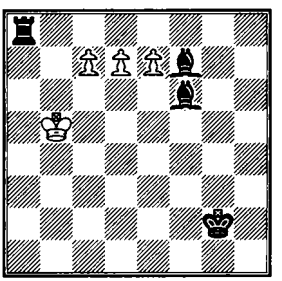


queens after 6...♗c3! 7 d8♕ ♖b4+ 8 ♔a3 (8 ♔a5 ♗c4!) 8...♖b1 9 ♔a4 ♗c4! 10 ♕g8+ (10 ♕d6 ♖b5!) 10...♗×g8 11 e8♕ ♗b3+! 12 ♔a3 ♗b4+! 13 ♔×b4 ♗f7+.

6...♗b6+ (6...♗c3+ 7 ♔a6) **7 ♔b5! ♗d4+ 8 ♔a5! ♖a8+ 9 ♔b5**

Avoiding a simple trap, 9 ♔b4? ♗×f6 10 c7 ♗×e7+.

9...♗×f6 10 c7!



You say this could never happen in a real game? – that pawns never go on to queen in such a pack?

But three years later... Wait, no, you've already read that.

With this "round" number, 50 studies, I now close this chapter, although there are equally interesting compositions by other practititioners, waiting their turn – mainly by international or national masters. But that is another story – or maybe another book...

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