

GAMBIT



# ENDGAME CHALLENGE

Test Your Skills with 250 Brilliant and Instructive Chess Endgame Studies

John Nunn

# **Endgame Challenge**

**John Nunn**

**GAMBIT**

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# Symbols and Terminology

|         |                                                                                                                    |
|---------|--------------------------------------------------------------------------------------------------------------------|
| +       | check                                                                                                              |
| ++      | double check                                                                                                       |
| #       | checkmate                                                                                                          |
| !!      | a brilliant move                                                                                                   |
| !       | a good move                                                                                                        |
| ?!      | a dubious move (a move that does not change the result of the position but which creates unnecessary difficulties) |
| ?       | an error (a move that changes the result of the position)                                                          |
| ??      | an obvious error                                                                                                   |
| 1-0     | the game ends in a win for White                                                                                   |
| 1/2-1/2 | the game ends in a draw                                                                                            |
| 0-1     | the game ends in a win for Black                                                                                   |
| (D)     | see next diagram                                                                                                   |

Most published endgames studies compete in composing competitions. These are often called *tourneys*. The best studies in a tourney are awarded *Prizes*, while those of slightly inferior quality, not quite worthy of Prizes, are awarded *Honourable Mentions*. Some tourneys are *Championships* of cities, countries, etc. In this book the abbreviations for these terms are as follows:

|           |                    |
|-----------|--------------------|
| Tny       | Tourney            |
| Pr.       | Prize              |
| Hon. Men. | Honourable Mention |
| Ch.       | Championship       |

A player is in *zugzwang* if any move he makes is detrimental to his position, but in this book we distinguish between various different types of *zugzwang*. The position ♖e6, ♜f5 vs ♜g7, ♜f6 with Black to play is *zugzwang*, because any move Black makes loses the f6-pawn and then the game. However, the position with White to play is still a win because he can make the pass move 1 ♜e7. We call this situation a *non-reciprocal zugzwang*. By contrast, in a *reciprocal zugzwang* the result depends on who moves first, with each side preferring that the other player moves first. An example of a reciprocal *zugzwang* is the standard position ♜g6, ♜f7 vs ♜f8. If Black moves first then he has to allow ♜g7, promoting the pawn, but if White is to play then he has no pass move and can only draw. A *full-point reciprocal zugzwang* is an extreme case of reciprocal *zugzwang* in which whoever moves first loses. An example is the position ♜d5, ♜e4 vs ♜f4, ♜e5.

## Acknowledgement

I would like to thank John Roycroft, long-time editor of the study magazine *EG*, for his help in the preparation of this book.

# Introduction

The purpose of this book is to present my selection of the 250 greatest endgame studies of all time in an instructive format. Endgame studies are composed positions but this fact should not dissuade over-the-board players from looking at them. Unlike the esoteric genre of chess problems, studies are closely related to over-the-board play. The aim in each position is to achieve a win or draw, and many of the positions are simplified endgames which might easily arise in over-the-board play. The solution normally involves a surprising or instructive feature. Most of the world's top players are interested in studies and some, such as Réti and Smyslov, have become noted composers in their own right.

I would first like to describe how I wrote the book, and then deal with the question of how to use the book and what the reader can hope to learn from it.

The process of selecting 250 studies from the tens of thousands which have been composed turned out to be an arduous one. In order for a study to be correct, two main criteria have to be satisfied. Firstly, it should indeed be possible to achieve the intended aim (win or draw); secondly, the route to the target result should be unique (this criterion should be interpreted with some flexibility; for example, minor alternatives in move-order may not be a serious flaw). The second criterion is what makes endgame studies so suitable for solving, because if there is just one solution, the solver can only succeed by uncovering the point of the study. By contrast, over-the-board positions often have multiple solutions and are usually less suitable for solving purposes.

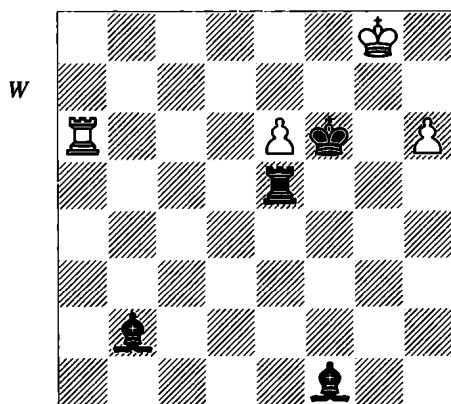
I have been interested in endgame studies since I was a junior player, and I have many study books on my shelves. Nevertheless, I was reluctant to rely only on these sources and my memory for the selection, since it would be all too easy to let an excellent study slip through the net simply because I had not consulted an

appropriate source. I therefore decided on a more systematic approach, based on the Van der Heijden study database, which currently contains about 60,000 studies. From these I examined, at least to some extent, about 20,000 studies. Clearly, with this number it wasn't possible to conduct a detailed analysis of each study; the aim was simply to construct a short-list of about 2,500 studies from which to choose the studies for inclusion in the book. At this point the problems started. Every author has the experience of selecting material for inclusion in a book, only to discover that for some reason it is not suitable and has to be discarded. By taking care with the original selection, I normally manage to keep the percentage of rejected material down to reasonable levels. However, all my precautions were in vain when it came to writing *Endgame Challenge*. In the process of finding 250 (hopefully) correct endgame studies for inclusion in the book, I found flaws in over 1,000 compositions. The high ratio of rejected to included material explains why this book took me over a year to write, and it means that readers will never see the majority of the work involved in writing the book!

I was surprised that so many studies turned out to be incorrect; after all, these were positions that had been published in magazines and tested by solvers. Moreover, many of the studies to fail were well-known compositions which have been frequently reproduced in the years since their first publications. It is clear that part of the answer is that I was able to use a powerful computer system for testing the studies – the combination of Deep Fritz running on a fast dual-processor computer and the Nalimov tablebases has almost frightening analytical power.

The following diagram provides an example of a well-known study that fell victim to the silicon monster.

The main line of the intended solution is (skipping various analytical complexities): 1 h7



### G. Kasparian

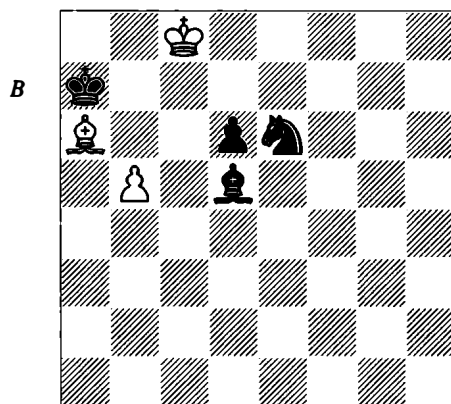
=1st Pr., *Chess Life & Review*, 1970

White to play and draw

♖g5+ 2 ♜f8 ♕g6 3 h8♖! ♙xh8 4 e7+ ♜h7 5 e8♖ ♜g8+ 6 ♜f7 ♜xe8 7 ♜a4! ♜h6 8 ♜f4! ♙b5 9 ♜h4+ ♕g5 10 ♜h5+ ♜xh5 with an attractive stalemate.

However, Black can improve by 2...♜h5 3 ♜c6 ♙b5! 4 ♜b6 ♙d4! 5 ♜xb5 ♜xh7. It turns out that White cannot avoid falling into a lost ♜+♙ vs ♜ position, for example after 6 ♕g8 ♜a7 7 ♜d5 ♙e5 8 ♜d1 ♜xe6. This fact is not at all obvious, and to verify it by hand would be a considerable task.

However, this can only be part of the answer, as many of the flaws hardly needed a computer to discover. The following study is typical.



### G. Kasparian

3rd Pr., *L'Italia Scacchistica*, 1963

Black to play, White to draw

The intended solution is 1...♙f3 (Black's choice of square is designed to prevent White's bishop from moving to g4 at move six) 2 ♜d7 d5 3 ♜xe6 d4 4 ♙c8! d3 5 ♜d6! d2 6 ♜c7! d1♖ 7 b6+ ♜a8 8 ♙b7+! ♙xb7 and the play ends in a surprising stalemate. The problem with the study is that Black has a win by 1...♙g7! 2 ♜d7 ♙e8 3 ♜xe8 (3 ♙c8 ♙b7) 3...♙b7 and White's bishop is trapped on a6, so the d-pawn cannot be stopped. This is a fairly simple line just three moves deep, and it is surprising that the flaw remained undetected for so long.

I found this to be a common pattern. Often those reproducing studies made no attempt to analyse the positions themselves, preferring instead to repeat the composer's original analysis virtually unchanged. One of the worthy exceptions to this was the famous endgame analyst André Chéron, whose four-volume *Lehr- und Handbuch der Endspiele* (Siegfried Engelhardt Verlag, 1952-71) is still regarded as a classic today. Unfortunately, sticking so rigidly to the 'party line' has often meant that thorny analytical issues have remained unresolved, sometimes for a very long time. This added considerably to my workload, since when I encountered some unclear point, looking it up would usually not help and I was thrown on my own resources. Sometimes the tricky point was resolved in the composer's favour (see, for example, Nos. 101 and 125) but more often it led to the study being discarded. However, in the end I produced a final list of 250 positions for inclusion. Although they have all been checked both by human brain and by computer, the complexity of some of the positions is such that a few flaws may remain.

In making my final selection, I made no attempt to include a wide range of composers or nationalities; the only criterion used was the merit of the study itself. Inevitably, the assessment of what constitutes a 'good' study is a subjective matter and readers will have to trust that my long association with endgame studies has led to a reasonable result. The fact that I am primarily an over-the-board player has doubtless coloured my judgement to some extent, since I tend to favour positions with relevance to practical play; however, given this book's instructional aim, that is perhaps no bad thing. Possibly a study expert would have made a

somewhat different selection, but I feel that there would be considerable overlap; this book contains a large number of undoubted classics which would feature in any such selection.

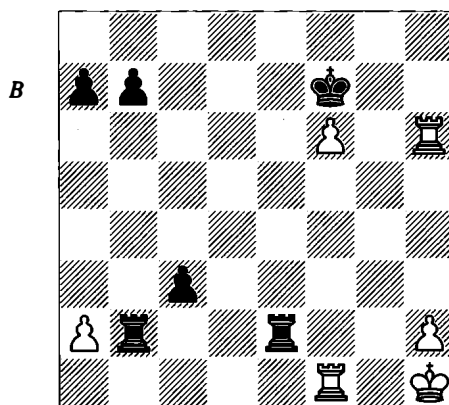
Moving on now to how the reader might use the book, there are various possibilities. One approach would be simply to play over the solutions, and there is no doubt that this in itself would be quite instructive. However, the greatest benefit will be obtained if you make an attempt to solve the positions yourself. Many trainers, such as Mark Dvoretsky, recommend solving studies as an excellent self-training technique, and I can only endorse their view. After studying each position for some time, you should decide what you consider to be the main line. Most of the studies have a spectacular finale so it is usually clear whether you have found the correct solution or not. Then you should look at the solution and see if you have indeed discovered the composer's intention. If not, note the move at which the printed solution differs from your main line, and try to see what the point behind it is. This clue may very well help you to find the right idea at the second attempt. Don't be disappointed if you do not find the correct solution straight away – some of the positions are quite challenging. I often used this technique while I was an undergraduate at Oxford University in the early 1970s and I think it significantly improved my chess.

What can you hope to learn from this book? Endgame studies are useful for strengthening two particular aspects of your play. The first is that of endgame theory. Because of their simplified nature, studies are often closely linked to specific areas of endgame theory. For example, Kasparian's No. 116 is a painless way to learn the main points of so-called 'triangular' positions in the ending of ♖+g♗+h♖ vs ♚. After seeing the first move of this study, who could forget the key reciprocal zugzwang which determines play in these endings? However, some of the studies are more tactical and the play resembles that of a complex middlegame rather than an endgame. These studies serve to develop your tactical imagination and to extend your repertoire of combinative motifs.

Will looking at the studies in this book help you to win games? The short answer is yes. Studies are usually better than game endgames

for instructional purposes, because game positions have all the messiness of real life and often include numerous sidelines which serve only to distract from the main point of the position. Endgame studies, on the other hand, have been composed to show a particular point and they should do so in a clear-cut and unequivocal manner. Moreover, they often conclude with an attractive and spectacular finale so that they entertain as well as instruct. These features make them far more memorable than game positions. Chess is to a considerable extent about pattern recognition. The more patterns you have firmly fixed in your memory, the more effective you are likely to be at the chessboard. The studies in this book provide an entertaining way of increasing your stockpile of patterns.

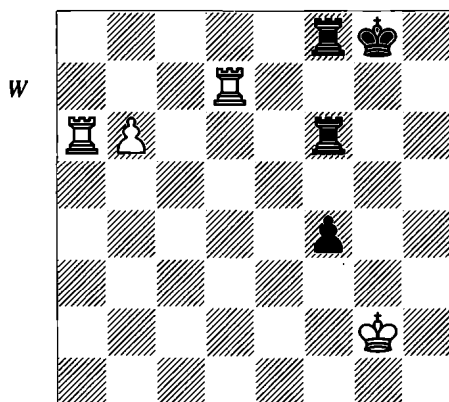
Here are two examples from my own games in which the memory of a specific endgame study helped me to find a winning continuation.



**N. Davies – J. Nunn**  
*Islington Open 1976*

It is Black to play in this double-edged position. Black's passed pawn is quite close to queening, but unfortunately White's f-pawn will provide considerable counterplay after ♖h7+. For a moment, I couldn't see how to promote my own pawn while preventing the promotion of White's pawn. You should take a little time here to work out for yourself the clearest continuation for Black before turning over the page to discover how the game continued.

During the game the memory of the following endgame study came to me.

**G. Kasparian***British Chess Magazine, 1938*

White to play and win

The solution here is 1 ♖a7 f3+ 2 ♔f2! and now:

1) 2... ♗h6 3 b7 ♗h2+ 4 ♕g3 f2 (4... ♗g2+ 5 ♕h3 f2 6 b8 ♗f1 ♗7 ♗b3+ ♕h8 8 ♗h7#) 5 ♗g7+ ♕h8 6 ♗f7! and wins (remember the final position of this line).

2) 2... ♗g6 3 b7 ♗g2+ 4 ♔f1! f2 (4... ♗b2 5 ♗a8 ♗b1+ 6 ♔f2 ♗b2+ 7 ♕g3! f2 8 ♗xf8+ ♕xf8 9 ♕g2) 5 ♗f7!! ♗b8 6 ♗a8! ♕xf7 7 ♗xb8 ♗g1+ 8 ♕xf2 ♗b1 9 ♗h8 and White wins the black rook.

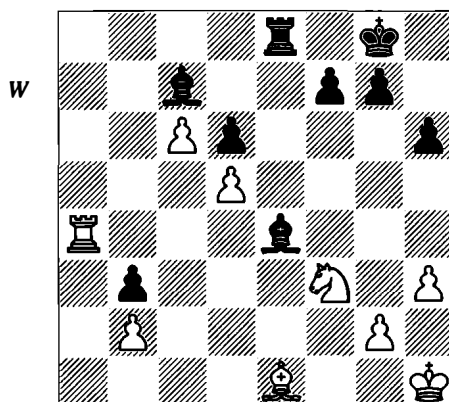
Using my knowledge of the Kasparian study, it wasn't too hard to find a convincing win in Davies-Nunn: 1...c2 (1... ♗f2 also wins) 2 ♗h7+ ♕g6 and now:

1) 3 ♗c7 ♗b1 4 ♗g7+ ♕h6 5 ♗gg1 ♗xf1 6 ♗xf1 ♗f2 and Black wins.

2) 3 f7 ♗f2! is the key point – the position is essentially identical to that at the end of line '1' in Kasparian's study.

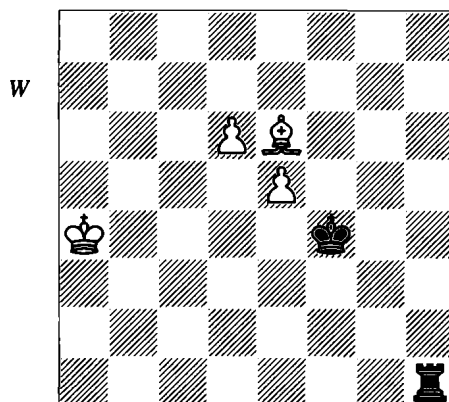
3) 3 ♗g7+ (the game continuation) 3... ♕h6 4 f7 (4 ♗c1 ♗b1 5 ♗gg1 ♗xc1 6 ♗xc1 ♕g6) 4...c1 ♗5 f8 ♗ ♗xh2+ 0-1.

White is to play in the following diagram, and the obvious move is 1 ♗a5, which saves the bishop from Black's threat of ...♗xf3 and aims to lift the blockade of the c6-pawn. However, Black can continue 1...♗xf3 2 gxf3 ♗a8, when White is forced to give up the exchange by 3 ♗xc7 ♗xa4 4 ♗xd6. This position looks quite difficult to assess, especially after the obvious

**J. Nunn – Xie Jun***Hastings 1996/7*

move 4... ♗c4, placing the rook behind the advanced pawns. If White is unable to push the pawns quickly, then Black will play ...f6, followed by ...♕f7-e8, blockading the pawns and giving him a winning position.

Suddenly, the following endgame study came into my mind.

**L. Prokeš***1st Pr., Narodni Listy, 1941*

White to play and win

White wins by 1 d7 and now there are various bishop sacrifices:

1) 1... ♗a1+ 2 ♗a2! ♗xa2+ 3 ♕b3, followed by 4 e6 and wins.

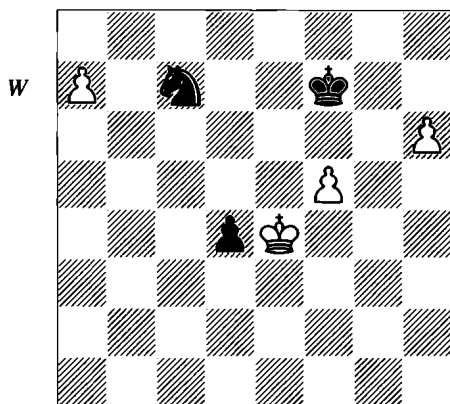
2) 1... ♗h8 2 ♗g8! ♗xg8 3 e6.

3) 1... ♗d1 2 ♗d5 ♗xd5 3 e6.

In each variation the bishop is sacrificed so as to free the e-pawn with gain of tempo.

Variation '3' in the Prokeš study gave me the clue I needed to find the win. The game did indeed continue 1 ♖a5 ♙xf3 2 ♗xf3 ♖a8 3 ♙xc7 ♖xa4 4 ♙xd6 ♖c4 and now I played 5 c7!. For the moment, Black's king is unable to approach and so White has time to play the sacrifice ♙c5, just as in the Prokeš study. The game concluded 5...f6 6 ♙c5 ♖xc5 7 d6 ♔f7 8 d7 ♖xc7 9 d8 ♖ ♖c1+ 10 ♔g2 ♖c2+ 11 ♔g3 ♖xb2 12 ♖d3 ♔g8 13 ♔f4 ♔f8 14 ♔f5 ♖c2 15 ♖xb3 ♖c5+ 16 ♔g6 ♖g5+ 17 ♔h7 ♔e7 18 f4 1-0.

Other players could also benefit from a knowledge of endgame studies.

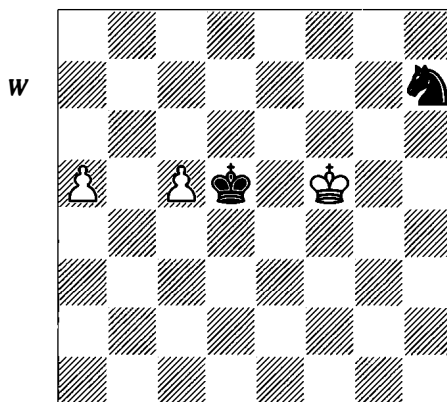


**P. Svidler – V. Anand**  
*Dos Hermanas 1999*

The game was agreed drawn in this position, but if Svidler had known the following study, he probably wouldn't have been so ready to share the point (see diagram in next column).

The solution runs 1 a6 ♙c6 2 ♔g6! (2 ♔e6? ♔g5+ 3 ♔e7 ♔e4 4 a7 ♔b7 5 c6+ ♔xa7 6 c7 ♔b7 draws) 2...♔f8+ 3 ♔f7 ♔h7 (3...♔d7 4 a7 ♔b7 5 c6+) 4 ♔e7 (4 a7? ♔b7) 4...♔g5 5 a7 ♔b7 6 c6+ ♔xa7 7 c7 ♔b7 8 ♔d7 and the c-pawn promotes.

Now we can see Svidler's missed win: 1 ♙xd4 ♔b5+ 2 ♙c5 ♔xa7 (the position is the same as after the first move of Stoichev's study, except for a minor difference in the position of the black king) 3 ♙b6 ♔c8+ (3...♔g8 4 f6!) 4



**K. Stoichev**

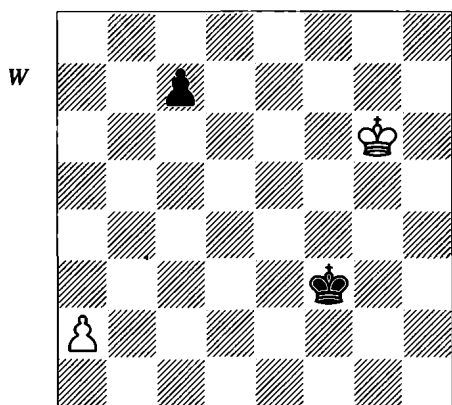
Hon. Men., *Shahmatna Misal*, 1997  
White to play and win

♙c7 ♔a7 (4...♔e7 5 h7 ♔g7 6 f6+) 5 ♙d7 ♔b5 (5...♙f6 6 h7! ♔g7 7 f6+ ♔xh7 8 f7 ♔g7 9 ♔e8) 6 h7 ♔g7 7 f6+ ♔xh7 8 f7 ♔g7 9 ♔e7 and wins.

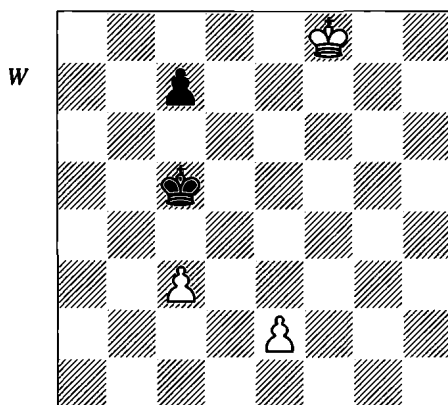
Before moving on to the studies themselves, there are two final points I would like to mention. The first concerns the ordering of studies in the book, which is based on material. The studies are ordered lexicographically, with the individual symbols ordered by the familiar hierarchy of material values (♙ < ♘ < ♖ < ♗ < ♕) and with white material being given priority over black material (in other words, black material is only used for a 'tie-break' when white material is equal). Readers can also consult the index of material on p. 254. Secondly, a few of the studies have been published in my earlier books *Tactical Chess Endings* (Batsford, 1988) and *Solving in Style* (reissued by Gambit, 2002). In my books I try to avoid duplication of material but in this case it was unavoidable if the book was to be self-contained. Where a study has been repeated, I have rewritten the earlier notes and checked the analysis, making corrections where necessary. *Solving in Style* contains two chapters on solving studies, and so might be useful for those who wish to brush up their solving technique before tackling the positions in this book.

# The Studies

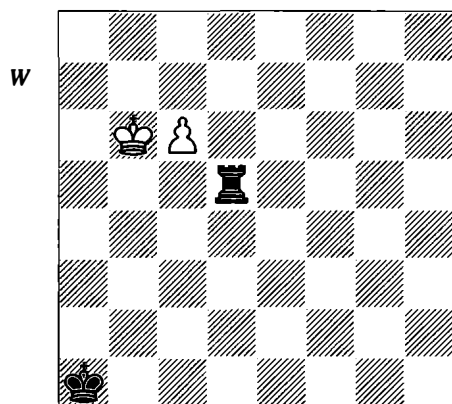
The 250 studies are given on pages 10-51. The condition underneath the study is usually 'White to play and win' or 'White to play and draw', although there are a handful of studies in which Black moves first.



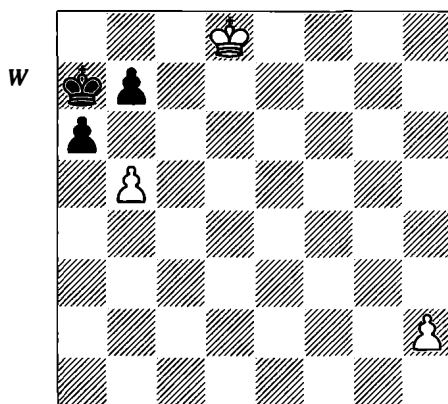
1) White to play and win  
Solution on p. 52



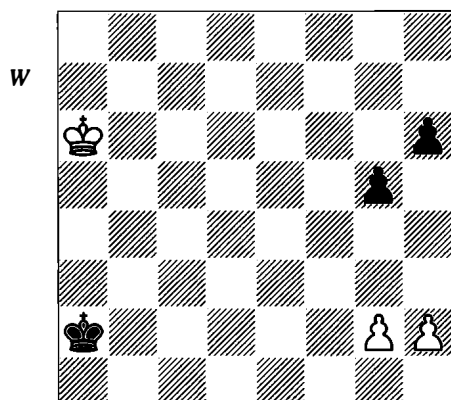
3) White to play and win  
Solution on p. 53



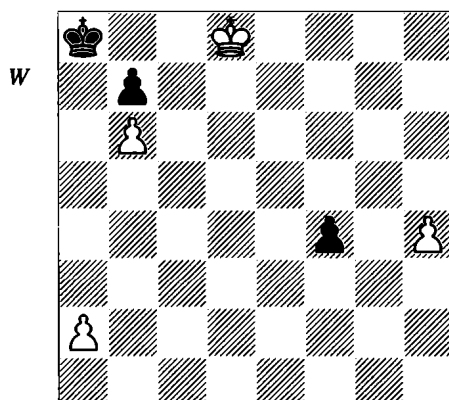
2) White to play and win  
Solution on p. 52



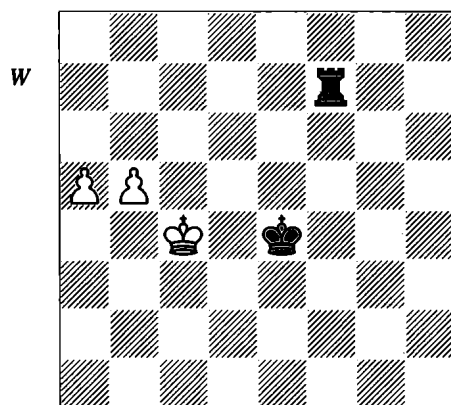
4) White to play and win  
Solution on p. 54



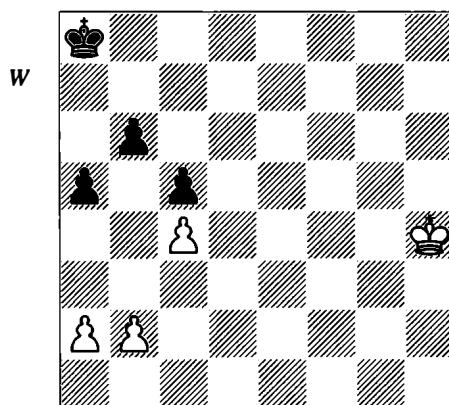
**5) White to play and win**  
Solution on p. 54



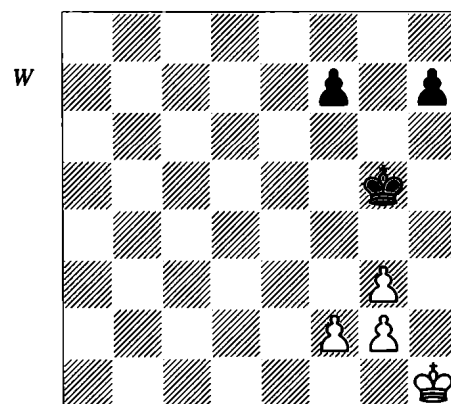
**8) White to play and win**  
Solution on p. 59



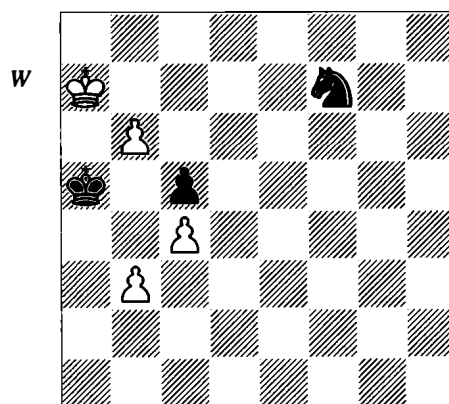
**6) White to play and win**  
Solution on p. 55



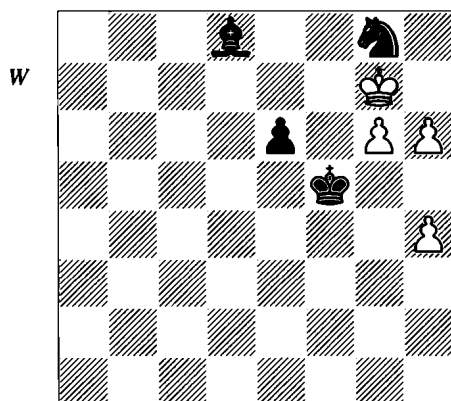
**9) White to play and win**  
Solution on p. 60



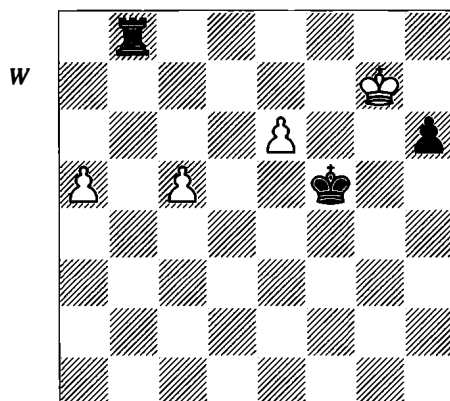
**7) White to play and win**  
Solution on p. 56



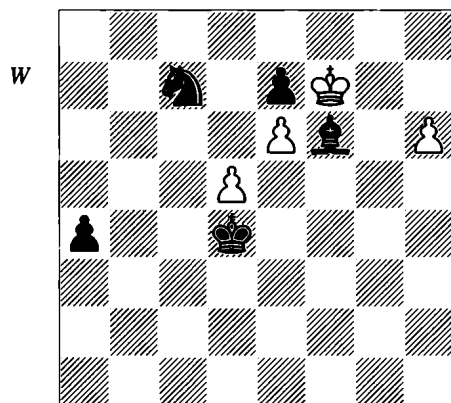
**10) White to play and win**  
Solution on p. 61



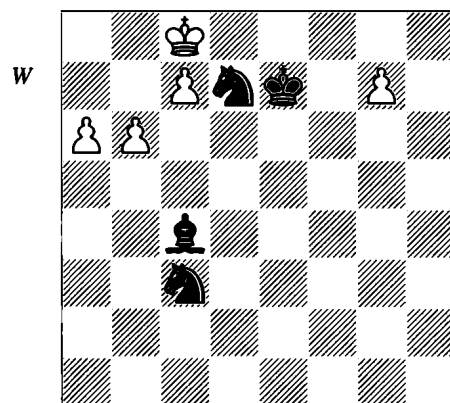
**11) White to play and win**  
Solution on p. 61



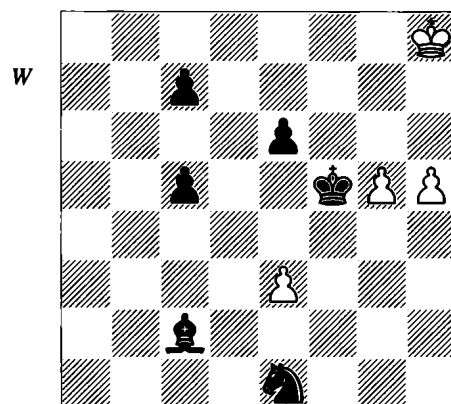
**14) White to play and draw**  
Solution on p. 63



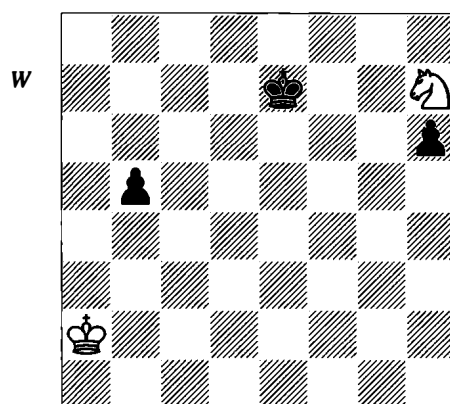
**12) White to play and draw**  
Solution on p. 62



**15) White to play and draw**  
Solution on p. 64

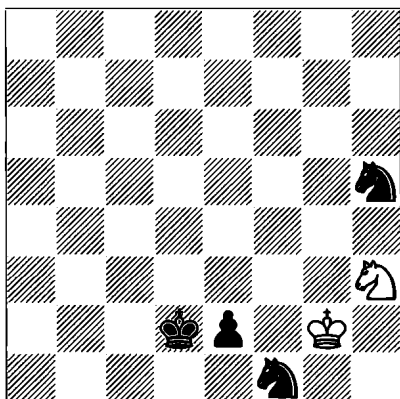


**13) White to play and win**  
Solution on p. 62



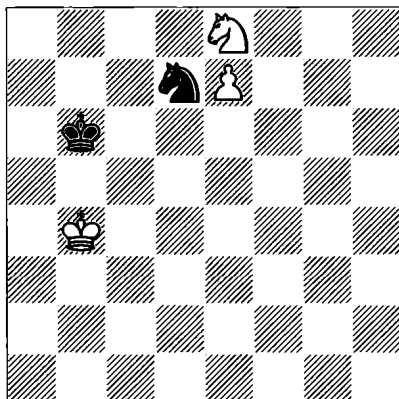
**16) White to play and draw**  
Solution on p. 65

W



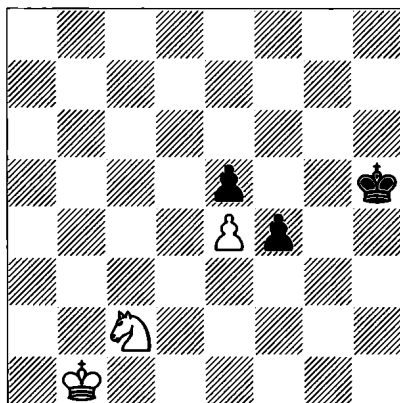
**17) White to play and draw**  
Solution on p. 65

W



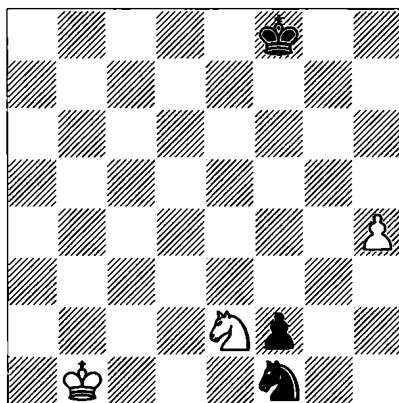
**20) White to play and win**  
Solution on p. 67

W



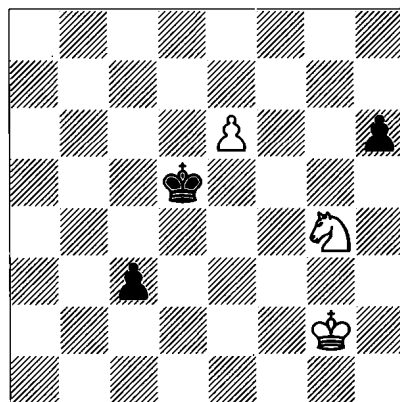
**18) White to play and win**  
Solution on p. 66

W



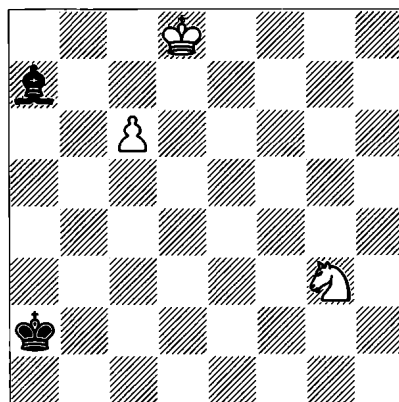
**21) White to play and draw**  
Solution on p. 68

W

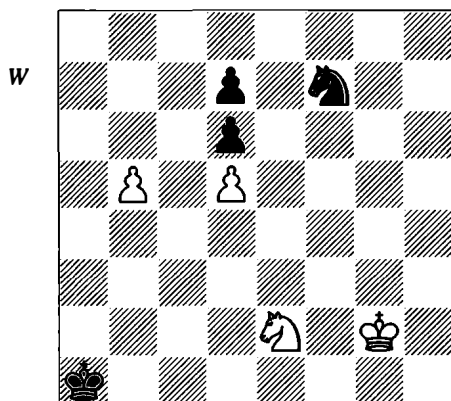


**19) White to play and win**  
Solution on p. 67

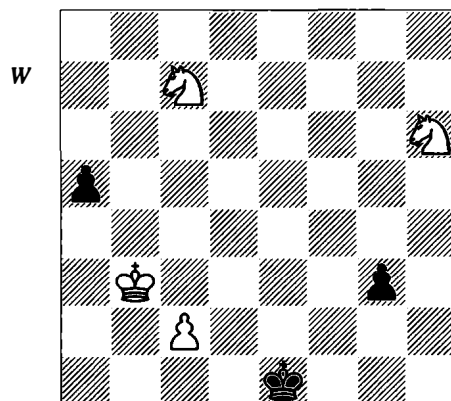
W



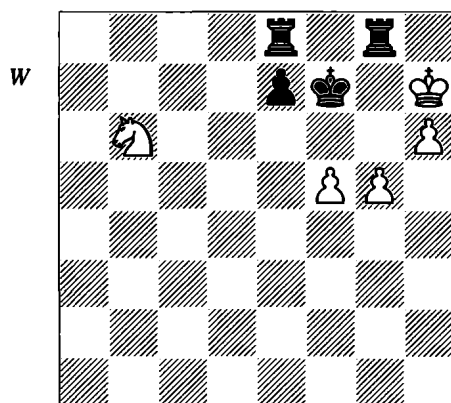
**22) White to play and win**  
Solution on p. 70



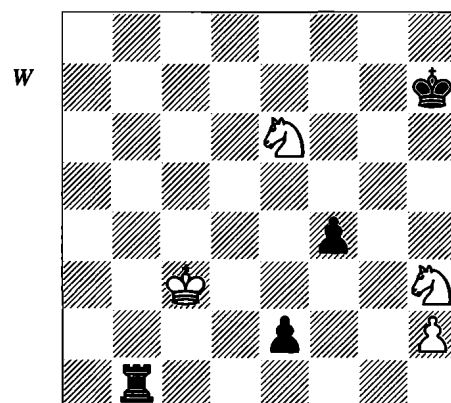
**23) White to play and win**  
Solution on p. 70



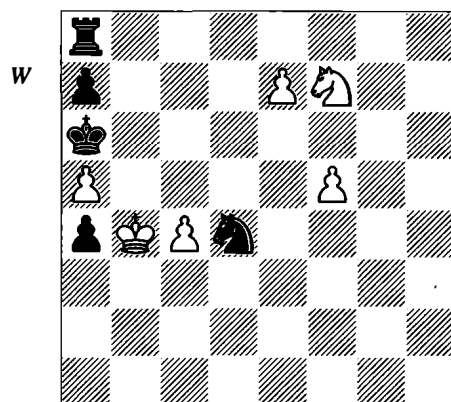
**26) White to play and win**  
Solution on p. 73



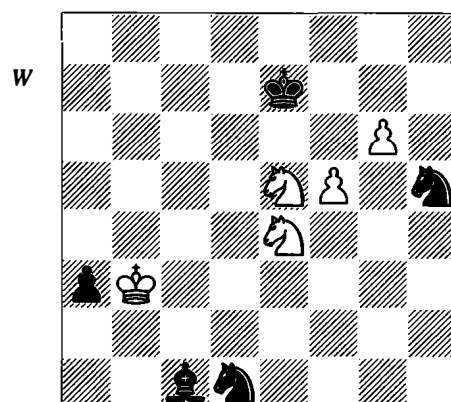
**24) White to play and draw**  
Solution on p. 71



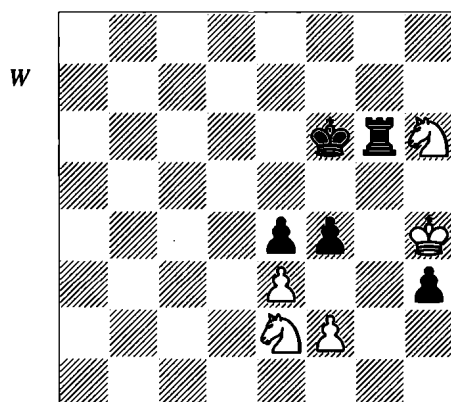
**27) White to play and draw**  
Solution on p. 73



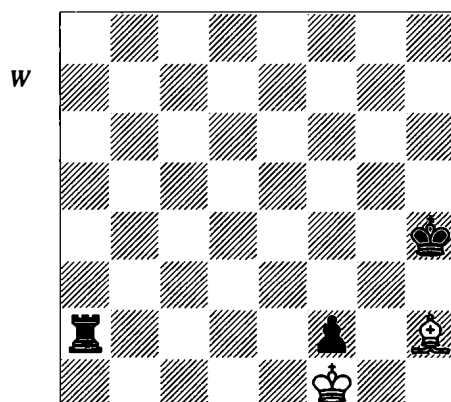
**25) White to play and win**  
Solution on p. 72



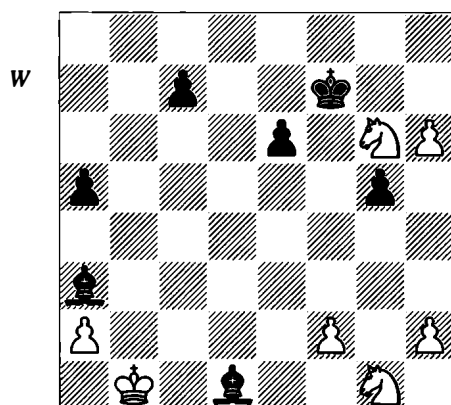
**28) White to play and win**  
Solution of p. 74



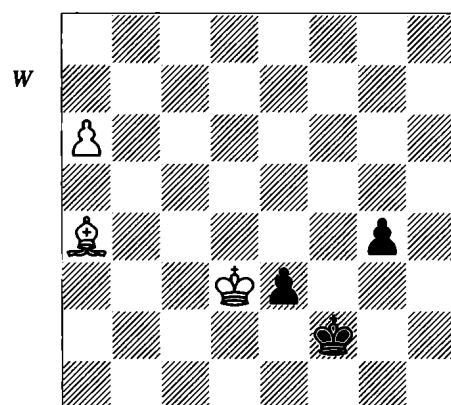
**29)** White to play and draw  
Solution on p. 74



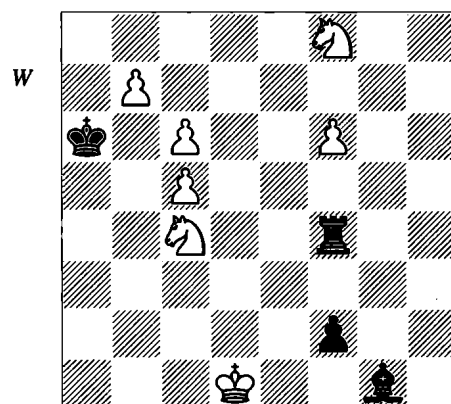
**32)** White to play and draw  
Solution on p. 76



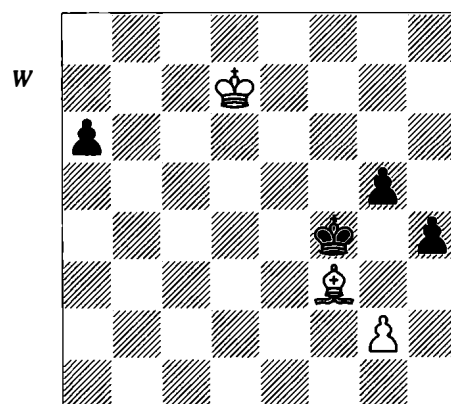
**30)** White to play and win  
Solution on p. 75



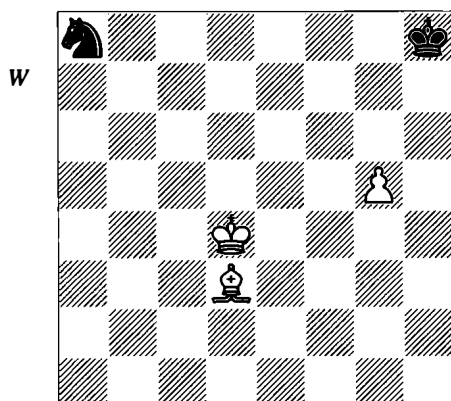
**33)** White to play and win  
Solution on p. 77



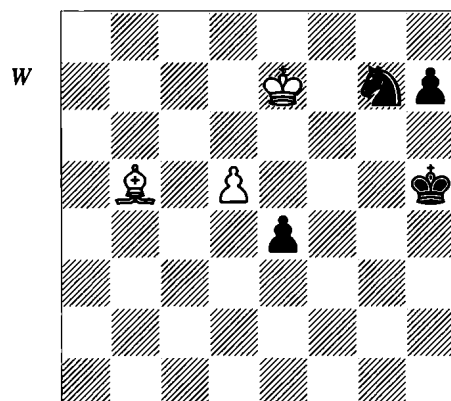
**31)** White to play and win  
Solution on p. 75



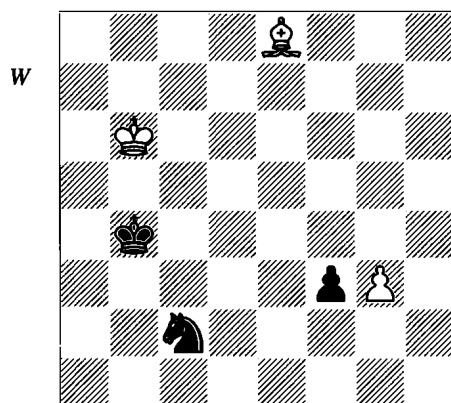
**34)** White to play and draw  
Solution on p. 78



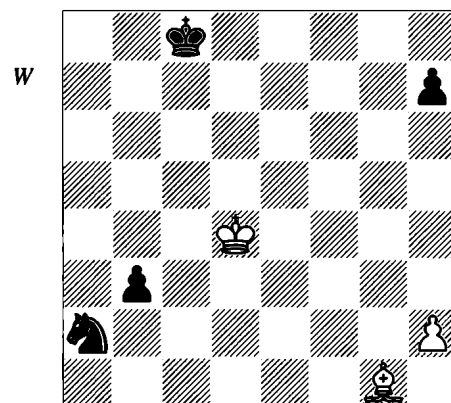
**35) White to play and win**  
Solution on p. 81



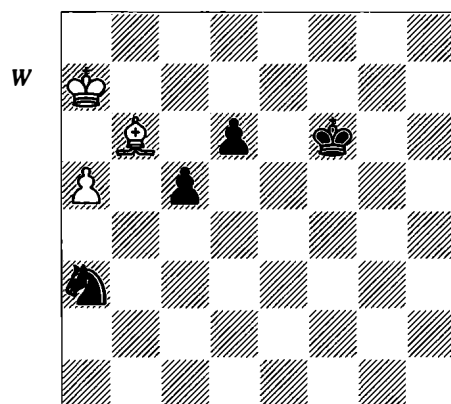
**38) White to play and win**  
Solution on p. 83



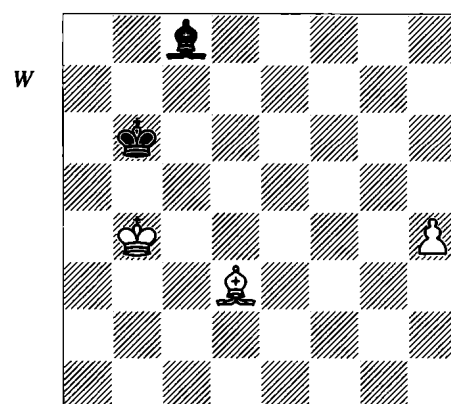
**36) White to play and draw**  
Solution on p. 81



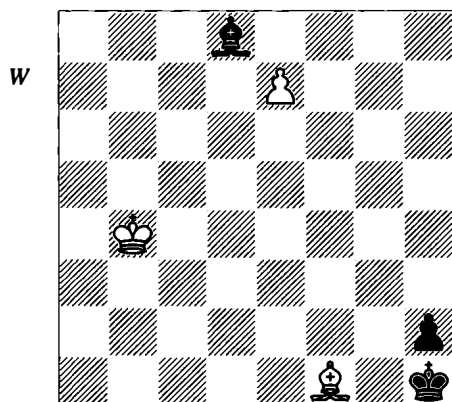
**39) White to play and draw**  
Solution on p. 84



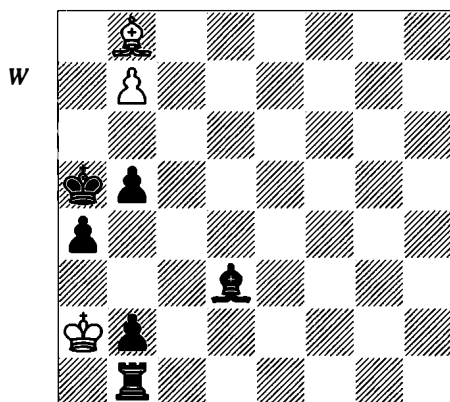
**37) White to play and win**  
Solution on p. 83



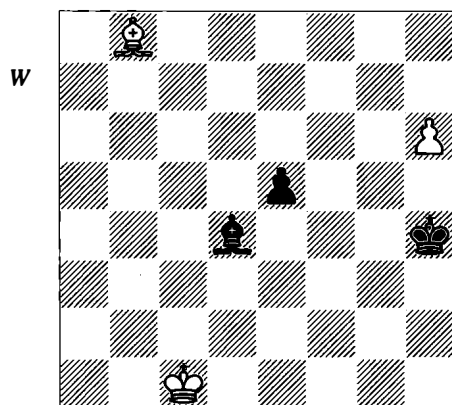
**40) White to play and win**  
Solution on p. 85



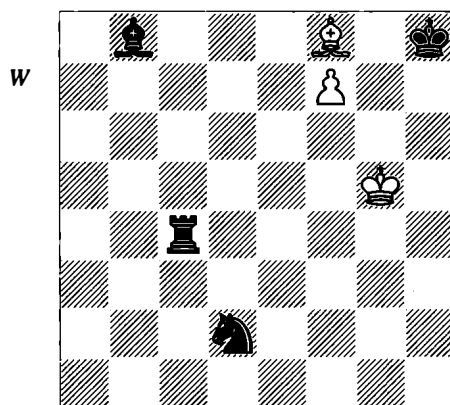
**41) White to play and win**  
Solution on p. 86



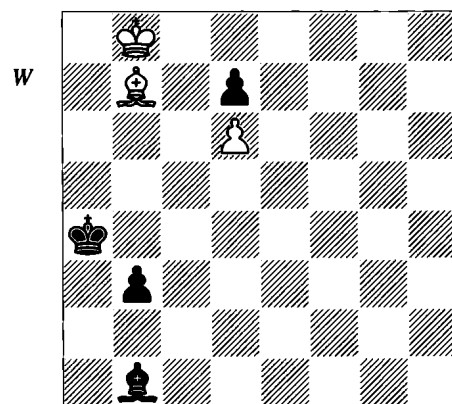
**44) White to play and win**  
Solution on p. 88



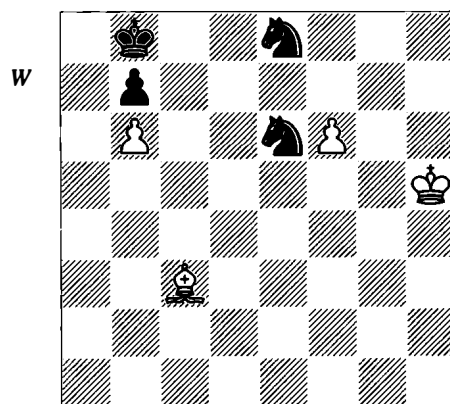
**42) White to play and win**  
Solution on p. 87



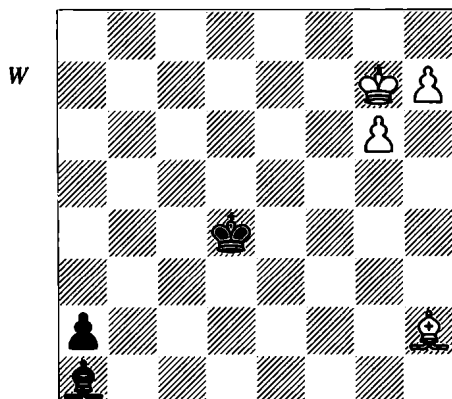
**45) White to play and draw**  
Solution on p. 88



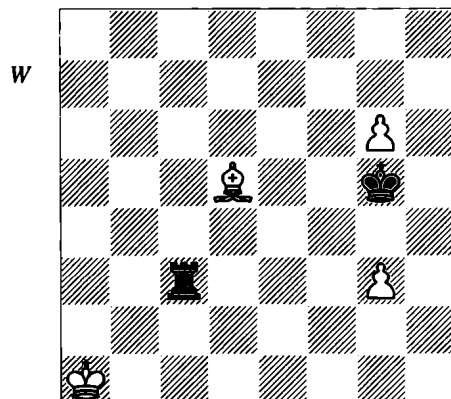
**43) White to play and draw**  
Solution on p. 87



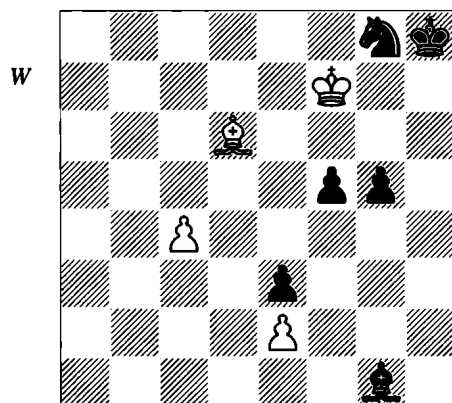
**46) White to play and win**  
Solution on p. 89



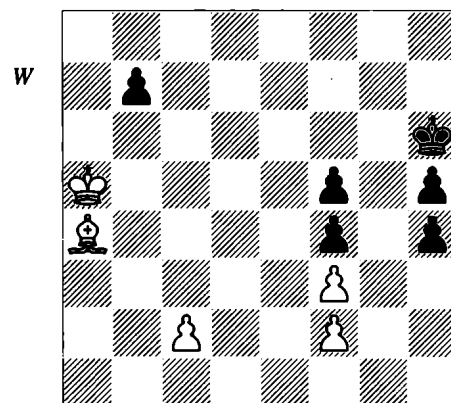
**47) White to play and draw**  
Solution on p. 90



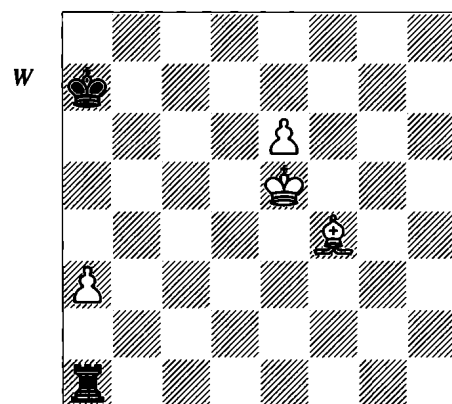
**50) White to play and win**  
Solution on p. 92



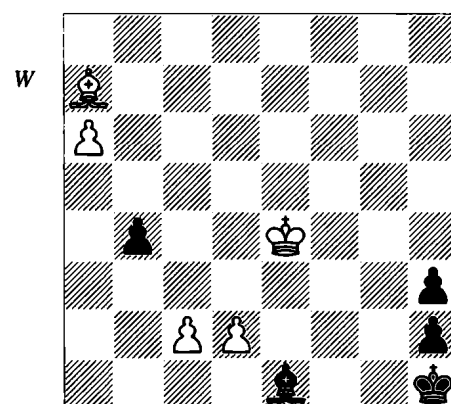
**48) White to play and win**  
Solution on p. 91



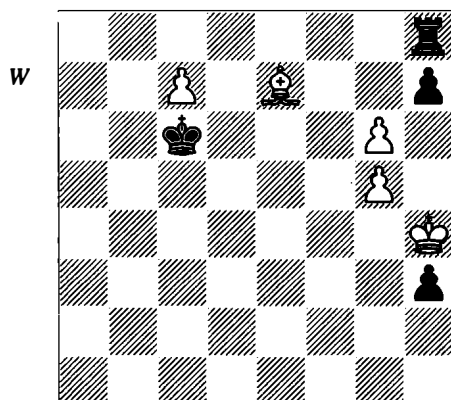
**51) White to play and win**  
Solution on p. 94



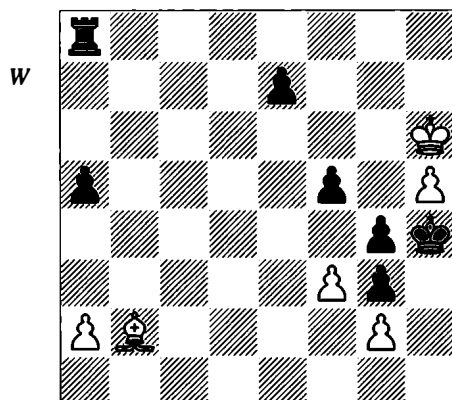
**49) White to play and win**  
Solution on p. 92



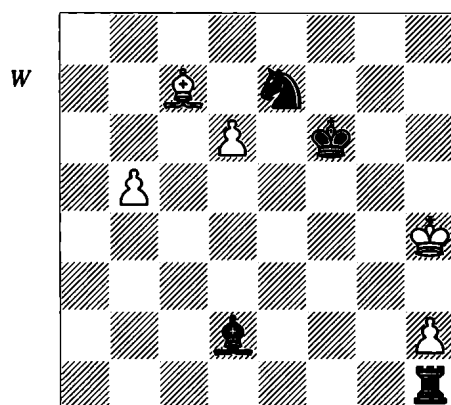
**52) White to play and win**  
Solution on p. 95



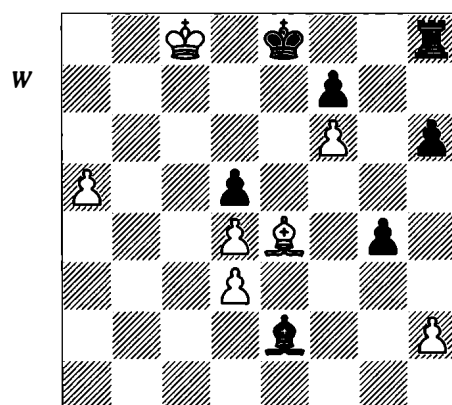
**53)** White to play and win  
Solution on p. 96



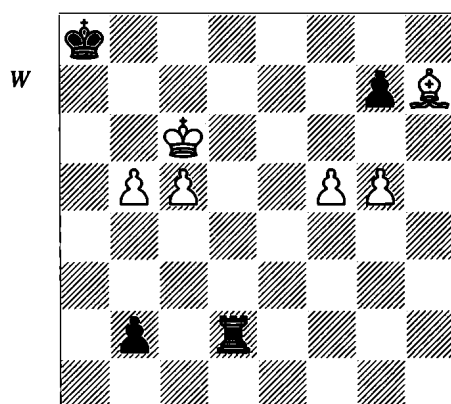
**56)** White to play and draw  
Solution on p. 98



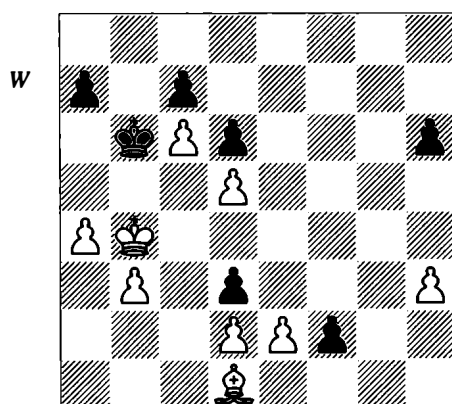
**54)** White to play and draw  
Solution on p. 97



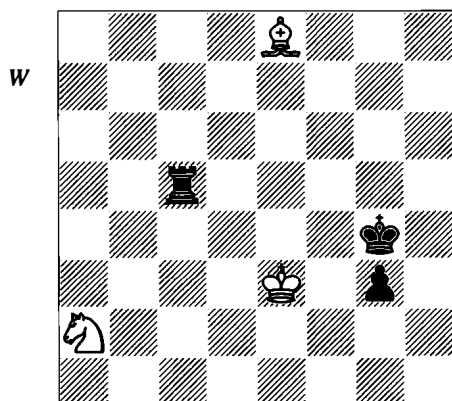
**57)** White to play and win  
(Black may still castle)  
Solution on p. 99



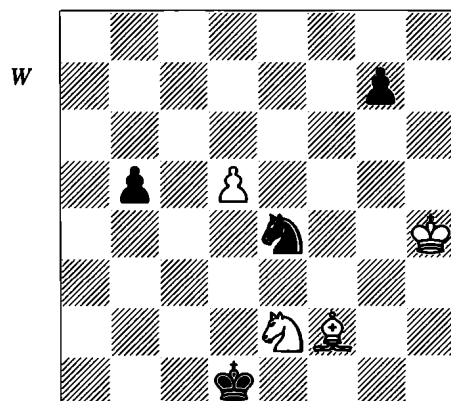
**55)** White to play and win  
Solution on p. 97



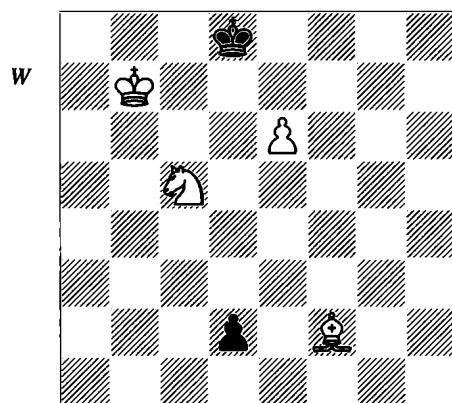
**58)** White to play and draw  
Solution on p. 100



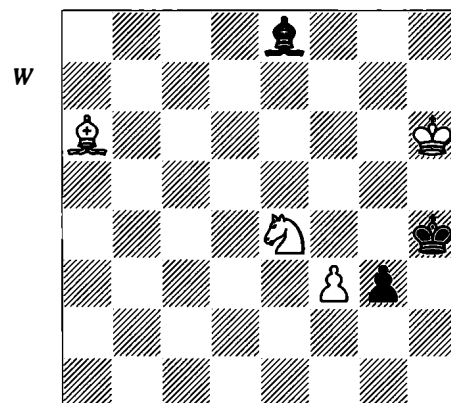
**59)** White to play and draw  
Solution on p. 100



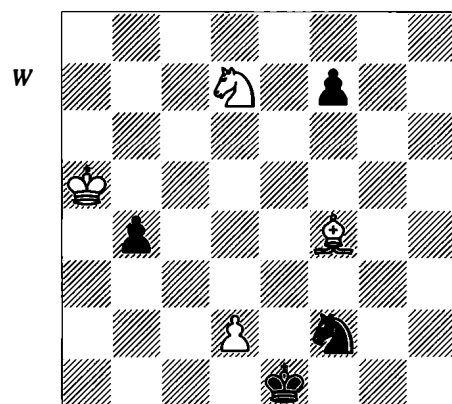
**62)** White to play and win  
Solution on p. 102



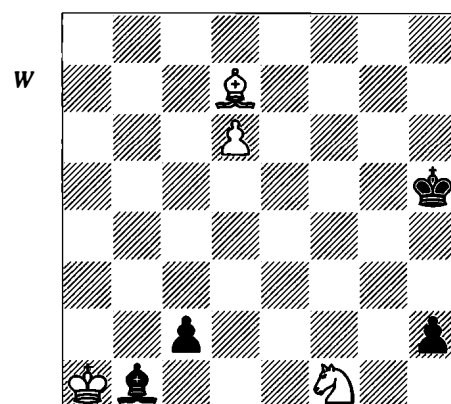
**60)** White to play and win  
Solution on p. 101



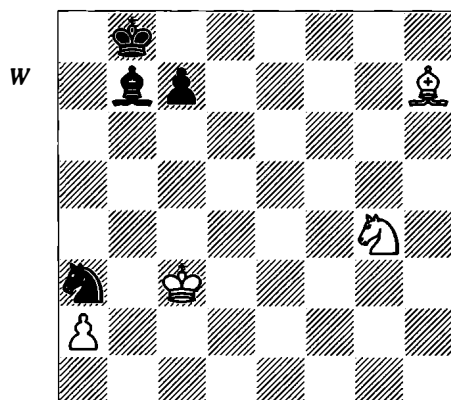
**63)** White to play and win  
Solution on p. 103



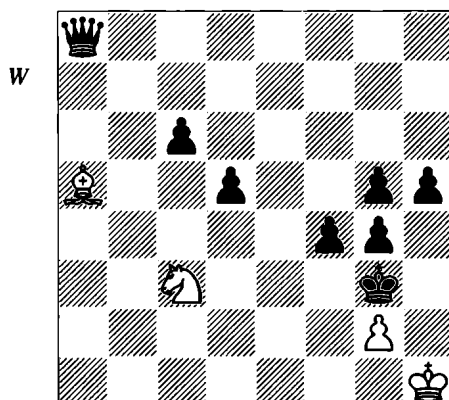
**61)** White to play and win  
Solution on p. 102



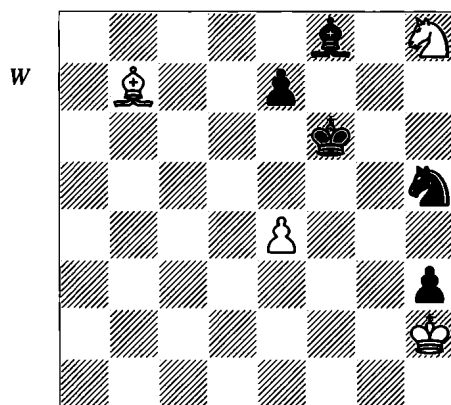
**64)** White to play and draw  
Solution on p. 104



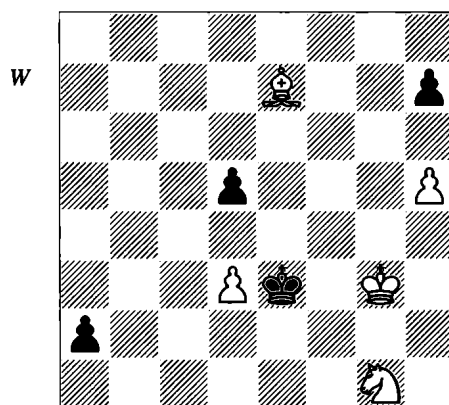
**65) White to play and win**  
Solution on p. 104



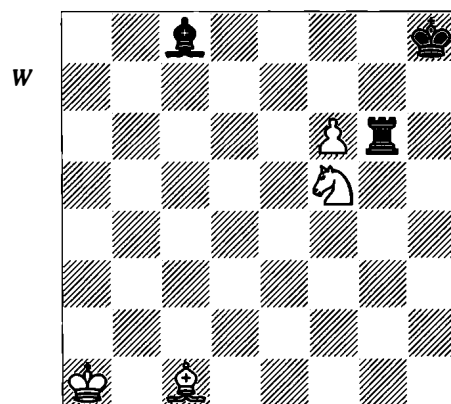
**68) White to play and draw**  
Solution on p. 107



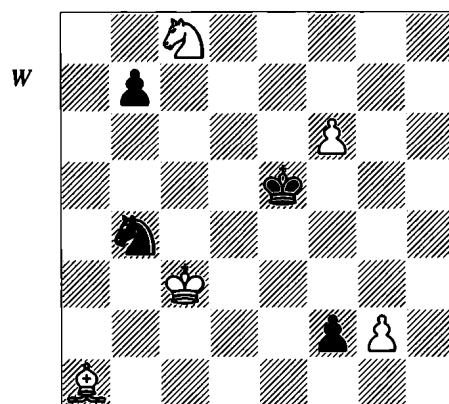
**66) White to play and draw**  
Solution on p. 105



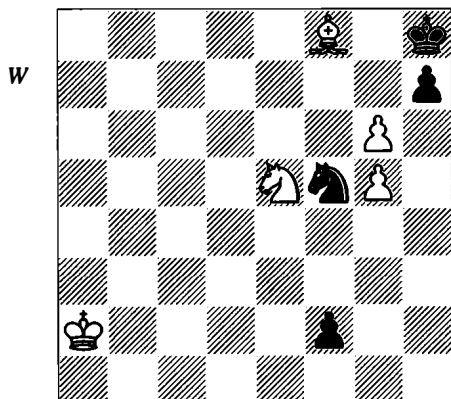
**69) White to play and win**  
Solution on p. 108



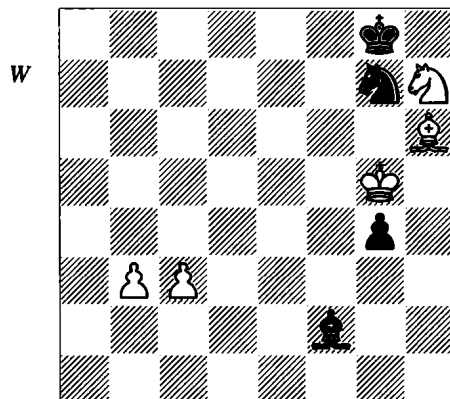
**67) White to play and win**  
Solution on p. 107



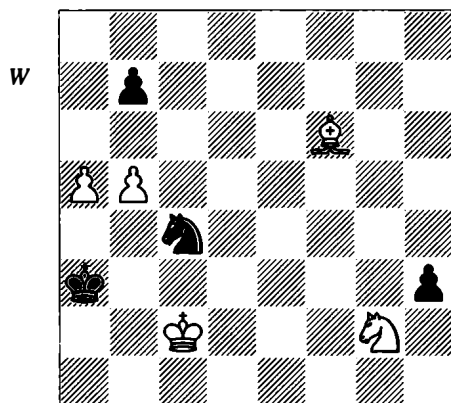
**70) White to play and win**  
Solution on p. 108



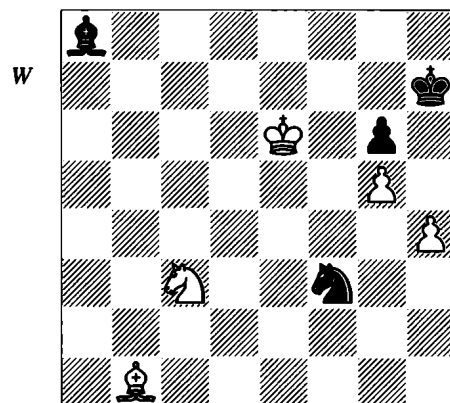
**71) White to play and draw**  
Solution on p. 109



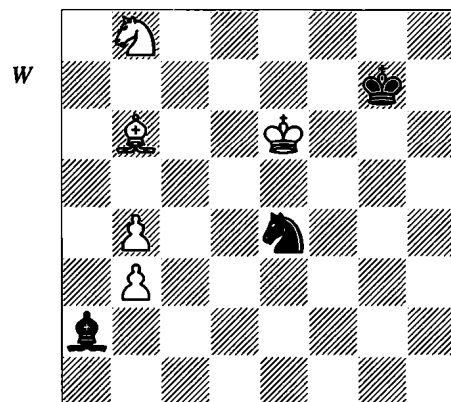
**74) White to play and win**  
Solution on p. 111



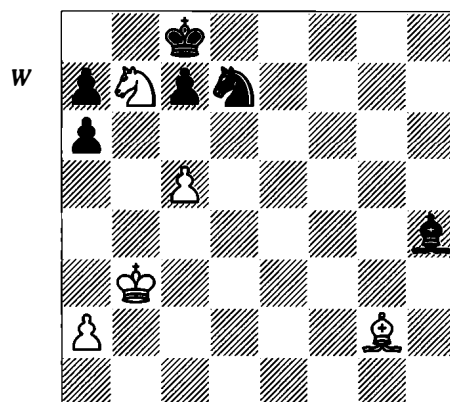
**72) White to play and draw**  
Solution on p. 109



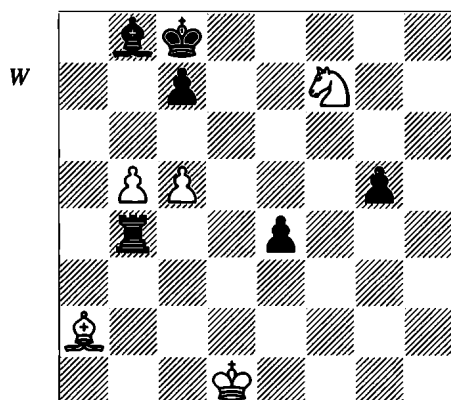
**75) White to play and win**  
Solution on p. 112



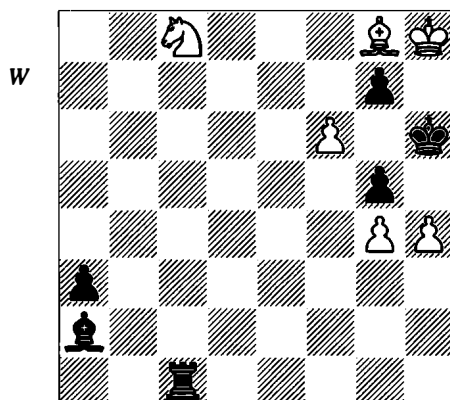
**73) White to play and win**  
Solution on p. 110



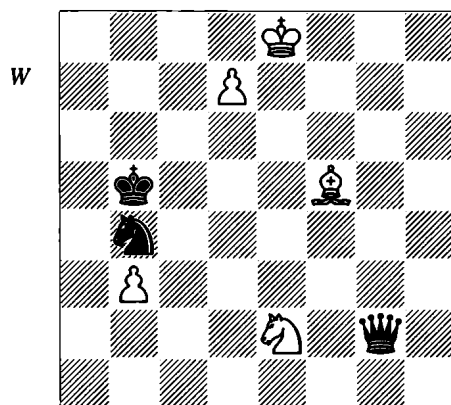
**76) White to play and win**  
Solution on p. 113



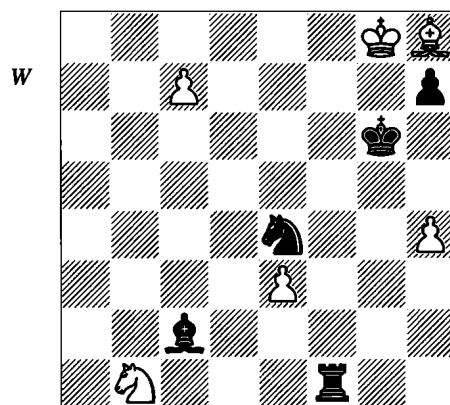
**77) White to play and win**  
Solution on p. 115



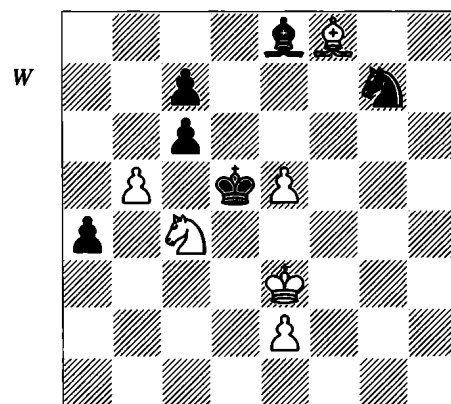
**80) White to play and draw**  
Solution on p. 117



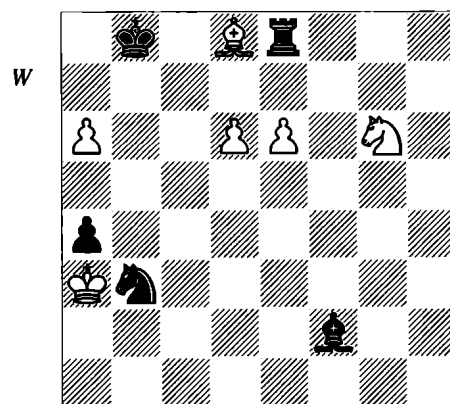
**78) White to play and win**  
Solution on p. 116



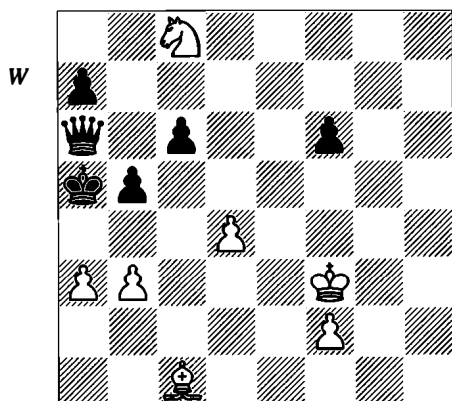
**81) White to play and draw**  
Solution on p. 118



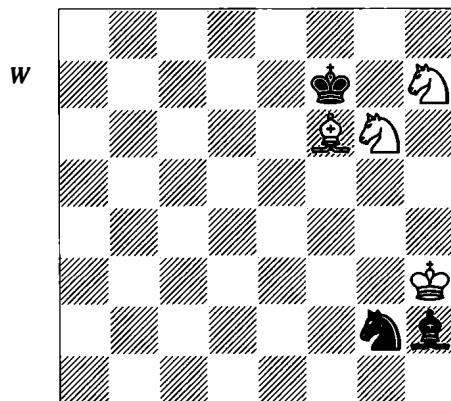
**79) White to play and win**  
Solution on p. 117



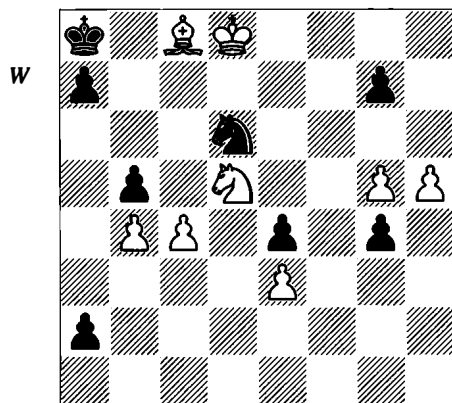
**82) White to play and win**  
Solution on p. 119



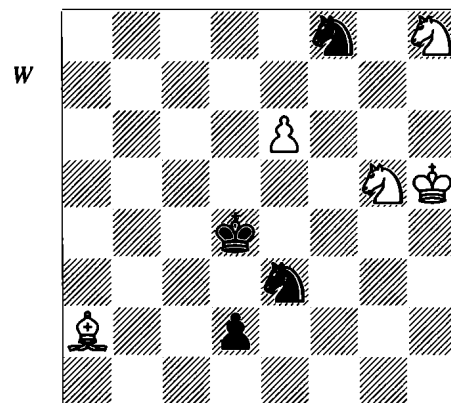
**83)** White to play and win  
Solution on p. 119



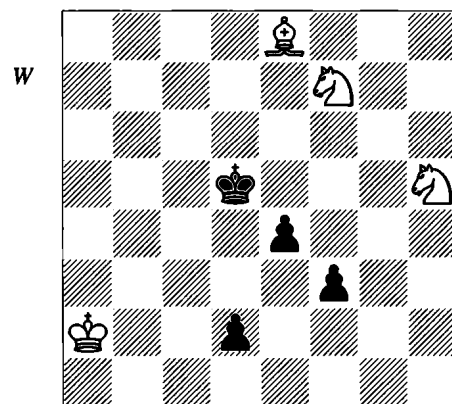
**86)** White to play and win  
Solution on p. 121



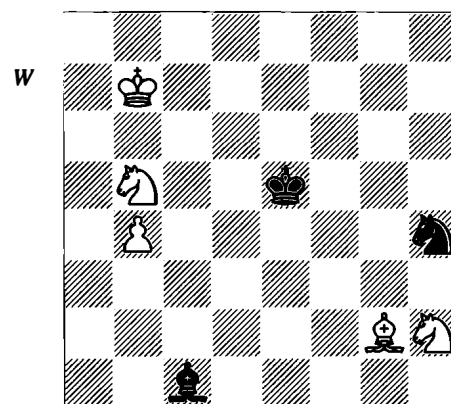
**84)** White to play and win  
Solution on p. 120



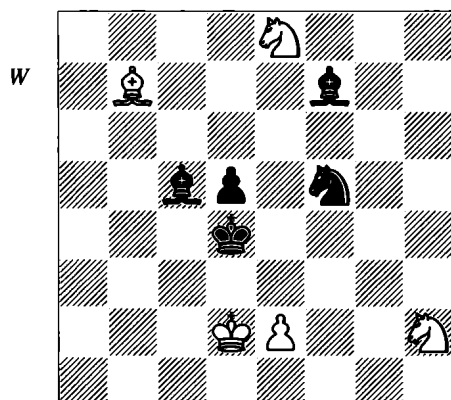
**87)** White to play and win  
Solution on p. 122



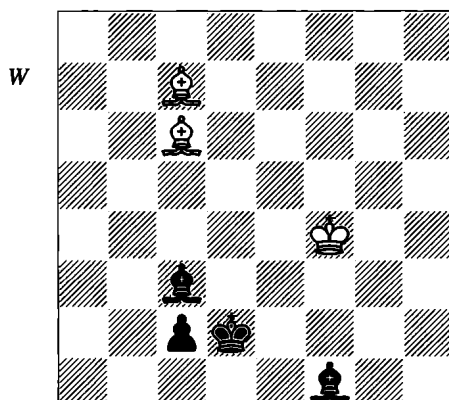
**85)** White to play and win  
Solution on p. 121



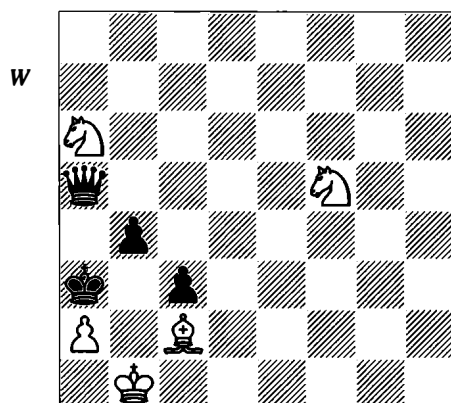
**88)** White to play and win  
Solution on p. 123



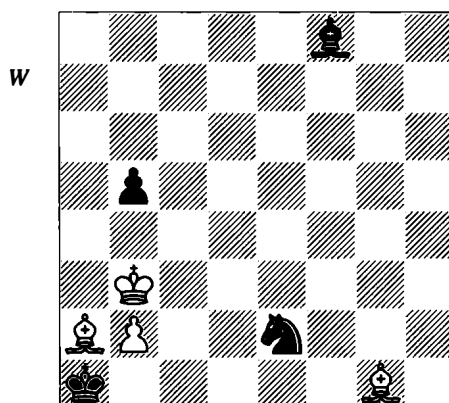
**89) White to play and win**  
Solution on p. 123



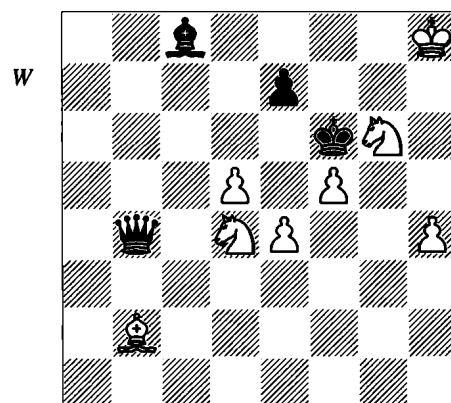
**92) White to play and draw**  
Solution on p. 125



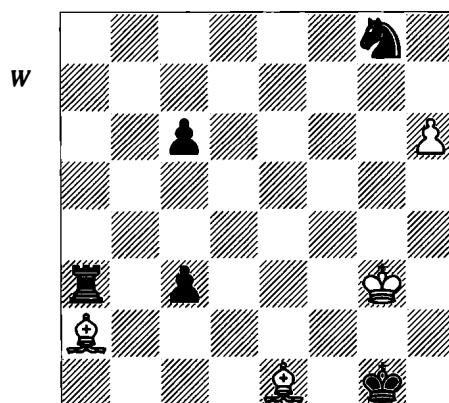
**90) White to play and win**  
Solution on p. 124



**93) White to play and draw**  
Solution on p. 126

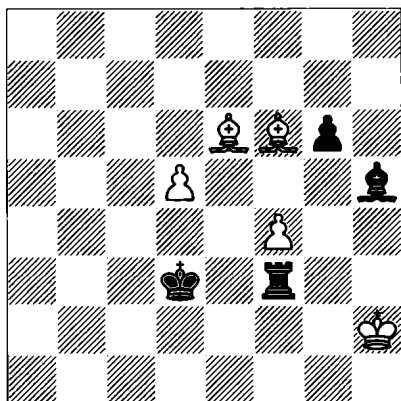


**91) White to play and win**  
Solution on p. 124



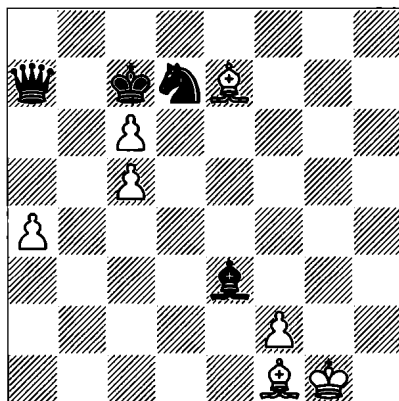
**94) White to play and draw**  
Solution on p. 126

W



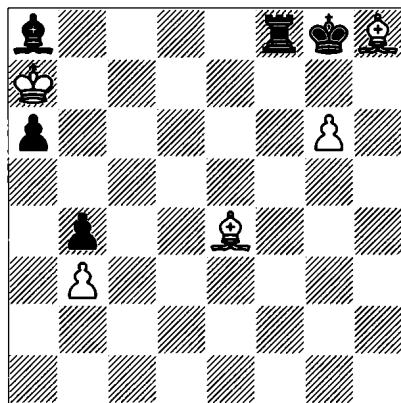
**95) White to play and win**  
Solution on p. 127

W



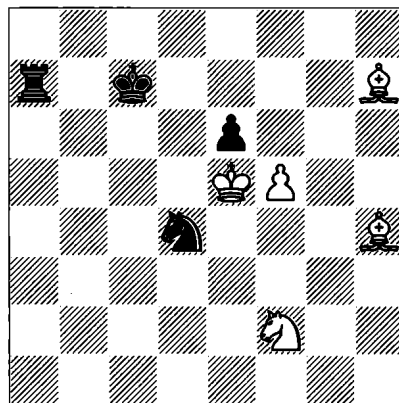
**98) White to play and draw**  
Solution on p. 130

W



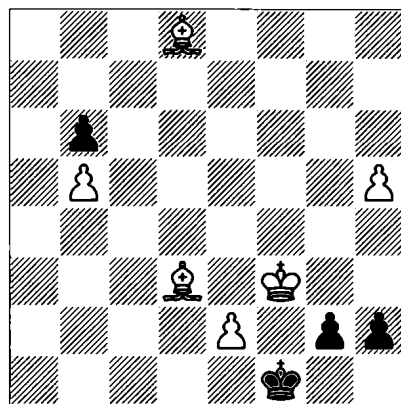
**96) White to play and draw**  
Solution on p. 128

W



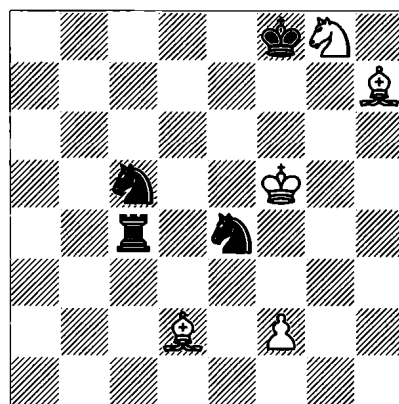
**99) White to play and win**  
Solution on p. 130

W

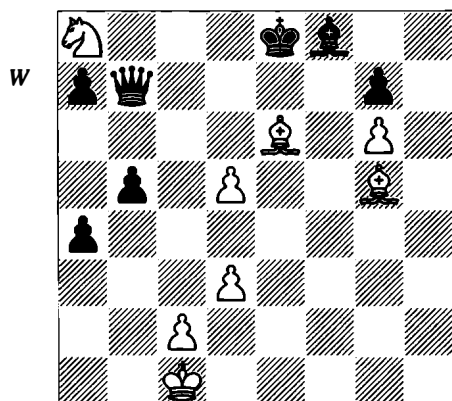


**97) White to play and win**  
Solution on p. 129

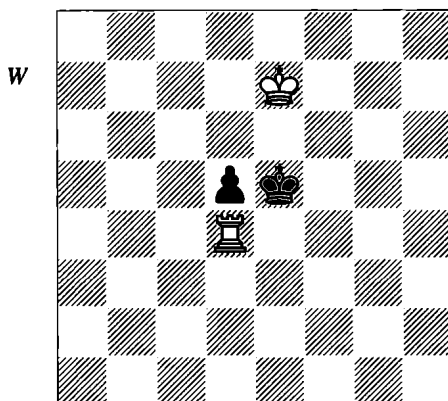
W



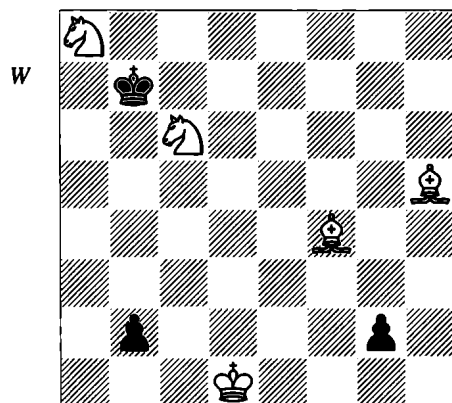
**100) White to play and draw**  
Solution on p. 131



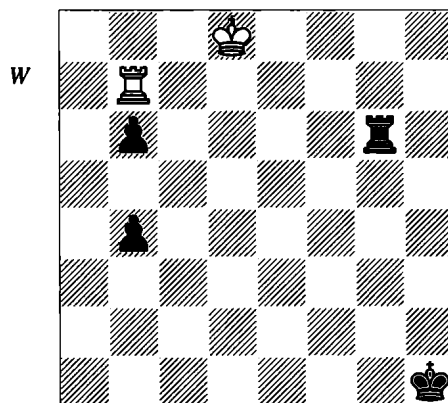
**101)** White to play and draw  
Solution on p. 133



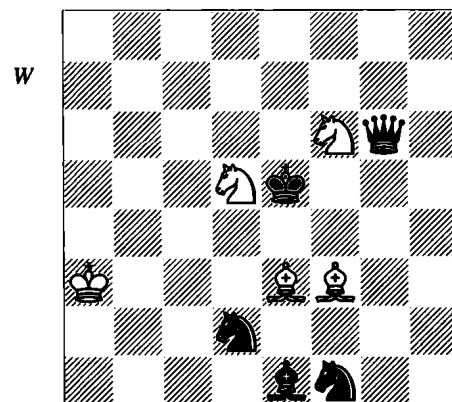
**104)** White to play and win  
Solution on p. 135



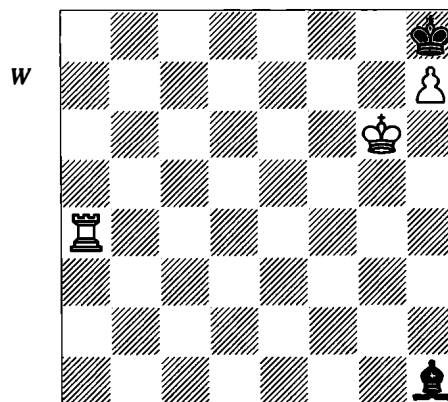
**102)** White to play and win  
Solution on p. 134



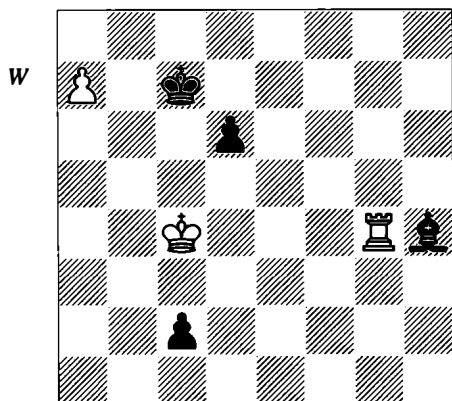
**105)** White to play and draw  
Solution on p. 136



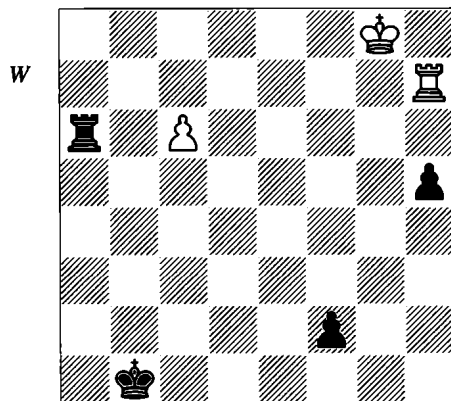
**103)** White to play and draw  
Solution on p. 135



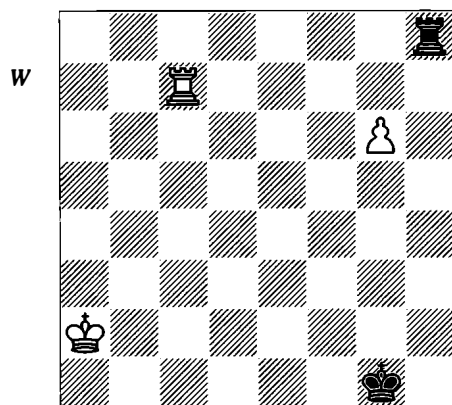
**106)** White to play and win  
Solution on p. 136



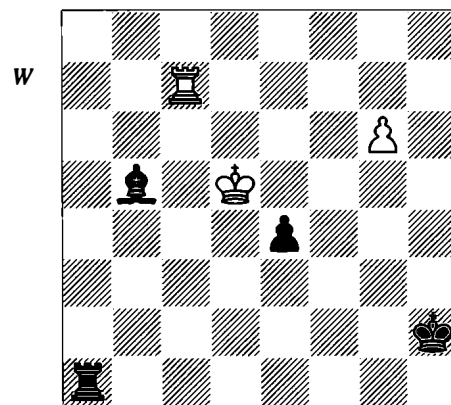
**107)** White to play and win  
Solution on p. 137



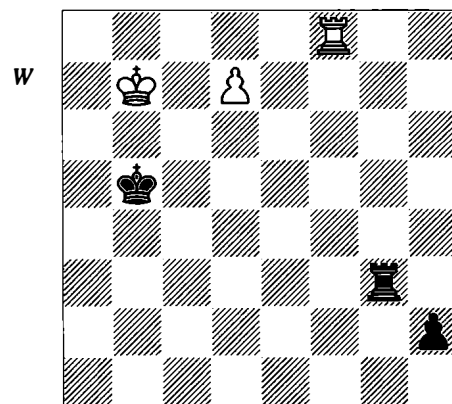
**110)** White to play and draw  
Solution on p. 139



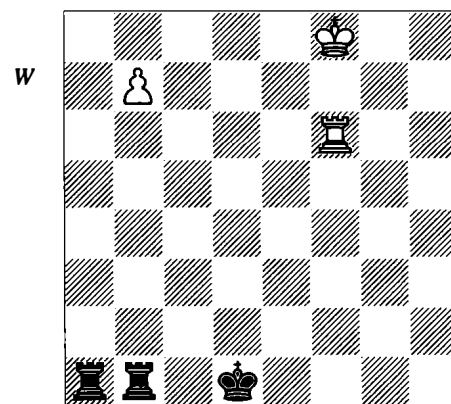
**108)** White to play and win  
Solution on p. 138



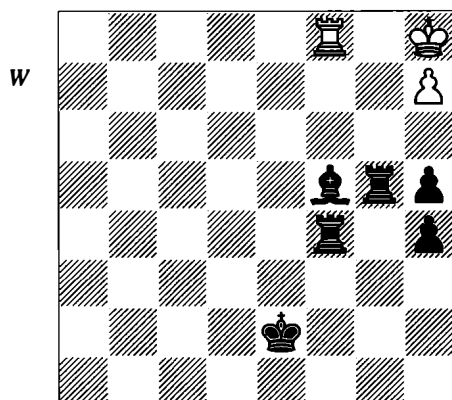
**111)** White to play and win  
Solution on p. 140



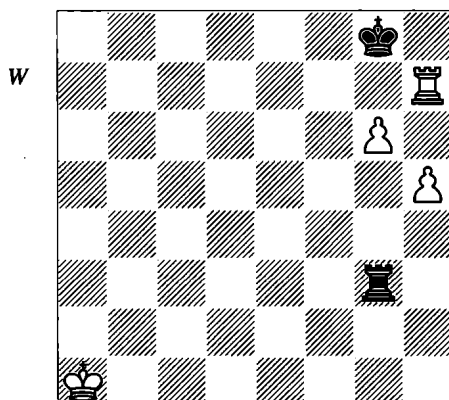
**109)** White to play and win  
Solution on p. 138



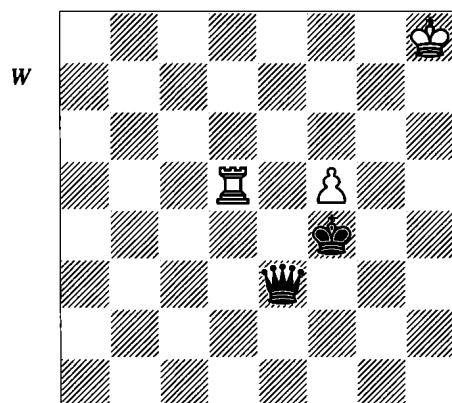
**112)** White to play and draw  
Solution on p. 141



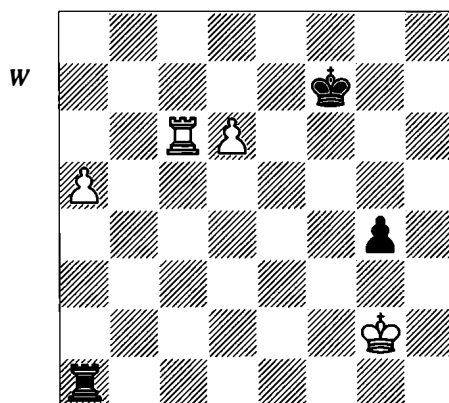
**113) White to play and draw**  
Solution on p. 142



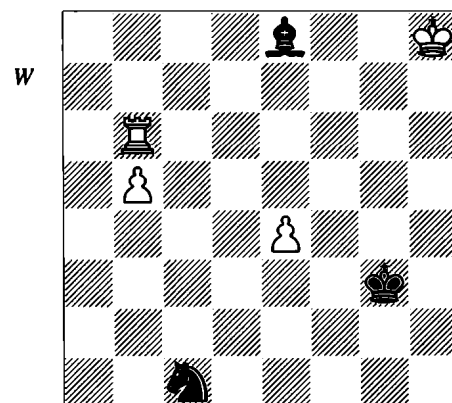
**116) White to play and win**  
Solution on p. 145



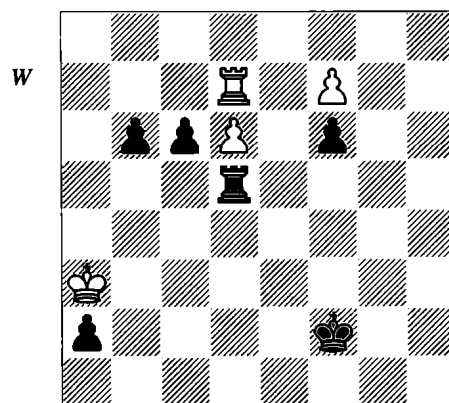
**114) White to play and draw**  
Solution on p. 143



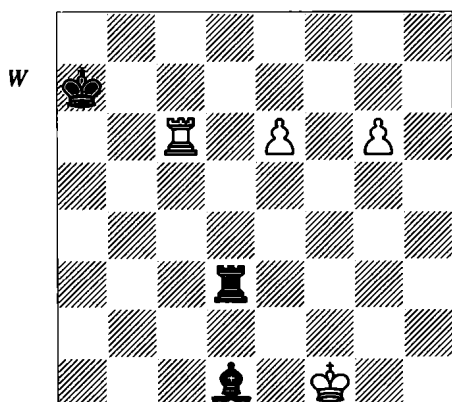
**117) White to play and win**  
Solution on p. 146



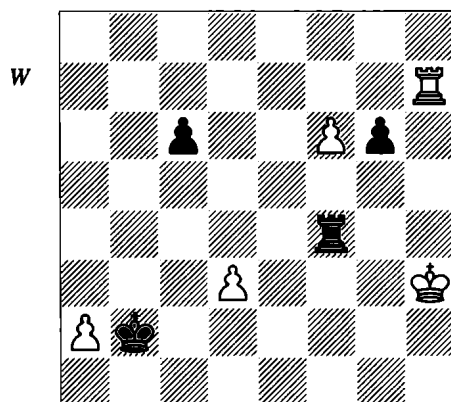
**115) White to play and win**  
Solution on p. 143



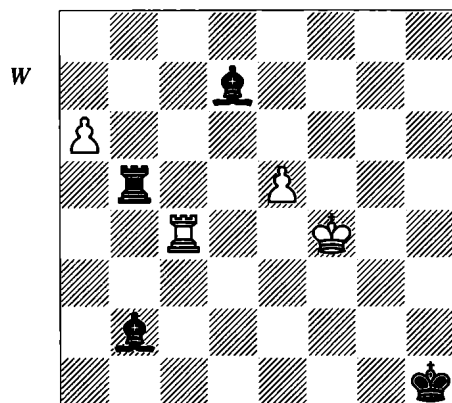
**118) White to play and win**  
Solution on p. 147



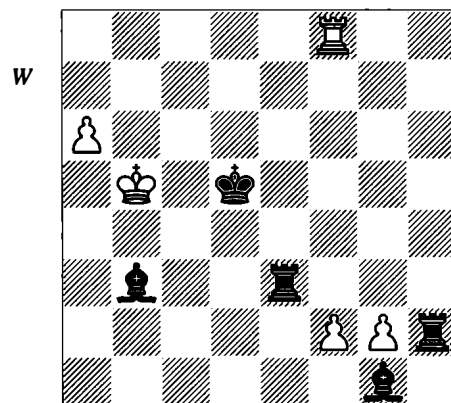
**119)** White to play and win  
Solution on p. 147



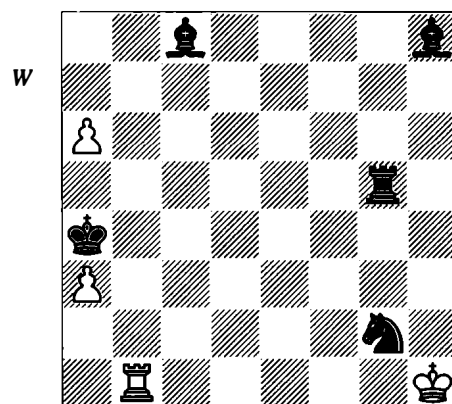
**122)** White to play and win  
Solution on p. 150



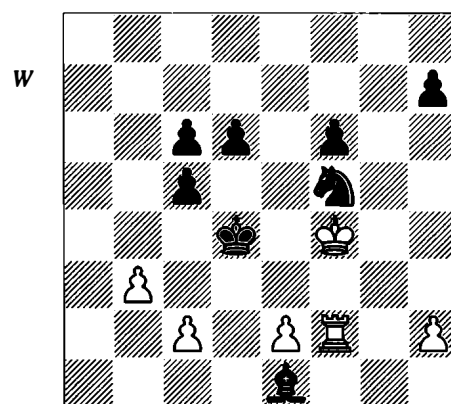
**120)** White to play and draw  
Solution on p. 148



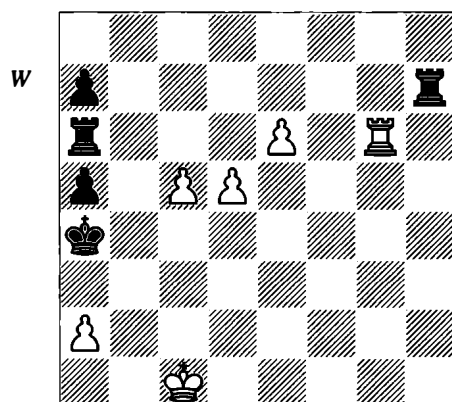
**123)** White to play and draw  
Solution on p. 151



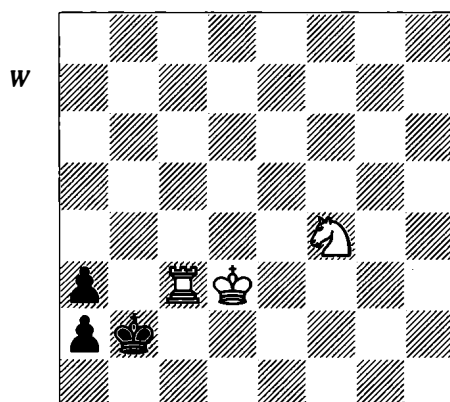
**121)** White to play and draw  
Solution on p. 149



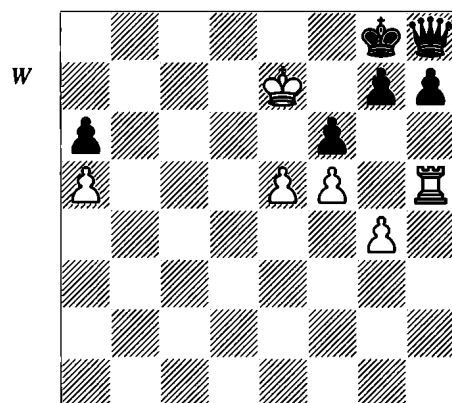
**124)** White to play and win  
Solution on p. 151



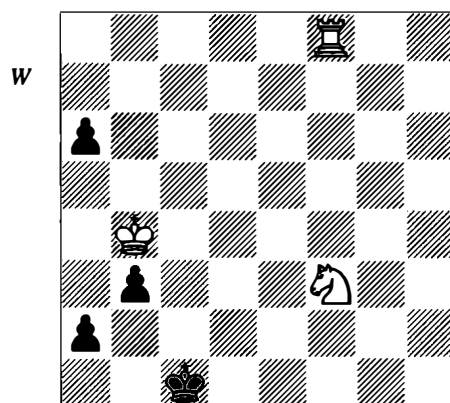
**125)** White to play and win  
Solution on p. 152



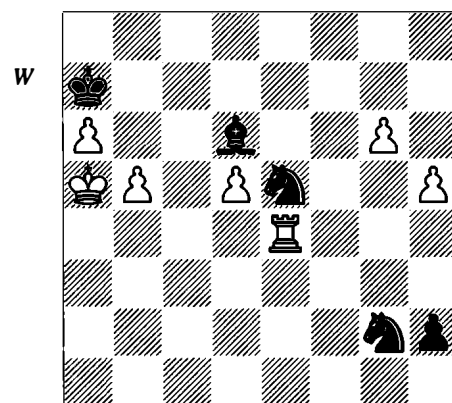
**128)** White to play and win  
Solution on p. 155



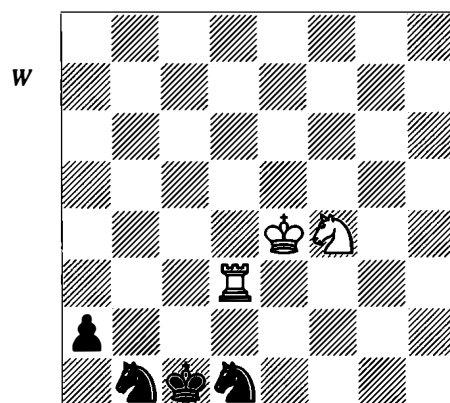
**126)** White to play and win  
Solution on p. 153



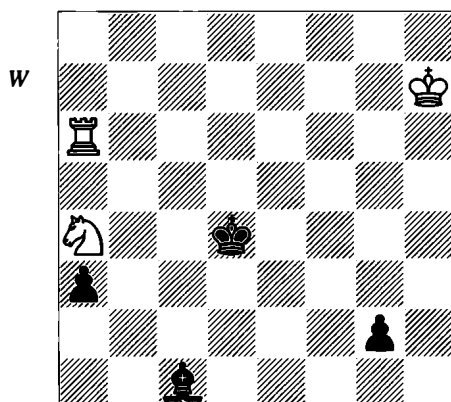
**129)** White to play and win  
Solution on p. 155



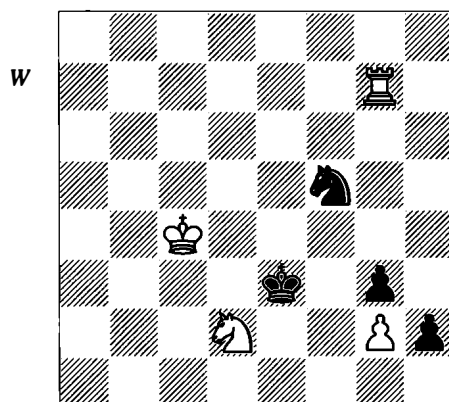
**127)** White to play and win  
Solution on p. 154



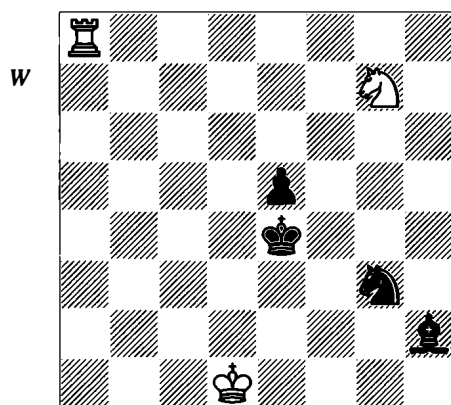
**130)** White to play and draw  
Solution on p. 156



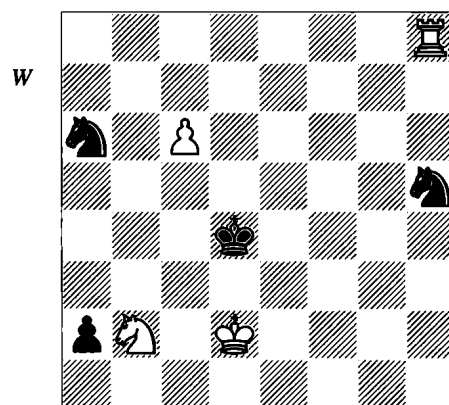
**131)** White to play and draw  
Solution on p. 157



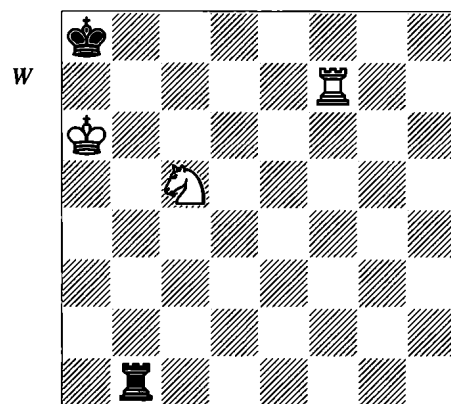
**134)** White to play and draw  
Solution on p. 159



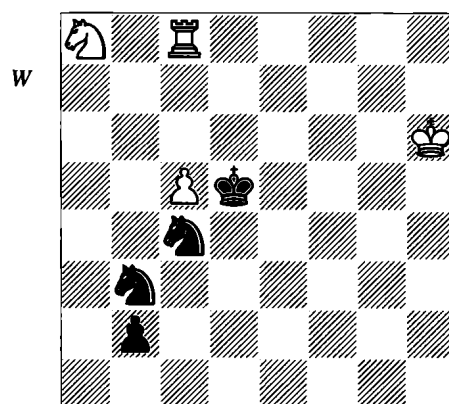
**132)** White to play and win  
Solution on p. 158



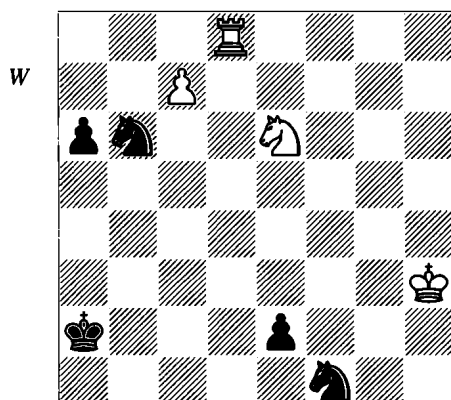
**135)** White to play and draw  
Solution on p. 160



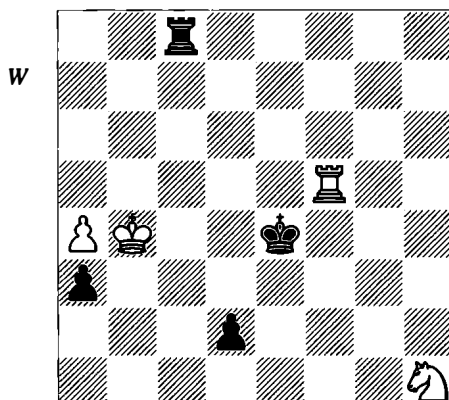
**133)** White to play and win  
Solution on p. 158



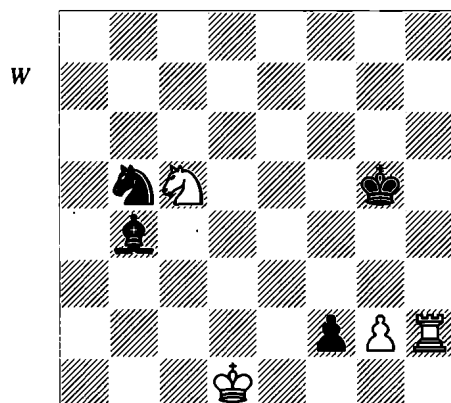
**136)** White to play and draw  
Solution on p. 161



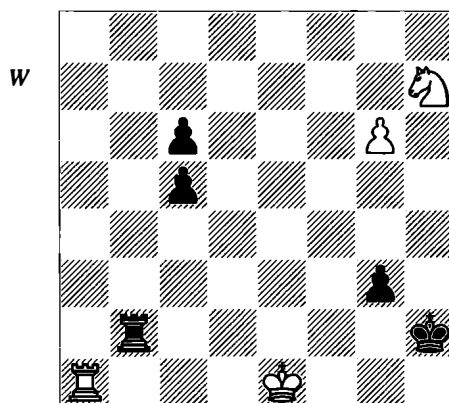
**137)** White to play and draw  
Solution on p. 161



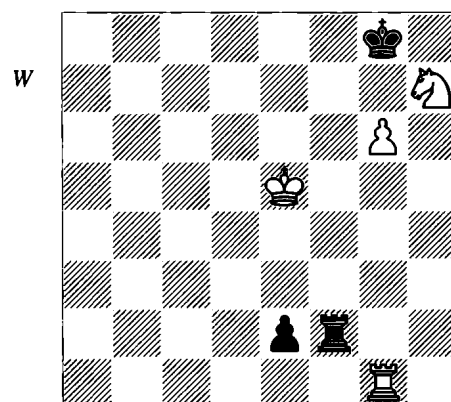
**140)** White to play and draw  
Solution on p. 163



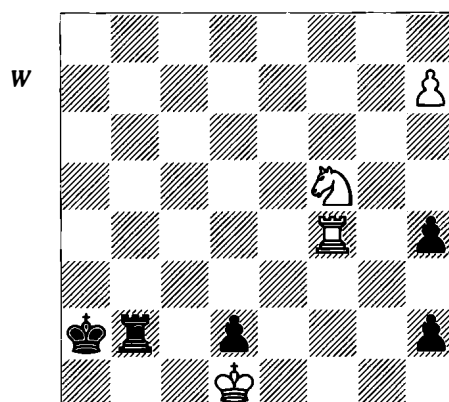
**138)** White to play and win  
Solution on p. 162



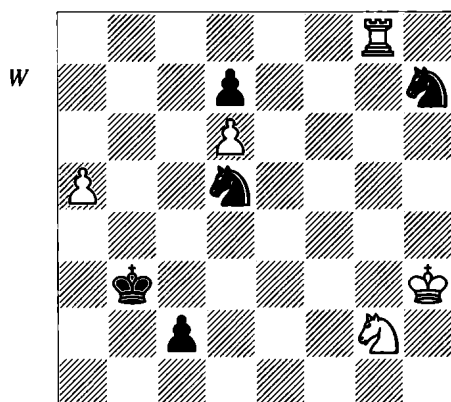
**141)** White to play and win  
(White may still castle)  
Solution on p. 164



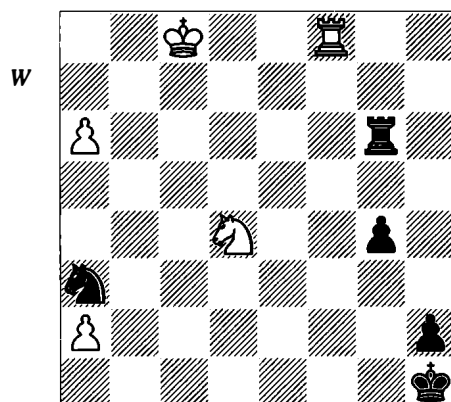
**139)** White to play and win  
Solution on p. 163



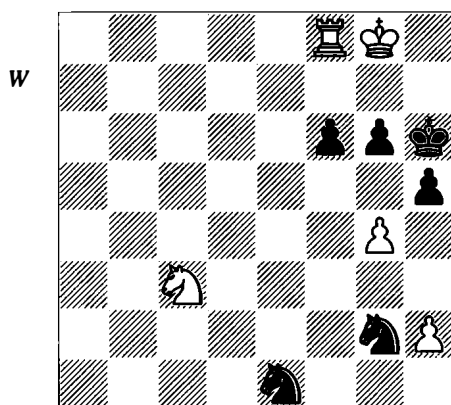
**142)** White to play and win  
Solution on p. 165



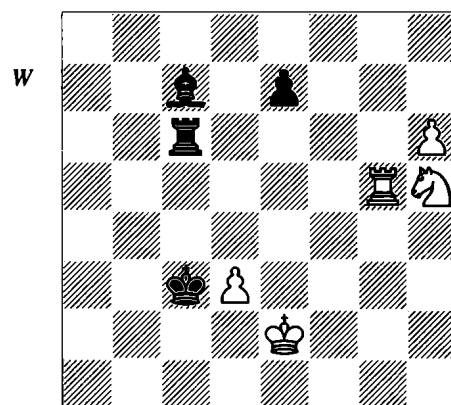
**143)** White to play and draw  
Solution on p. 165



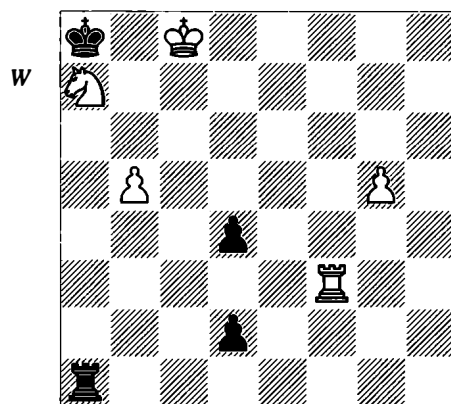
**146)** White to play and draw  
Solution on p. 167



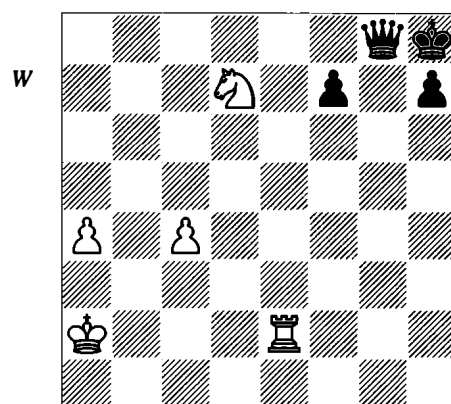
**144)** White to play and win  
Solution on p. 166



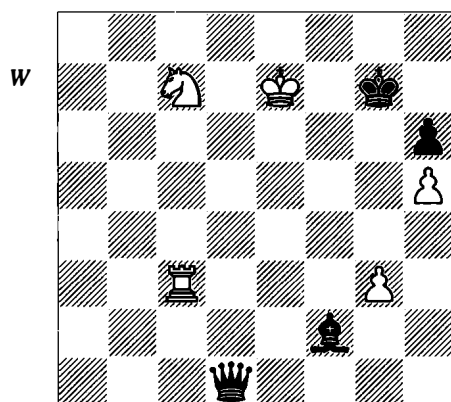
**147)** White to play and win  
Solution on p. 168



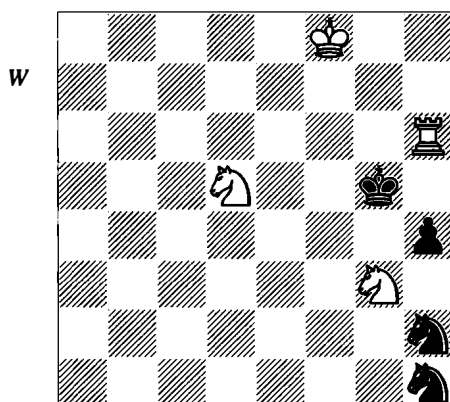
**145)** White to play and win  
Solution on p. 167



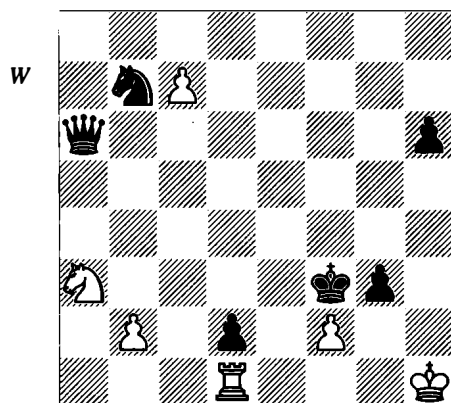
**148)** White to play and win  
Solution on p. 169



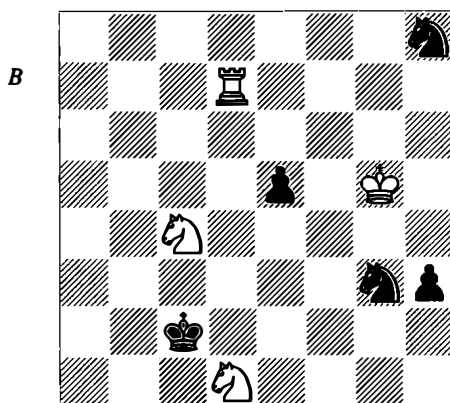
**149)** White to play and draw  
Solution on p. 170



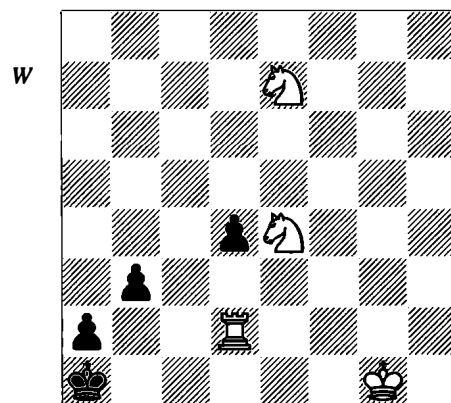
**152)** White to play and win  
Solution on p. 172



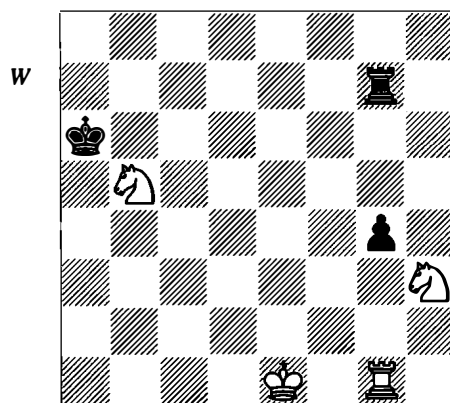
**150)** White to play and win  
Solution on p. 170



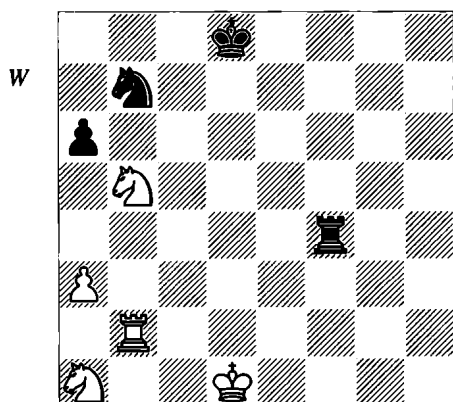
**153)** Black to play, White to win  
Solution on p. 172



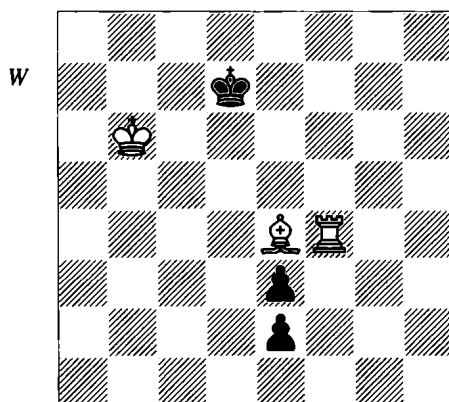
**151)** White to play and win  
Solution on p. 171



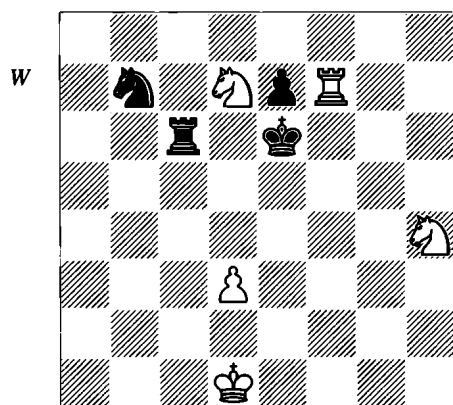
**154)** White to play and win  
Solution on p. 173



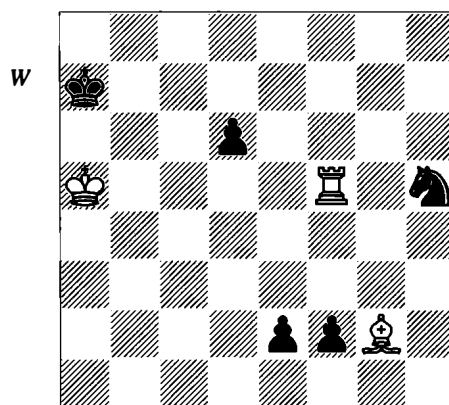
**155)** White to play and win  
Solution on p. 174



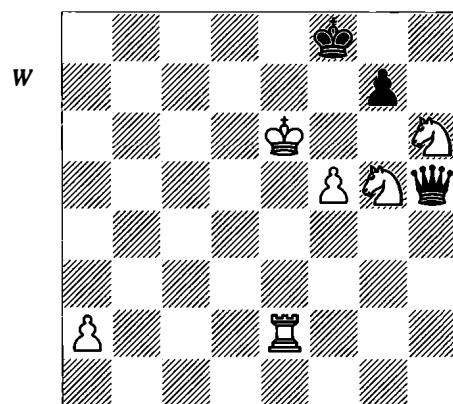
**158)** White to play and win  
Solution on p. 176



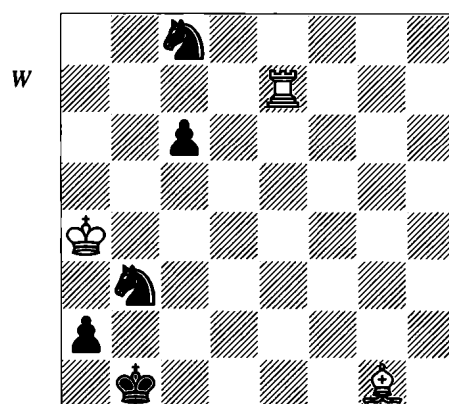
**156)** White to play and win  
Solution on p. 175



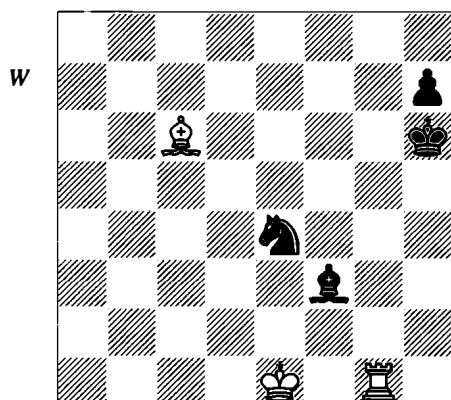
**159)** White to play and win  
Solution in p. 177



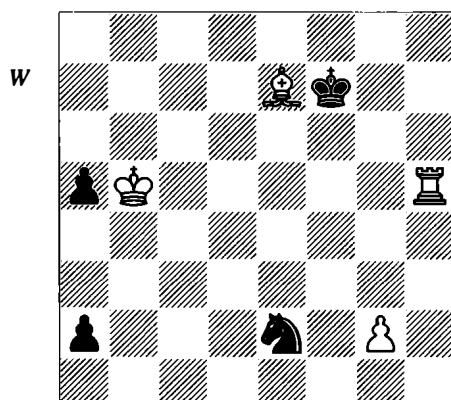
**157)** White to play and win  
Solution on p. 176



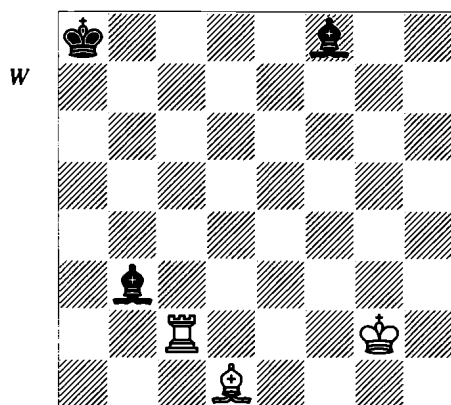
**160)** White to play and draw  
Solution on p. 177



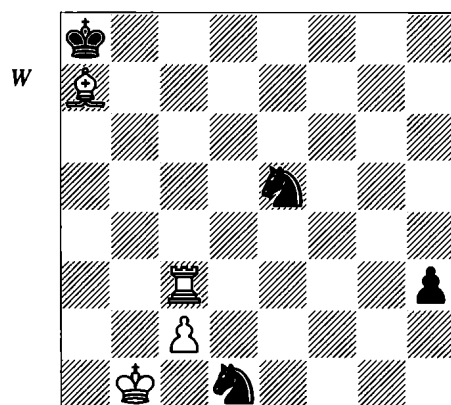
**161)** White to play and win  
Solution on p. 178



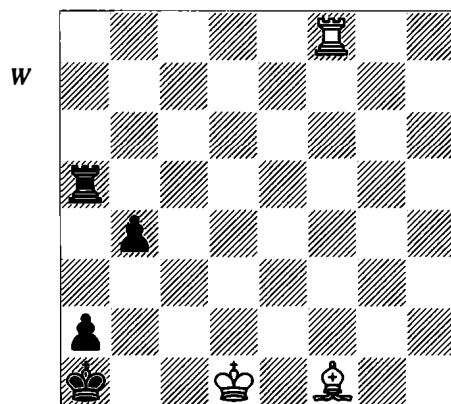
**164)** White to play and draw  
Solution on p. 181



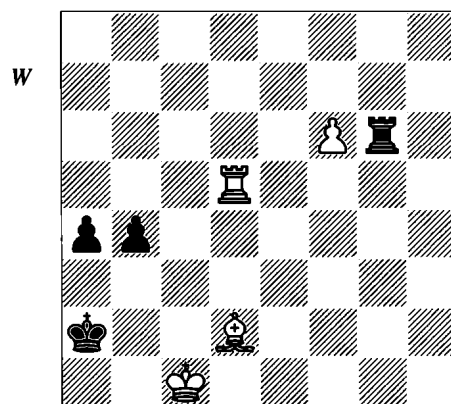
**162)** White to play and win  
Solution on p. 179



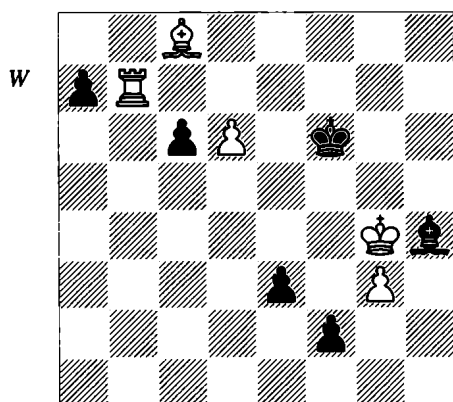
**165)** White to play and win  
Solution on p. 181



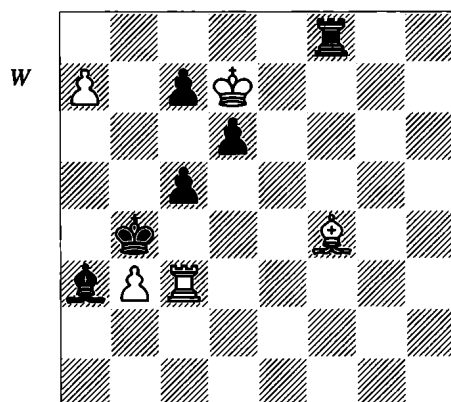
**163)** White to play and draw  
Solution on p. 180



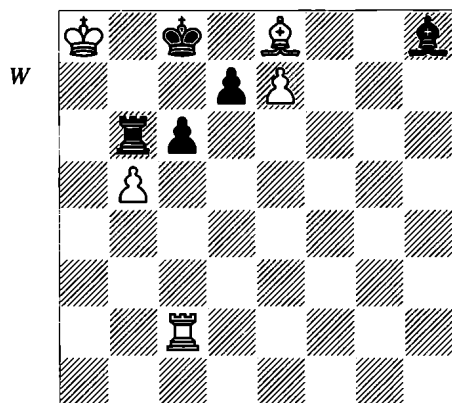
**166)** White to play and win  
Solution on p. 182



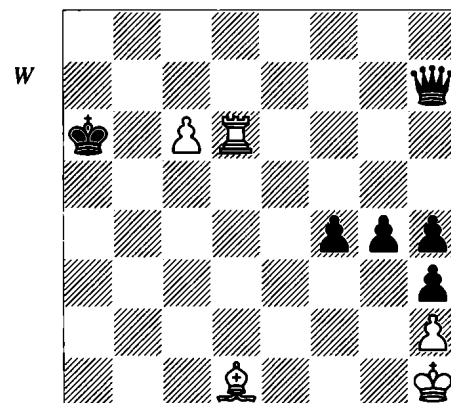
**167)** White to play and win  
Solution on p. 183



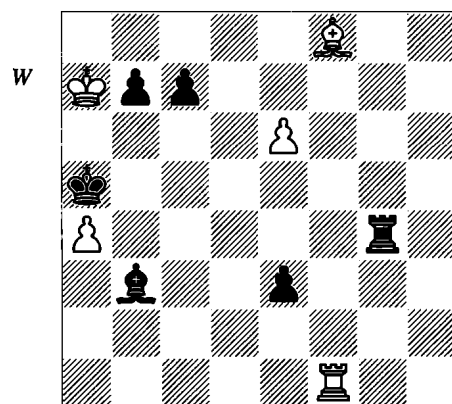
**170)** White to play and win  
Solution on p. 185



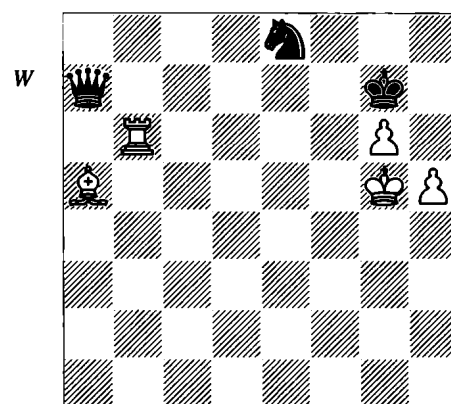
**168)** White to play and win  
Solution on p. 184



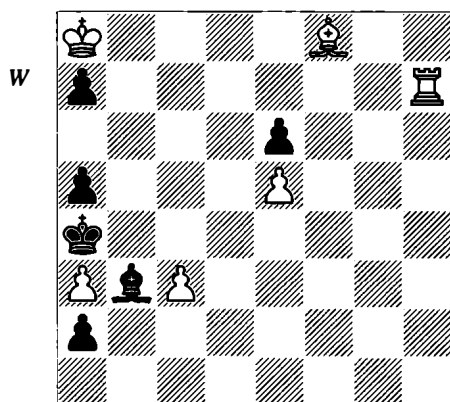
**171)** White to play and draw  
Solution on p. 186



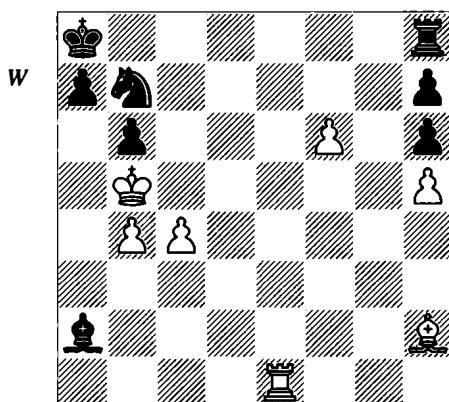
**169)** White to play and win  
Solution on p. 184



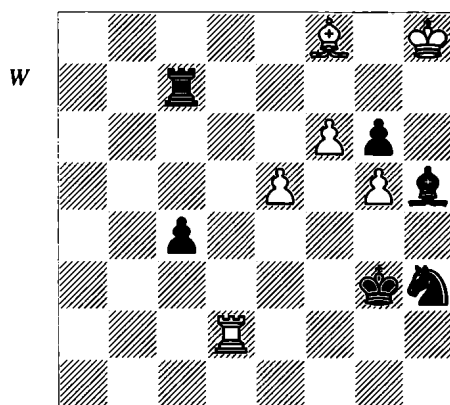
**172)** White to play and win  
Solution on p. 187



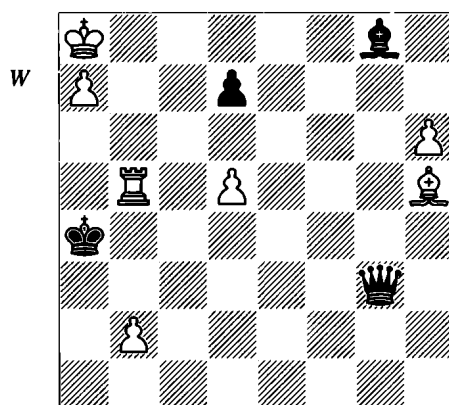
**173)** White to play and draw  
Solution on p. 188



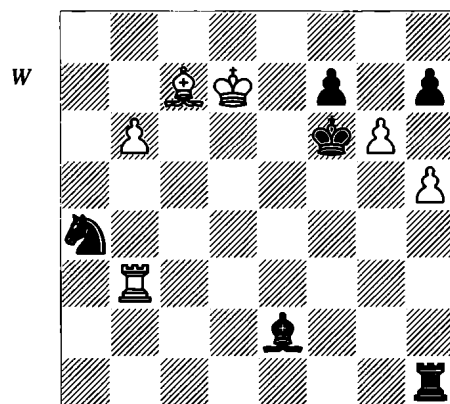
**176)** White to play and win  
Solution on p. 189



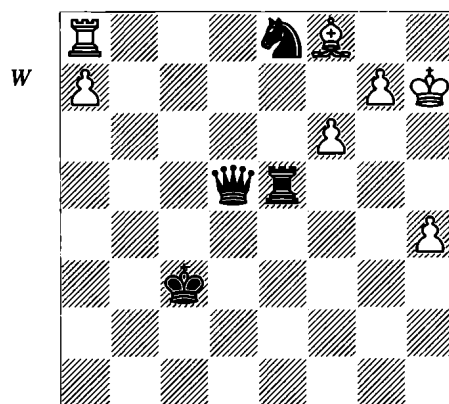
**174)** White to play and win  
Solution on p. 188



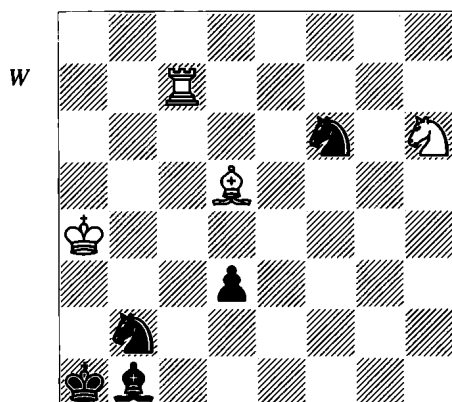
**177)** White to play and win  
Solution on p. 190



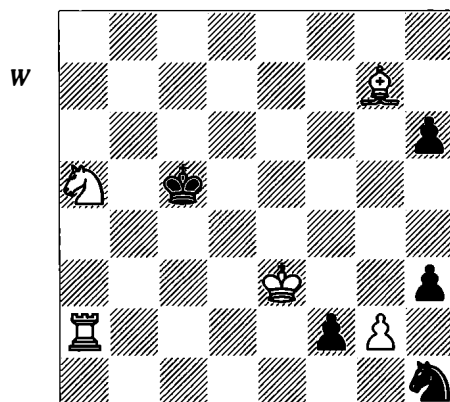
**175)** White to play and win  
Solution on p. 189



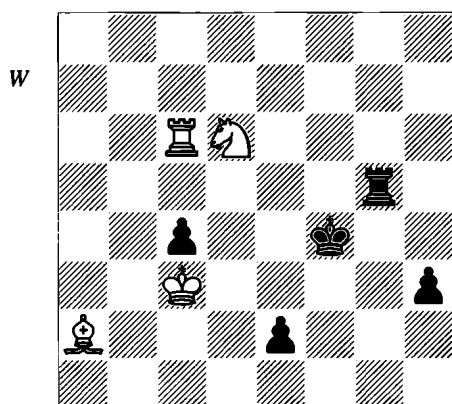
**178)** White to play and draw  
Solution on p. 191



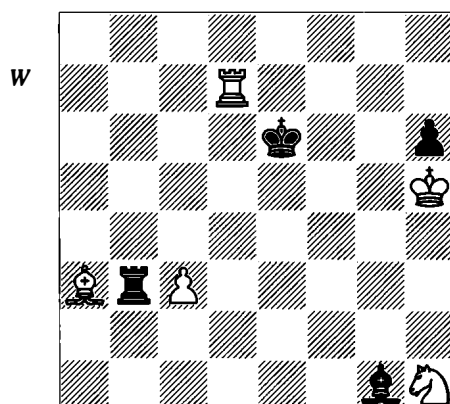
**179)** White to play and draw  
(White's king is in check)  
Solution on p. 192



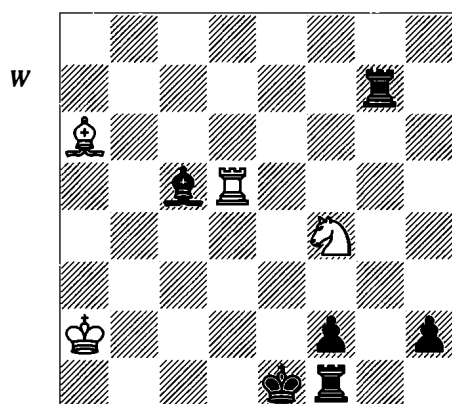
**182)** White to play and win  
Solution on p. 194



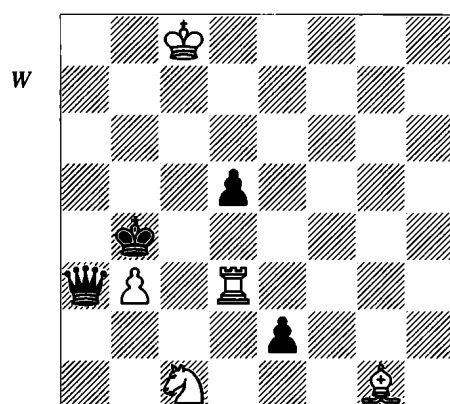
**180)** White to play and draw  
Solution on p. 193



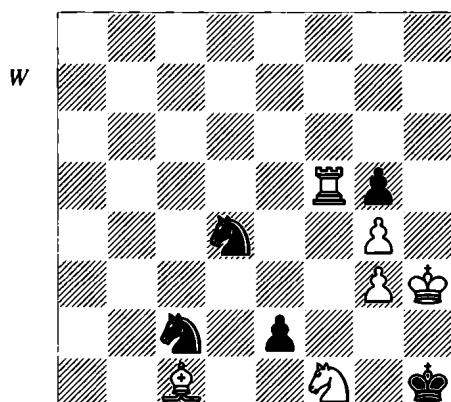
**183)** White to play and win  
Solution on p. 195



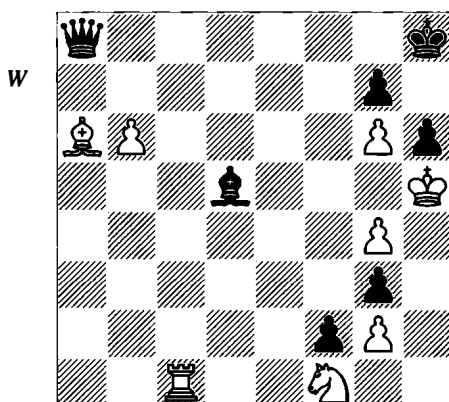
**181)** White to play and win  
Solution on p. 194



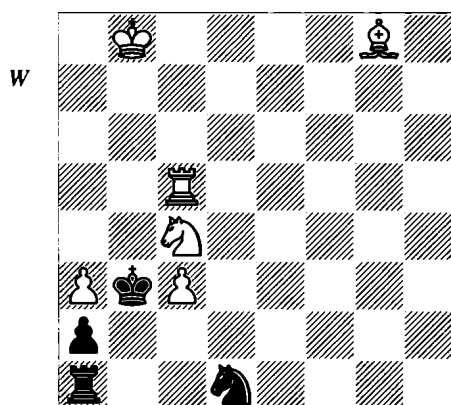
**184)** White to play and draw  
Solution on p. 196



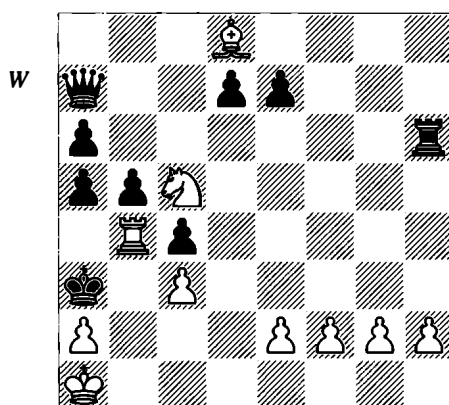
**185)** White to play and draw  
Solution on p. 196



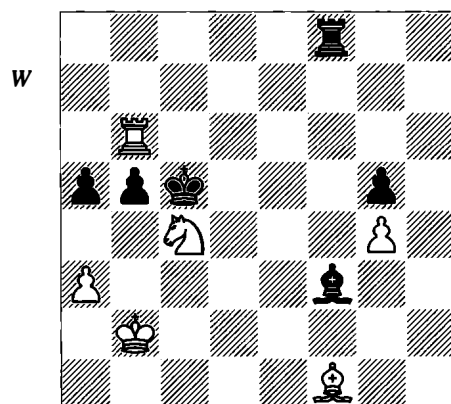
**188)** White to play and win  
Solution on p. 199



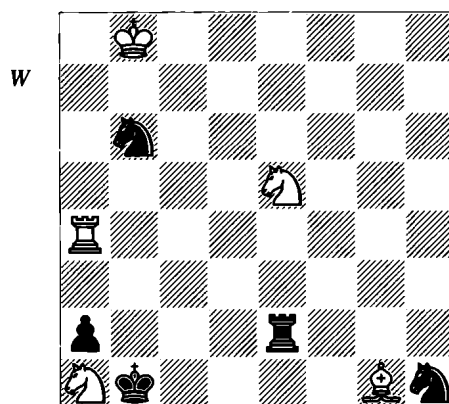
**186)** White to play and win  
Solution on p. 197



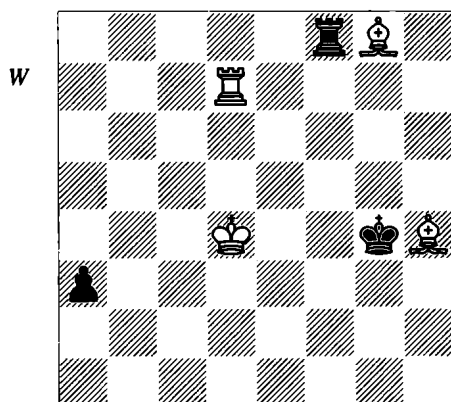
**189)** White to play and win  
Solution on p. 200



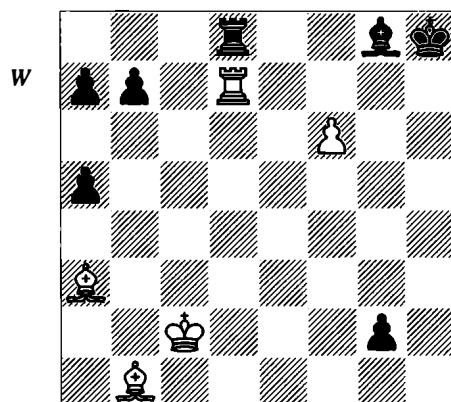
**187)** White to play and win  
Solution on p. 198



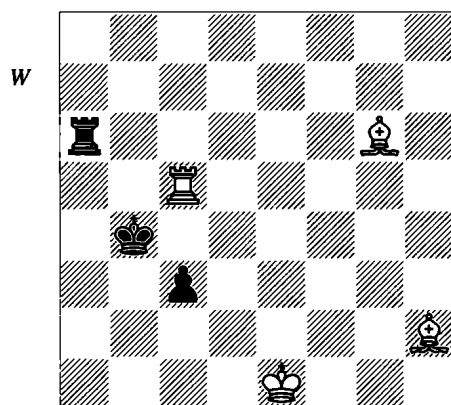
**190)** White to play and win  
Solution on p. 201



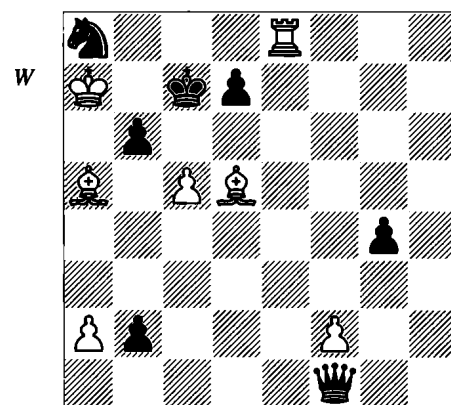
**191)** White to play and win  
Solution on p. 202



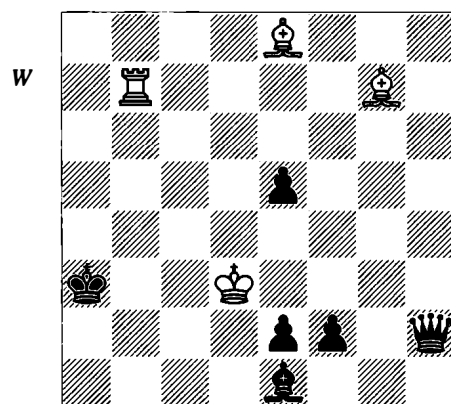
**194)** White to play and win  
Solution on p. 204



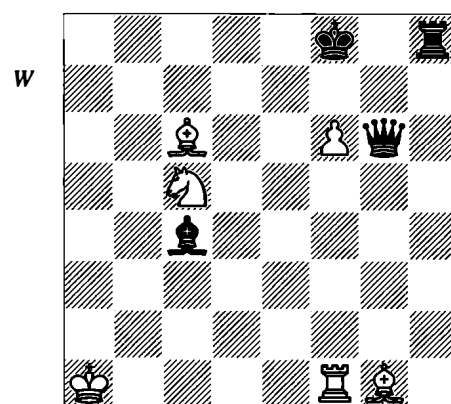
**192)** White to play and win  
Solution on p. 202



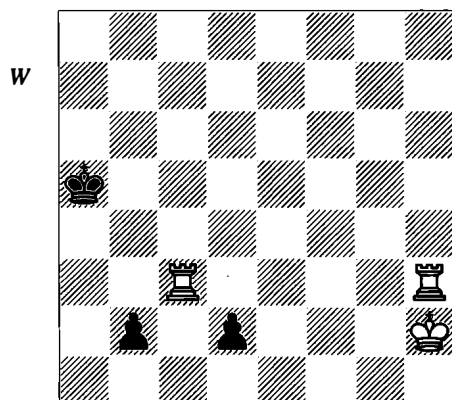
**195)** White to play and win  
Solution on p. 206



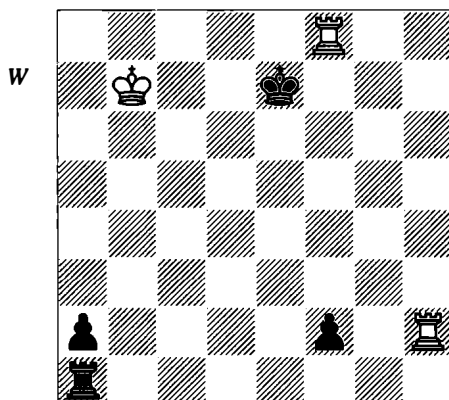
**193)** White to play and win  
Solution on p. 203



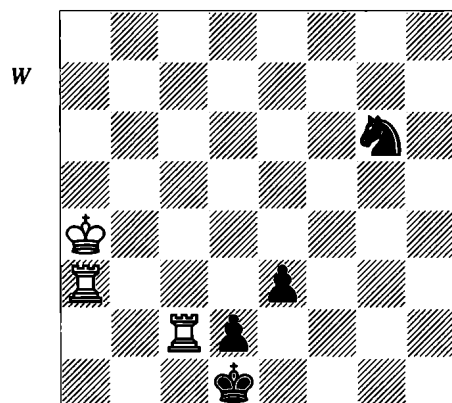
**196)** White to play and draw  
Solution on p. 207



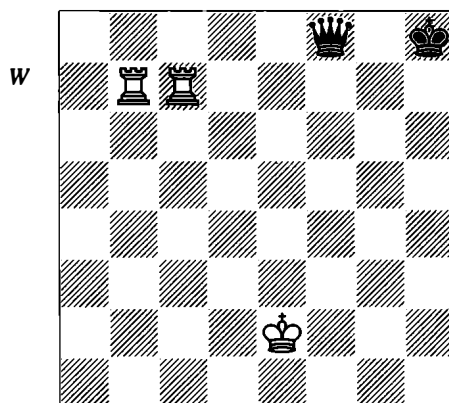
**197)** White to play and win  
Solution on p. 207



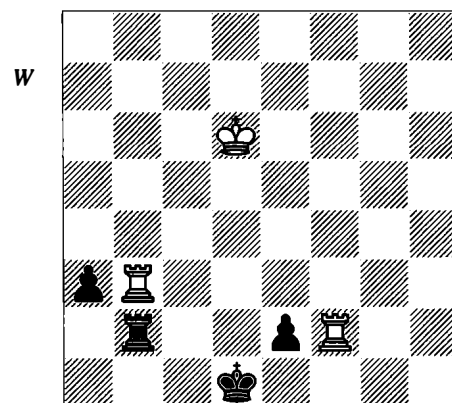
**200)** White to play and draw  
Solution on p. 210



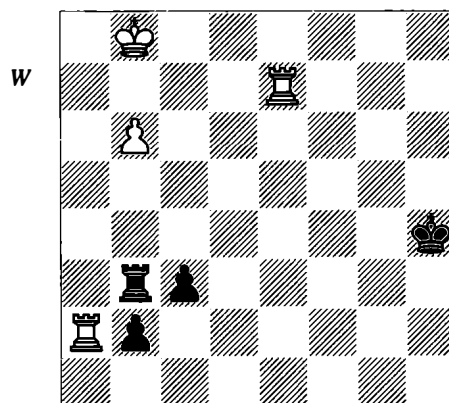
**198)** White to play and win  
Solution on p. 208



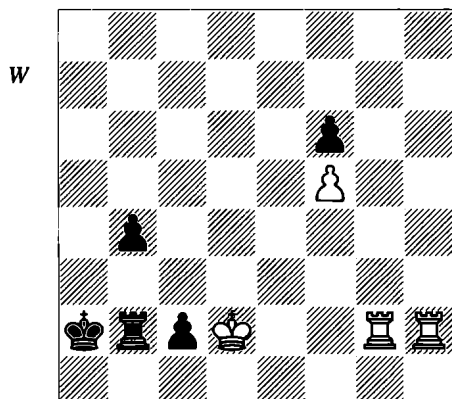
**201)** White to play and win  
Solution on p. 211



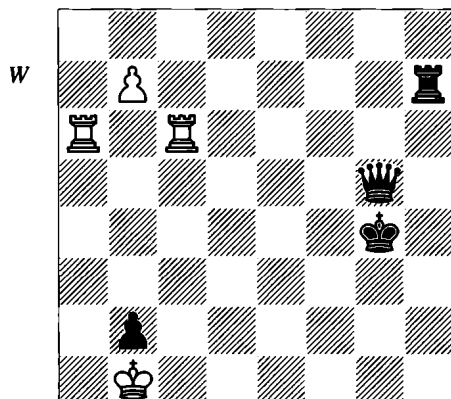
**199)** White to play and draw  
Solution on p. 209



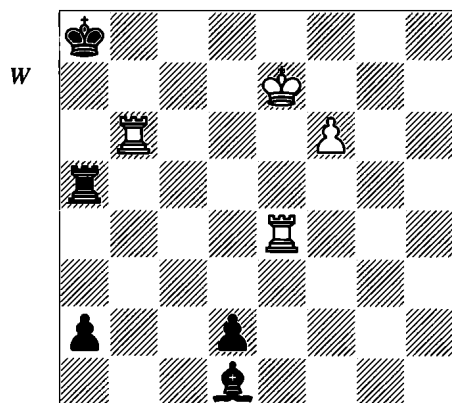
**202)** White to play and draw  
Solution on p. 212



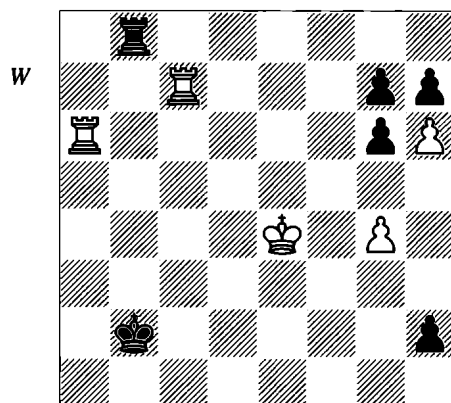
**203)** White to play and win  
Solution on p. 212



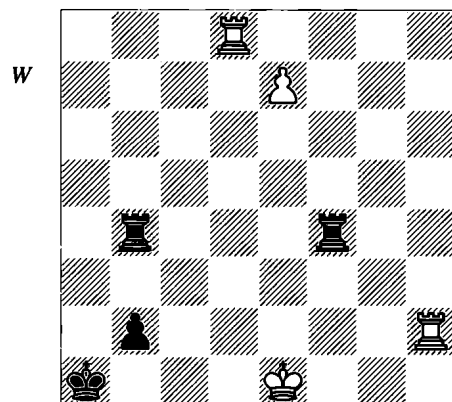
**206)** White to play and win  
Solution on p. 215



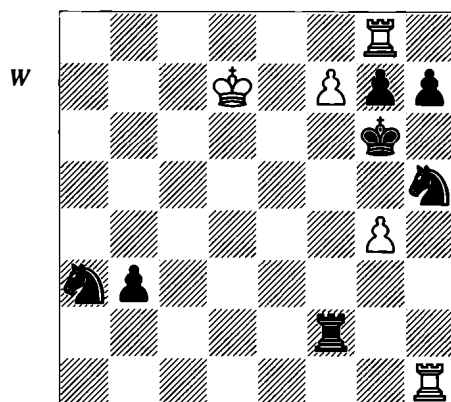
**204)** White to play and draw  
Solution on p. 213



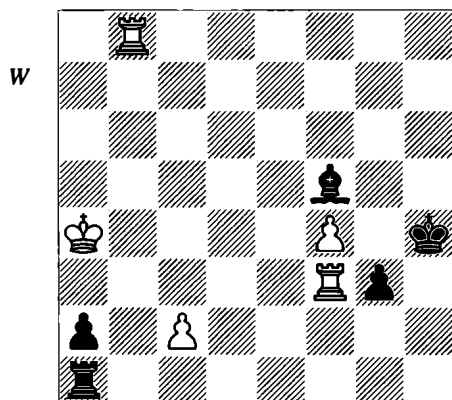
**207)** White to play and draw  
Solution on p. 215



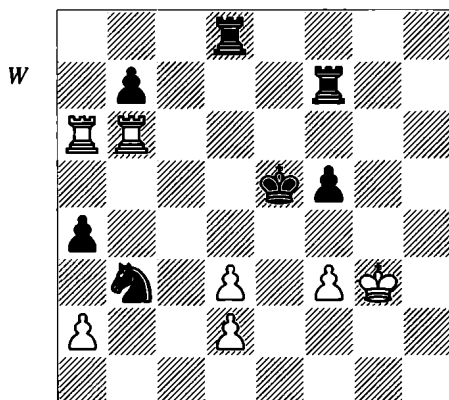
**205)** White to play and win  
Solution on p. 214



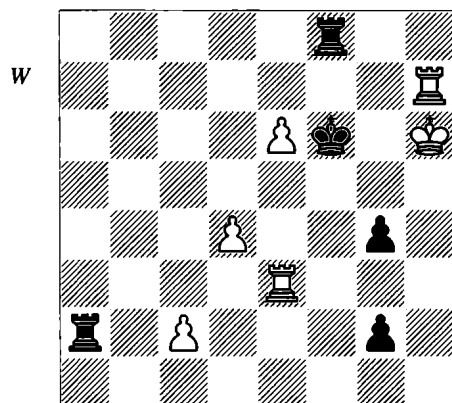
**208)** White to play and win  
Solution on p. 216



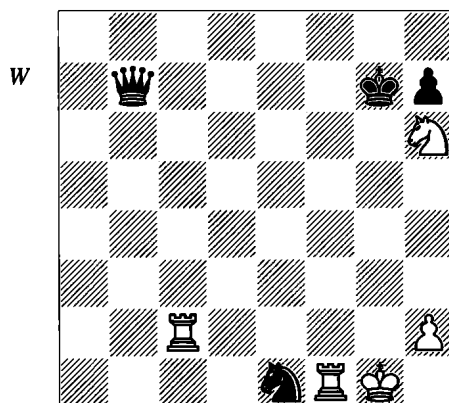
**209)** White to play and draw  
Solution on p. 216



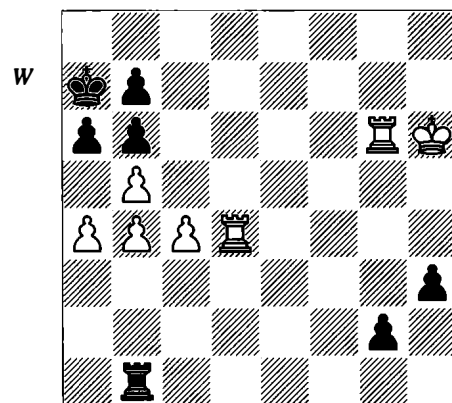
**212)** White to play and draw  
Solution on p. 219



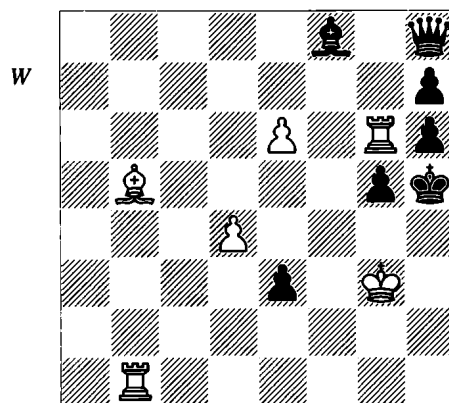
**210)** White to play and draw  
Solution on p. 217



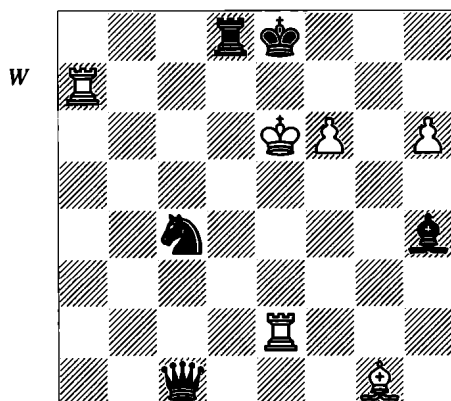
**213)** White to play and win  
Solution on p. 220



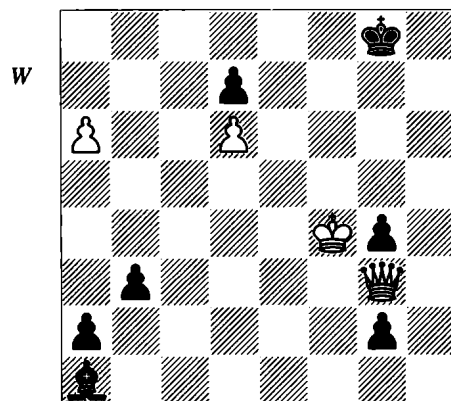
**211)** White to play and win  
Solution on p. 218



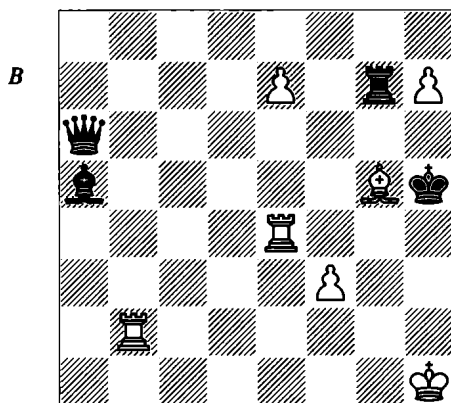
**214)** White to play and win  
Solution on p. 220



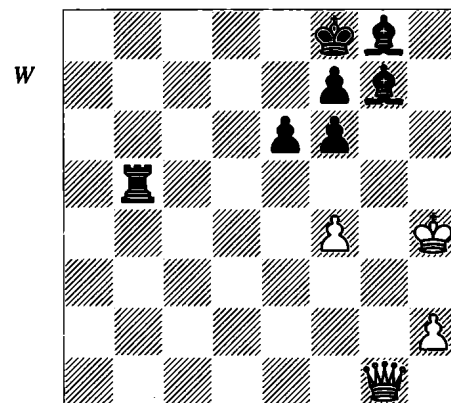
**215)** White to play and win  
Solution on p. 221



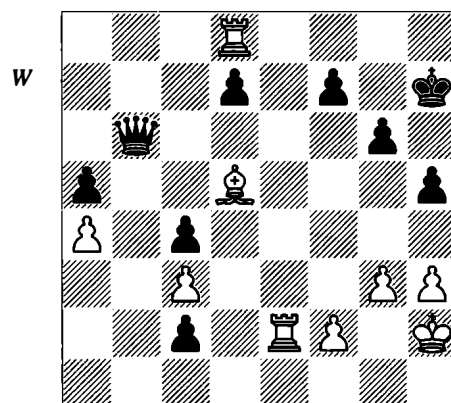
**218)** White to play and win  
Solution on p. 224



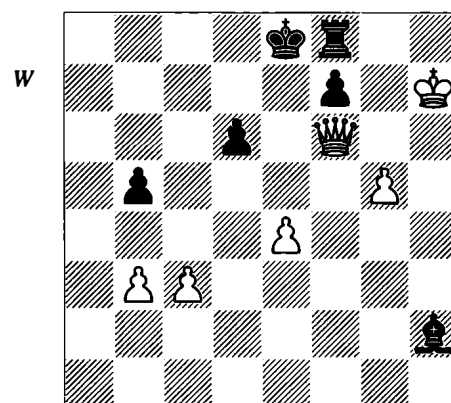
**216)** Black to play, White to draw  
Solution on p. 222



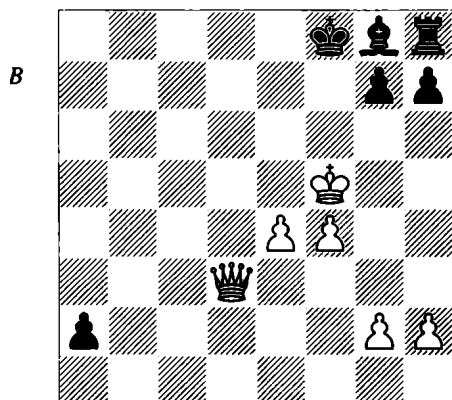
**219)** White to play and draw  
Solution on p. 224



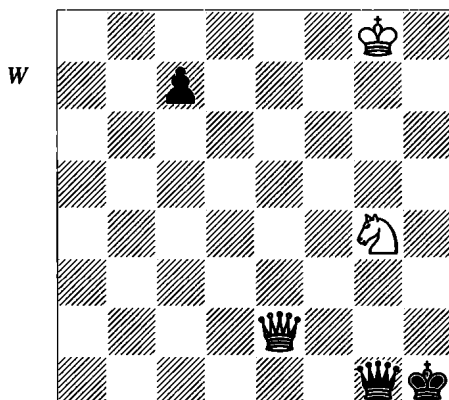
**217)** White to play and win  
Solution on p. 222



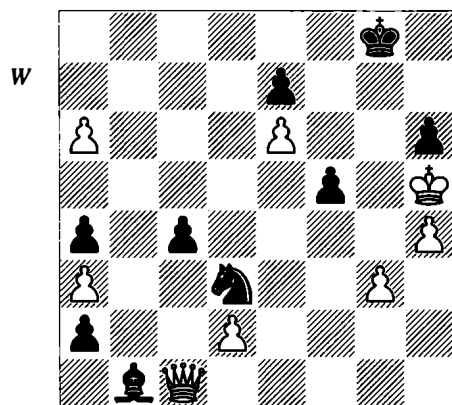
**220)** White to play and win  
Solution on p. 225



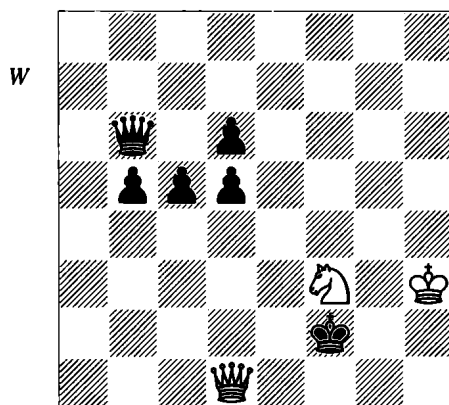
**221)** Black to play, White to draw  
Solution on p. 226



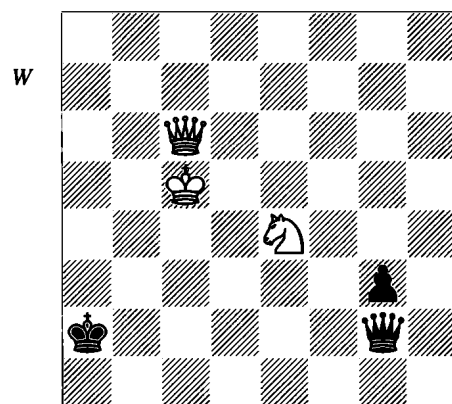
**224)** White to play and win  
Solution on p. 228



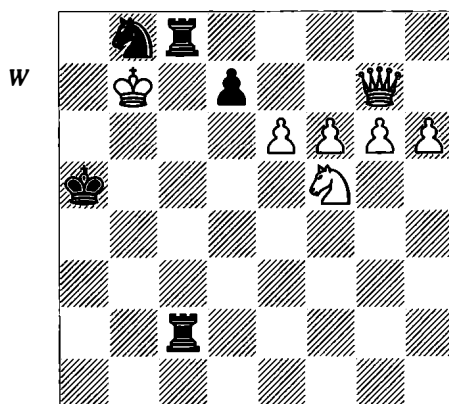
**222)** White to play and draw  
Solution on p. 227



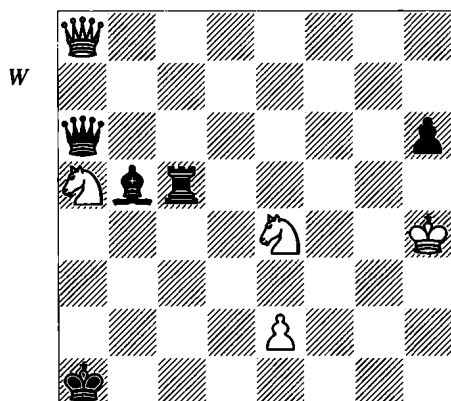
**225)** White to play and win  
Solution on p. 229



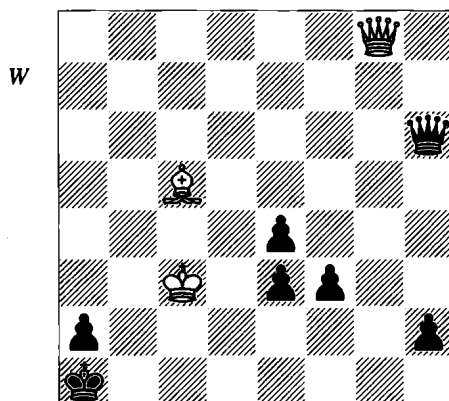
**223)** White to play and win  
Solution on p. 228



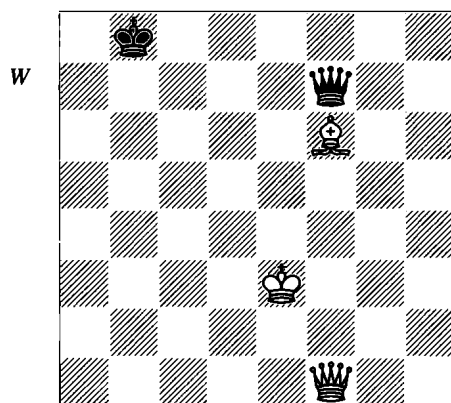
**226)** White to play and draw  
Solution on p. 230



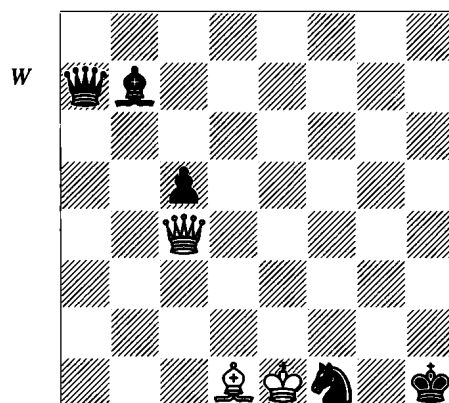
**227)** White to play and win  
Solution on p. 231



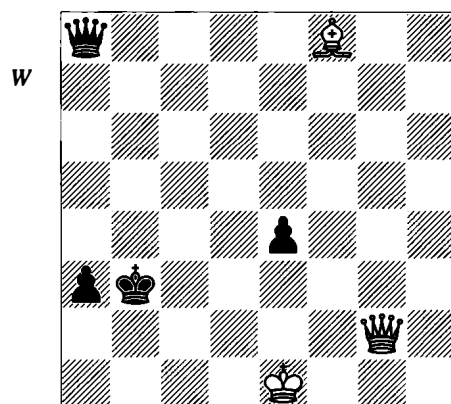
**230)** White to play and win  
Solution on p. 233



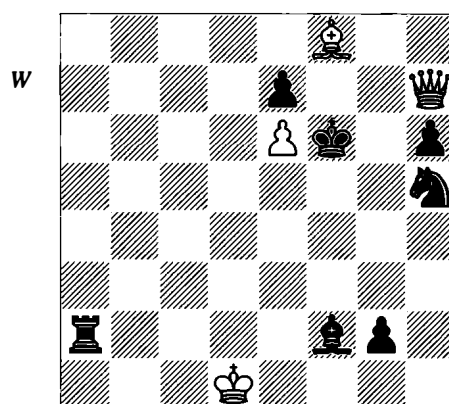
**228)** White to play and win  
Solution on p. 232



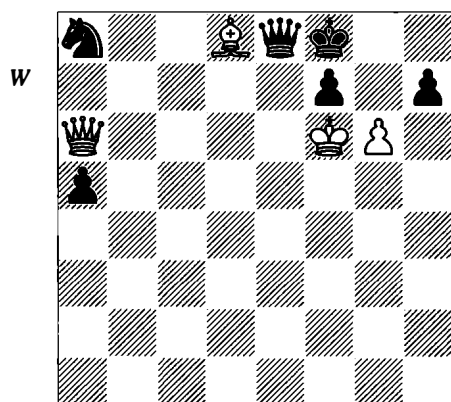
**231)** White to play and win  
Solution on p. 234



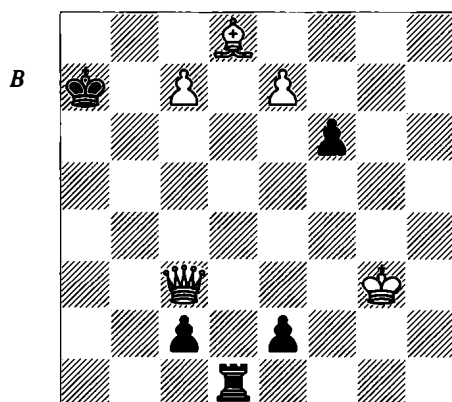
**229)** White to play and win  
Solution on p. 233



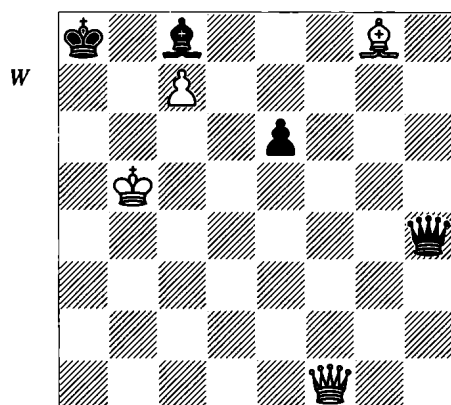
**232)** White to play and win  
Solution on p. 235



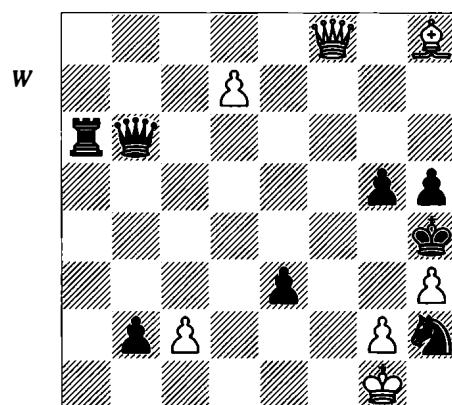
**233) White to play and win**  
Solution on p. 236



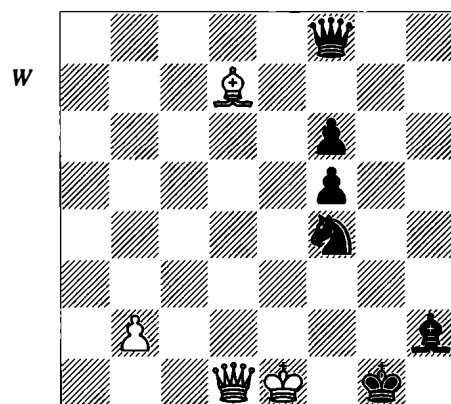
**236) Black to play, White to win**  
Solution on p. 237



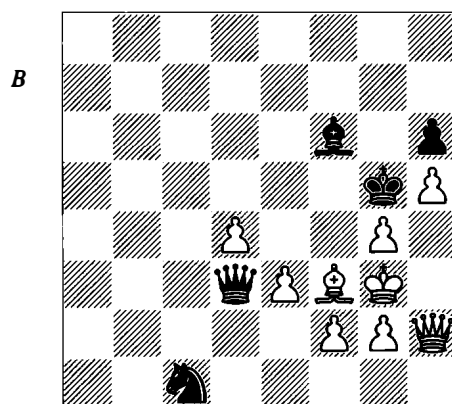
**234) White to play and win**  
Solution on p. 236



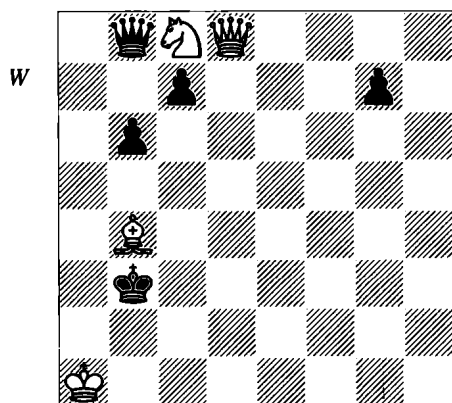
**237) White to play and win**  
Solution on p. 239



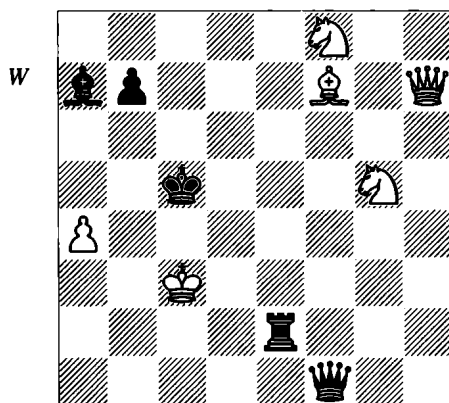
**235) White to play and win**  
Solution on p. 237



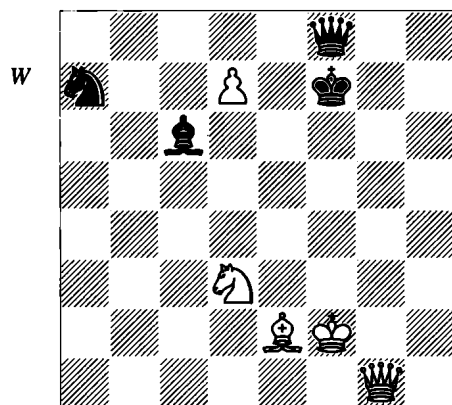
**238) Black to play, White to win**  
Solution on p. 240



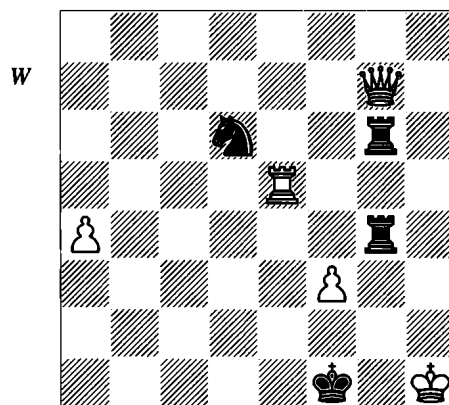
**239)** White to play and win  
Solution on p. 240



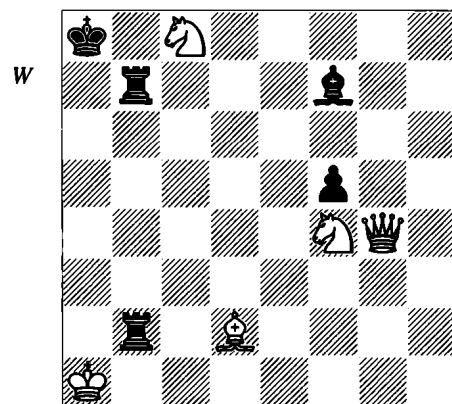
**242)** White to play and win  
Solution on p. 243



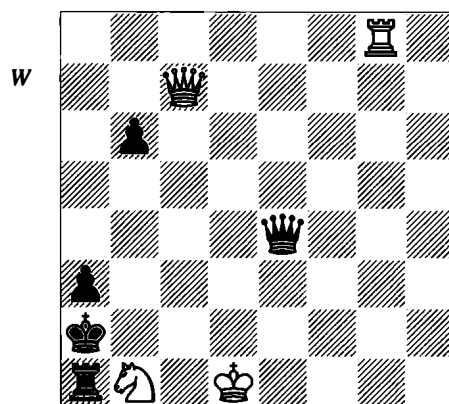
**240)** White to play and win  
Solution on p. 241



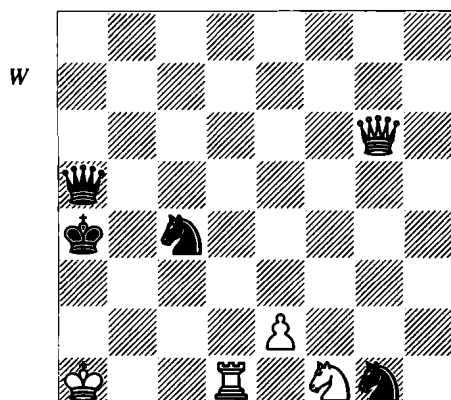
**243)** White to play and win  
Solution on p. 244



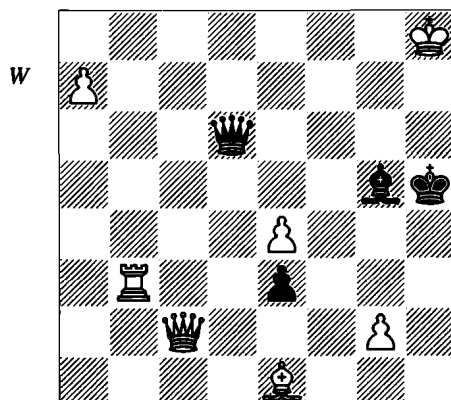
**241)** White to play and draw  
Solution on p. 242



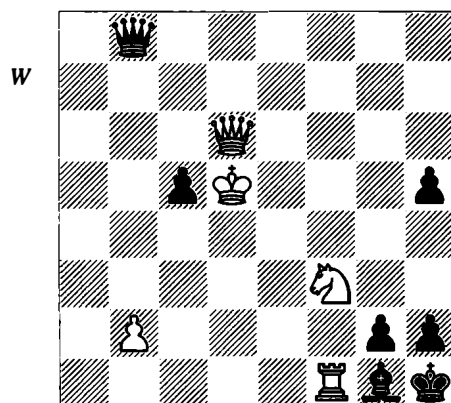
**244)** White to play and draw  
Solution on p. 245



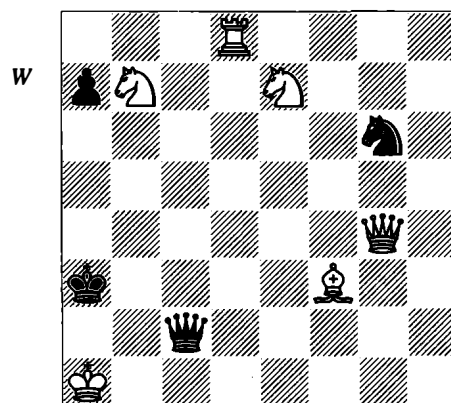
**245)** White to play and draw  
Solution on p. 246



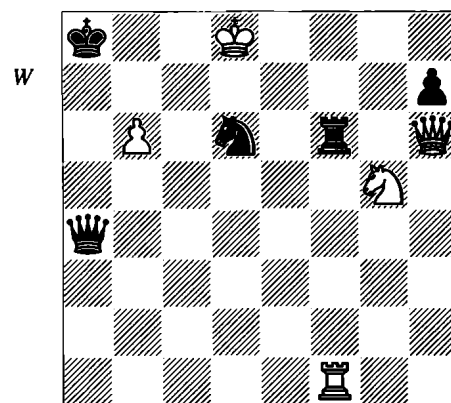
**248)** White to play and win  
Solution on p. 248



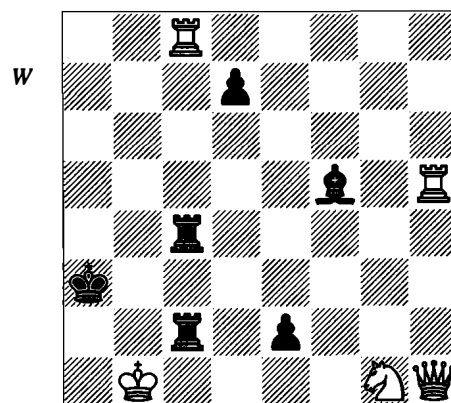
**246)** White to play and win  
Solution on p. 246



**249)** White to play and win  
Solution on p. 250



**247)** White to play and draw  
Solution on p. 247



**250)** White to play and win  
Solution on p. 251

# Solutions

## 1) N. Grigoriev

*Shakhmaty v SSSR*, 1932

It appears that Frink published a very similar position in 1927, but Grigoriev's version is slightly better and is the one usually quoted.

**1 ♖f5!**

It is no good just pushing the a-pawn with 1 a4?, since Black can draw by 1...c5 or 1...♙e4. White must use his king both to contain Black's c-pawn and to prevent Black's king from stopping his own a-pawn. Not, however, 1 ♖f6? ♙e4 2 ♙e6 ♖d4 with a draw.

**1...♙e3**

After 1...c5 2 ♙e5 ♙e3 3 ♖d5 White captures the c-pawn, whereupon he is free to advance his a-pawn.

**2 ♙e5**

Once again White must shoulder Black's king away.

**2...c6!**

The only chance is to keep White's king out of d5, since after 2...♖d3 3 ♖d5 c6+ 4 ♖c5 ♖c3 5 a4 the pawn promotes.

**3 a4**

3 ♖d6? allows 3...♖d4 4 ♖xc6 ♖c4, capturing White's pawn.

**3...♖d3**

Black has to spend another tempo with his king, so White promotes first.

**4 a5 c5 5 a6 c4 6 a7 c3 7 a8♚ c2**

The key position. In general, a queen against a black pawn on c2 is a draw, due to a stalemate defence: when Black's king is on b1 and White plays ♚b3+, Black need not block the pawn but can reply ...♖a1. Here, however, there are two features that operate in White's favour. Firstly, Black's king is poorly placed to apply the stalemate defence; if it were on b2 the position would indeed be drawn. Secondly, White's king is relatively close to the pawn. However, despite these advantages White has only one winning move.

**8 ♚d5+!**

Or:

1) 8 ♚a1? does not make progress since after 8...♖d2 9 ♚a2 ♖c3! (not 9...♖d1?, which loses to 10 ♖d4 c1♚ 11 ♖d3) White has to check again.

2) 8 ♚e4+? ♖d2 9 ♚d4+ ♙e2 10 ♚c3 (10 ♚b2 ♖d1 11 ♚b3 ♖d2 12 ♚a2 ♖c3 draws as in line '1', while after 10 ♚e4+ ♖d2 11 ♚d5+ ♖e1! it is clear that White has missed his chance) 10...♖d1 11 ♚d3+ ♖c1 (White has one spare move while Black's king crosses to the other side of the pawn, but even with this tempo White cannot bring his king close enough to win) 12 ♖d4 ♖b2 13 ♚e2 (13 ♚d2 ♖b1) 13...♖a1! (13...♖b1? loses to 14 ♖c3 c1♚+ 15 ♖b3) 14 ♖c3 c1♚+ 15 ♖b3 ♚b1+ is a draw.

**8...♙e2**

Other moves allow White to blockade the pawn with his queen:

1) 8...♖c3 9 ♚d4+ ♖b3 10 ♚a1.

2) 8...♙e3 9 ♚g2! is the key tactical point – thanks to the skewer White can bring his queen to c1; e.g., 9...♖d3 (9...c1 ♚ 10 ♚g5+) 10 ♚g5.

**9 ♚a2!**

The preliminary check on d5 has caused Black's king to lose contact with the drawing square c3, so now this wins.

**9...♖d1 10 ♖d4**

10 ♙e4 is just as good.

**10...c1♚ 11 ♖d3**

Forcing mate.

## 2) F. Saavedra (correcting G. Barbier)

*Glasgow Weekly Citizen*, 1895

This classic position will doubtless be familiar to many readers, but for those new to it, the amount of play derived from such limited material is remarkable.

**1 c7 ♖d6+**

Black cannot prevent the pawn promotion directly, so he can only check with his rook. Note that if Black's king were on b1, he would have a draw by 1...♖d2 2 c8♚ ♖b2+ followed

by perpetual check, but in the current position this fails because c2 is not defended.

## 2 ♖b5

The king cannot go up the board since 2 ♖b7? ♜d7 eliminates the pawn, while 2 ♖c5? ♜d1 also leads to a draw. Thus White's king is constrained to move down the b-file.

## 2...♜d5+ 3 ♖b4

The same logic applies.

## 3...♜d4+ 4 ♖b3

4 ♖c3 ♜d1 5 ♖c2 is equally good.

## 4...♜d3+ 5 ♖c2

Now there is no room for a skewer, so White can happily switch his king to the c-file, cutting out any further checks. Still, Black has one shot left in his locker.

## 5...♜d4!

An ingenious defence. Now if 6 c8♝, then 6...♜c4+ 7 ♝xc4 is stalemate. At first it seems that White has nothing better than to repeat moves by 6 ♖b3 ♜d3+ or 6 ♖c3 ♜d1, but there is an astonishing resource.

## 6 c8♝!!

Black made use of the confined position of his king to set up his stalemate defence, but now White exploits the same factor to launch a mating attack!

## 6...♜a4

There is no longer a stalemate, so this is the only way to prevent ♜a8+ followed by mate.

## 7 ♖b3!

The final point. White threatens both 8 ♜c1# and 8 ♖xa4, so Black loses his rook.

### 3) M. Zinar

1st Special Pr., *Shakhmaty v SSSR*, 1981

Let's take a look at the most obvious tries for White:

1) 1 e4? allows 1...♖d6 2 ♖e8 ♖e5 3 ♖d7 ♖xe4 4 ♖xc7 ♖d3, winning the last pawn.

2) 1 e3? ♖d5 2 ♖e7 ♖e4 3 c4 ♖xe3 4 c5 ♖d4 5 ♖d7 only draws.

3) 1 ♖e7? blocks the e-pawn and allows Black to draw by 1...♖c4! 2 ♖e6 (2 e4 ♖xc3 3 e5 c5 4 ♖d6 c4 5 e6 ♖d2 6 e7 c3 7 e8♝ c2 is also a draw) 2...♖xc3 3 ♖d5 ♖b4! 4 e4 c5 and both sides promote at the same time.

4) 1 ♖f7? avoids blocking White's e-pawn, so that now 1...♖c4? loses to 2 e4, but after 1...♖d5! White is in a quandary. 2 ♖e7 ♖c4! is

a draw as before, while 2 ♖f6 ♖c4! 3 e4 ♖xc3 4 e5 c5 5 e6 c4 6 e7 ♖d2! 7 e8♝ c3 saves the game because White cannot prevent the pawn from advancing to c2 with a standard theoretical draw (see No. 1). What is special about this position is the location of the white king: after 8 ♖d8+ (8 ♖d7+ ♖c1 is also drawn) 8...♖c1 White lacks the otherwise winning move 9 ♖g5+.

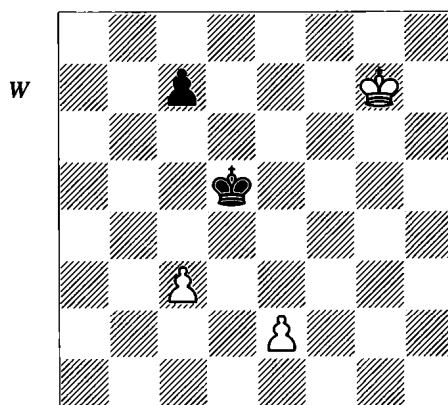
We have looked at all the likely candidates now, so perforce we must move on to the unlikely ones. 1 ♖g8? is unlikely, but it doesn't work: after 1...♖c4 2 e4 c5 White cannot play 3 e5? because of 3...♖d5, when White even loses.

## 1 ♖g7!!

This is the remarkable winning move, paradoxically taking the king away from the action. White is again threatening to win with 2 e4, but on g7 the king is not blocking any vital lines.

## 1...♖d5 (D)

Preventing 2 e4. 1...♖c4 2 e4 c5 3 e5 ♖xc3 4 e6 and 1...♖d6 2 ♖f6 ♖d5 3 ♖f5 ♖c4 4 e4 c5 5 e5 ♖xc3 6 e6 are both wins for White for similar reasons. It is only on f6 and the e-file that the white king gets in the way; when it is on other squares White has no trouble winning with a queen against a pawn on c3.



## 2 ♖f7!

As you have probably already guessed, this is a position of reciprocal zugzwang. 2 ♖f6? is wrong due to 2...♖c4, transposing to the analysis of 1 ♖f7?.

## 2...♖e5

Black cannot avoid making a concession, but this is the best try. Other moves:

1) 2...♟c4 3 e4 ♟xc3 4 e5 c5 5 e6 ♟d2 6 e7 c4 7 e8♚ c3 8 ♚d8+ wins for White as the queen has a check on g5.

2) 2...c5 loses to 3 ♟e7 ♟e5 4 ♟d7 ♟d5 5 ♟c7.

3) 2...c6 allows the white king access to d6, and loses to 3 ♟e7 ♟c4 4 ♟d6 ♟xc3 (4...c5 5 ♟c6) 5 ♟c5.

3 ♟e7

Black's king has lost contact with the c4-square for a moment, and White seizes his chance to cross the e-file.

3...♟d5 4 ♟d7 ♟c4

4...c5 loses to 5 ♟c7. The text-move sets a final trap.

5 ♟c6!

Not 5 e4? ♟xc3 6 e5 c5 7 e6 ♟d2 8 e7 c4 9 e8♚ c3 drawing, since White has no check.

5...♟xc3 6 ♟c5!

Black cannot prevent the e-pawn from promoting.

#### 4) D. Joseph (version by unknown, 1923) *British Chess Magazine*, 1922

1 b6+!

The only chance. 1 h4? axb5 2 h5 b4 3 h6 b3 4 h7 b2 5 h8♚ b1♚ leads to an ending in which White is worse (although it is a draw with accurate play), while 1 bxa6?? even loses to 1...b5 2 h4 b4 3 h5 b3 4 h6 b2 5 h7 b1♚ 6 h8♚ ♚b8+, when Black wins the queen.

1...♟b8!

Black sets up a cunning stalemate defence. 1...♟xb6 2 h4 is an easy win for White since his promotion on h8 prevents Black's promotion on a1.

2 h4 a5 3 h5 a4 4 h6 a3 5 h7 a2 6 h8♚

6 h8♚? is a mistake because after 6...a1♚ 7 ♠xa1 Black has a fortress.

6...a1♚

Now the real struggle begins. White has to move his queen, but where? In order to retain winning chances, White must keep up the threats against Black's king, so he is restricted to a queen move along the eighth rank. However, the correct destination is far from clear.

7 ♚g8!

The only move to win. 7 ♚f8? ♚a3! is a draw, because if White's queen moves along the eighth rank, then Black plays ...♚d6+, winning

the b6-pawn. 7 ♚e8? ♚g7! is a position of reciprocal zugzwang; White to play cannot keep his queen on the eighth rank, and so Black draws easily.

7...♚a2

Black's only chance is to repeat his stalemate attempt.

8 ♚e8!

Once again we can operate by elimination. 8 ♚f8? fails as before, while we know that 8 ♚h8? cannot be correct as it allows Black to repeat the position. In fact, it even throws away the win as 8...♚e6! is a good reply.

8...♚a4

Once again forced. Now White reveals why e8 is a good square for his queen.

9 ♚e5+!

White first of all forces Black's king to a8, destroying the stalemate...

9...♟a8 10 ♚h8!

...and then returns to the back rank to renew the mating threat. White's queen has to be on e8 for this to work, since otherwise the 'triangle' extends beyond the edge of the board (for example, from g8 White would have to play to g3 and then '18'). After the text-move, there is no defence and it is mate in a couple of moves.

This position is not that originally published by Joseph, but a version by an unknown Czechoslovak composer which appeared in *Československa Republika* in 1923.

It is interesting to note that No. 8 has a somewhat similar position to this study, although the play is quite different.

#### 5) N. Grigoriev

1st Pr., *Shakhmaty v SSSR*, 1937

While this study is based on the opposition, there are some subtle finesses which make the play particularly interesting. White's plan is to block the kingside pawns with g4 at a moment when he has the opposition, and then march the kings towards the pawns, all the time retaining the opposition. Finally White will reach the position ♟f5 vs ♟f3 (with his pawn on g4) with Black to play. Then White wins after 1...♟g2 2 ♟g6 ♟h3 3 ♟h5!, when Black loses both his pawns. White has the opposition in the diagram, so the immediate 1 g4 suggests itself. This advance is in fact the correct move, but it

is interesting to see why White's alternatives fail:

1) 1 ♖b5? ♜b2! (1...♜b3? 2 g4 transposes to the main line of the study, but by taking the 'anti-opposition' Black prevents White from blocking the kingside pawns) 2 ♜c5 (2 g4 ♜b3! shows how Black converts the 'anti-opposition' into a direct opposition if White plays g4; 2 ♜c6 ♜c3! again maintains the anti-opposition) 2...♜c2! 3 ♜d5 ♜d2 4 ♜e5 ♜e2 5 ♜f6 (5 ♜f5 ♜f2 6 g4 ♜f3 is an easy draw, but the text-move looks dangerous, as the anti-opposition square f3 is unavailable) 5...g4 (5...♜f2? 6 g4! hands the opposition to White) 6 ♜f5 (6 g3? ♜f2 7 ♜f5 ♜f3 8 ♜g6 ♜g2 9 ♜h5 ♜h3, winning for Black, is a curious mirror image of the main line of the study) 6...g3 7 hxg3 ♜f2 draws.

2) 1 ♜b6? ♜b3 draws by the same logic as line '1'.

### 1 g4 ♜a3

Black fights a delaying action. 1...♜b2 2 ♜b6 and 1...♜b3 2 ♜b5 only help White since he is aiming to force the kings to the other side of the board.

### 2 ♜a5!

White cannot move to the b-file yet because 2 ♜b5? ♜b3 gives Black the opposition and 2 ♜b6? ♜b4 is a draw whoever moves first.

### 2...♜a2

2...♜b3 is met by the obvious 3 ♜b5, but 2...♜b2 is more subtle. The winning move is 3 ♜b6! and not 3 ♜b4?, when Black draws by 3...♜c2 4 ♜c4 ♜d2 5 ♜d4 ♜e2 6 ♜e4 ♜f2 because the opposition square f4 is out of bounds for White's king. There is nothing better than 7 ♜f5 ♜f3 with a draw.

After the text-move, White faces a problem. How can he move his king to the b-file without losing the opposition?

### 3 ♜b6!

This move provides the answer – White can play ♜b6 provided that Black is unable to reply ...♜b4, in other words when his king is on a2. The reason is that, despite appearances, only the position ♜b5 vs ♜b3 is a valid opposition. With ♜b6 vs ♜b2 White wins whoever moves first, while ♜b4 vs ♜b2 and ♜b6 vs ♜b4 are drawn whoever moves first. The same holds true on the other queenside files. This position shows that situations involving the opposition should never be taken at face value; it is always

necessary to supplement general principles with concrete analysis.

### 3...♜b3

After 3...♜b2, White wins by 4 ♜c6 ♜c2 (4...♜c3 5 ♜c5 takes the opposition) 5 ♜d6 ♜d2 6 ♜e6 ♜e2 7 ♜f6 ♜f2 8 ♜g6 ♜f3 9 h3.

### 4 ♜b5

The logic repeats as the kings move across the board. White must force Black's king to b2, when ♜c6 cannot be answered by ...♜c4.

### 4...♜b2

After 4...♜c3 5 ♜c5 or 4...♜c2 5 ♜c6 Black loses more quickly.

5 ♜c6 ♜c3 6 ♜c5 ♜c2 7 ♜d6 ♜d3 8 ♜d5 ♜d2 9 ♜e6 ♜e3 10 ♜e5 ♜e2 11 ♜f6 ♜f3 12 ♜f5 ♜g2 13 ♜g6 ♜h3

Or 13...♜f3 14 h3.

### 14 ♜h5

White wins.

## 6) H. Keidanz

*Schweizerische Schachzeitung*, 1915

You will find the key winning idea (see move 7) in many contemporary books on endgame theory, since it is of considerable practical importance.

### 1 b6!

The right pawn to push, because it cuts out the check on c7. 1 a6? ♜c7+ 2 ♜b4 ♜d5! 3 b6 ♜c6 is an easy draw and 1 ♜c5? ♜f5+ likewise causes Black no problems.

### 1...♜f1!

By far the most resilient defence, aiming to harass White's king with checks from behind. 1...♜f2 is much worse since 2 b7 ♜b2 3 a6 wins at once.

### 2 a6!

Once again, White has to take care to advance the correct pawn. 2 b7? only draws after 2...♜c1+! 3 ♜b5 ♜d5 4 ♜b6 ♜b1+ 5 ♜c7 ♜c1+ 6 ♜d7 (or 6 ♜d8 ♜b1 7 a6 ♜c6 8 ♜c8 ♜h1) 6...♜b1 7 a6 ♜b6! 8 ♜c7 ♜c6+, when White cannot make progress.

### 2...♜c1+

In the absence of the kings, a rook cannot stop two connected passed pawns on the sixth (except if it can take one of the pawns immediately) so Black's only hope is to exploit the position of the white king.

### 3 ♜b4!

A difficult move to find, since 3 ♖b5? looks more natural. However, this allows 3... ♔d5! 4 a7 (4 b7? ♖b1+ 5 ♔a5 ♔c6 even wins for Black) 4... ♖b1+ 5 ♔a6 ♔c5 and Black draws.

**3... ♖b1+**

The alternative is 3... ♔d4, when White wins by 4 a7! (not 4 b7?, when Black can employ an important drawing technique: 4... ♖b1+ 5 ♔a3 ♔c3 6 ♔a2 ♖b6 7 a7 ♖a6+ 8 ♔b1 ♖b6+ 9 ♔c1 ♖h6! {the only move} 10 ♔d1 ♔d3 11 ♔e1 ♔e3 12 ♔f1 ♔f3 13 ♔g1 ♖g6+ and White's king cannot escape) 4... ♖b1+ 5 ♔a3! ♔c3 6 ♔a2 ♖b2+ 7 ♔a1 and this time there is no escape for Black.

**4 ♔c5**

Now the white king can slip away from the a- and b-files, but the struggle is not over yet.

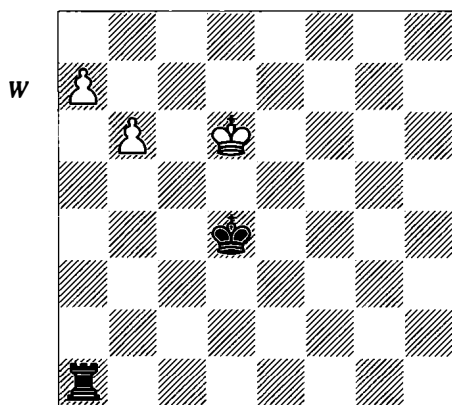
**4... ♖c1+ 5 ♔d6 ♖a1**

Black utilizes the position of the king on the sixth rank to cause further problems.

**6 a7**

6 b7? is wrong as the tactical point 6... ♖xa6+ 7 ♔c5 ♖a5+ 8 ♔c4 ♖a1! leads to a draw. The text-move threatens 7 b7, but Black finds a way to prevent this.

**6... ♔d4 (D)**



Confining the white king, and preparing to meet 7 b7? with 7... ♖a6+ followed by 8... ♖xa7.

**7 ♔e6!!**

This is the key move. Black has to oppose kings (or else White can play b7) but then White can march his king to the eighth rank without Black being able to attack the b6-pawn with his king. After 7 ♔c6 ♔c4 White can only win by returning to d6, while 7 ♔c7? throws the win away entirely due to 7... ♔c5.

**7... ♔e4**

7... ♖a6 8 ♔f5! and 7... ♖e1+ 8 ♔d7 ♖a1 9 ♔d8 are also winning for White.

**8 ♔d7**

Now is the time for White to make the decisive move.

**8... ♔d5 9 ♔c8**

White's king has made it across the dangerous seventh rank and now Black cannot prevent the advance of the b-pawn.

**9... ♔c6 10 b7 ♖h1**

In a practical game Black would doubtless prefer to limp on with 10... ♖xa7 11 b8♖ ♖f7, although this should not change the final result.

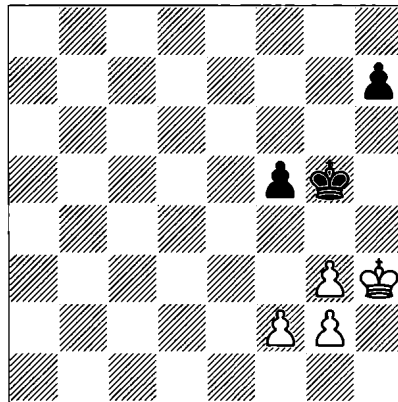
**11 b8♔+! ♔d6 12 a8♖**

White wins.

## 7) J. Nunn

'Brains of the Earth' Challenge, 1999

In order for the solution to make sense, we must first analyse two key positions of reciprocal zugzwang.



**Reciprocal Z1**

**Black to play:**

**1... h6**

Or:

1) 1... h5 2 f3 ♔g6 3 ♔h4 ♔h6 4 g4! hxg4 5 fxg4 fxg4 6 ♔xg4 ♔g6 7 g3 and White wins.

2) 1... ♔g6 2 g4 f4 3 ♔h4 h6 4 f3 is also a win for White.

3) 1... ♔h5 2 f4 is again reciprocal zugzwang, and the only reasonable move, 2... h6, then transposes to the main line.

**2 f4+ ♔h5 3 g4+! fxg4+ 4 ♔g3**

and White wins as Black no longer has a reserve tempo with his h-pawn.

The situation with White to play is more complex.

**White to play:**

1 ♖h2

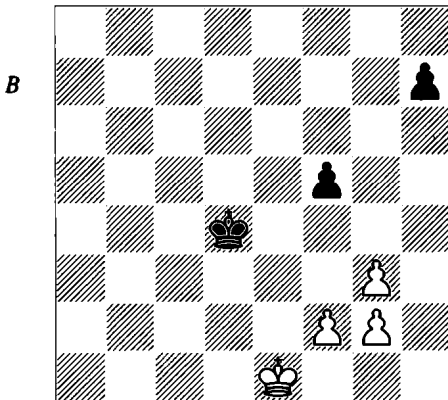
1 f3 (1 f4+ ♖h5 is now a draw as Black has the reserve tempo ...h6) 1...h5! 2 ♖h2 ♖g6 3 ♖g1 ♖f6 4 ♖f2 ♖e6! 5 ♖e2 ♖d6! (it is important to note that White cannot win with this pawn-structure unless he can gain the opposition with his king on the third rank, thereby ensuring access to f4) 6 ♖d2 ♖e6 7 ♖c3 (White cannot hope to make progress unless he executes a by-pass at some stage) 7...♖e5 8 ♖c4 f4 and Black secures the draw.

1...♖f6!

Black must rush in order to be sure of gaining the opposition when White's king arrives on the e-file. 1...♖g6? loses to 2 ♖g1! ♖f6 3 ♖f1 ♖e5 4 ♖e1 ♖d5 5 ♖d1 ♖e5 (5...h6 deprives Black of his reserve tempo and now White can win by playing his king back to h3: 6 ♖e2 ♖e4 7 ♖f1! ♖e5 8 ♖g1 ♖f6 9 ♖h2 ♖g6 10 ♖h3 ♖g5 11 f4+ ♖h5 12 g4+! fxg4+ 13 ♖g3) 6 ♖c2 ♖e4 (6...♖d4 loses to 7 ♖d2 ♖e4 8 ♖e2 ♖d5 9 ♖f3 ♖e5 10 g4 f4 11 g3) 7 ♖c3 h6 (or else the king reaches f3) 8 ♖d2 and White wins by heading to h3 as before.

2 ♖g1 ♖e5 3 ♖f1 ♖d4 4 ♖e1 (D)

4 ♖e2 ♖e4 is similar.



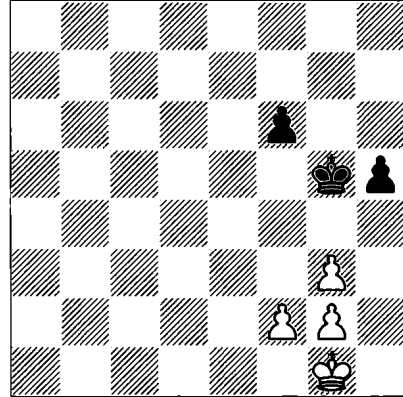
4...♖e5!

Play with this pawn-structure is governed by the opposition. Therefore, many positions with opposed kings are reciprocal zugzwang.

5 ♖d1 ♖d5! 6 ♖d2 ♖d4 7 ♖e2 ♖e4

and White cannot make progress.

With the black pawns on f5 and h7 we can summarize the situation by giving the network of corresponding squares for the kings: h3 vs g5, h2 vs f6, f1 vs d5, e1 vs e5, e2 vs e4, d1 vs d5, d2 vs d4. With White's king on g1, Black's king can be on either e6 or e5.



### Reciprocal Z2

This is the key reciprocal zugzwang when Black arranges his pawns on f6 and h5.

**Black to play:**

1...♖f5

Or:

1) 1...♖g6 2 ♖h2 ♖f5 3 ♖h3 ♖g5 4 f4+ ♖g6 5 g4 ♖h6 6 ♖h4 hxg4 7 ♖xg4 ♖g6 8 f5+ ♖f7 9 ♖h5 ♖g7 10 g3 ♖h7 11 ♖g4! ♖h6 12 ♖f3 ♖h5 13 ♖f4 ♖h6 14 g4 ♖g7 15 ♖e4 and White wins.

2) 1...♖g4 2 ♖h2! (another reciprocal zugzwang) 2...♖f5 (2...f5 3 f3+ ♖g5 4 ♖h3 ♖g6 5 ♖h4 ♖h6 6 g4) 3 ♖h3 transposes to line '1'.

2 f3!

Not 2 ♖h2? ♖g4!, when the reciprocal zugzwang arises with White to play; for example, 3 f3+ (3 ♖h1 ♖f5! is another reciprocal zugzwang) 3...♖g5! (this is a further reciprocal zugzwang) 4 ♖h3 (4 ♖g1 f5! 5 ♖f2 ♖f6! is a draw as White cannot gain the opposition without playing f4, but then the f4-square is not free for his king so the result is a draw in any case) 4...f5 with a fairly obvious final position of reciprocal zugzwang.

2...♖g5

2...♖e6 3 ♖h2! ♖f5 4 ♖h3 ♖g5 5 f4+ transposes to the analysis of 1...♖g6.

3 ♖f2 ♖f5 4 ♖e3 ♖e5 5 g4 hxg4 6 fxg4! ♖d6 7 ♖f4 ♖e6 8 g5

and White wins.

We can summarize the analysis of this position by saying that with Black's pawns on f6 and h5, play is governed by a network of corresponding squares: g1 vs g5, h1 vs f5, h2 vs g4, f1 vs f5, e2 vs e6, d2 vs d6, d1 vs d5, e1 vs e5. When the white king is on the f-file or further left, the opposition is the deciding factor, but when the king is near the h1-corner, matters are more complex.

### White to play:

The play with White to move is implicit in the Black-to-move analysis.

1 f3

The following lines are all in accordance with the network of corresponding squares established in the Black-to-play analysis: 1 ♖h1 ♖f5!, 1 ♖h2 ♖g4! and 1 ♖f1 ♖f5!.

1...f5!

This move establishes an important point. Playing f3 is ineffective if Black can set up a blockade with pawns on f5 and h5 – then White can only win if he gains the opposition and penetrates with his king to f4. However, when his king is on g1 this is clearly impossible.

2 ♖f2 ♖f6! 3 ♖e2 ♖e6!

White cannot make progress.

We can now give the solution of the study (in the following analysis, 'Z1W', for example, means zugzwang 1 with White to play). The position is extremely complex since the pawn-structure is not yet fixed, and Black can still choose between various pawn arrangements. Each arrangement gives rise to a network of corresponding squares, and White is not sure which network is going to arise. This is why we started by analysing the positions in which Black has committed his pawns.

1 ♖h2!

Amazing as it may seem, this is already a position of reciprocal zugzwang, although the fact that it is a draw with White to play is not relevant for the solution.

1...f6 (D)

This move puts up most resistance. The alternatives are:

1) 1...♖g4 2 f3+ ♖g5 3 g4! ♖h4 (3...♖f4 loses to 4 ♖h3 ♖g5 5 ♖g3) 4 ♖g1 ♖g3 5 ♖f1 and White can just wait until Black exhausts his pawn moves, whereupon his king will have to retreat; e.g., 5...f6 6 ♖g1! h6 7 ♖f1 ♖f4 8 ♖f2 with a simple win.

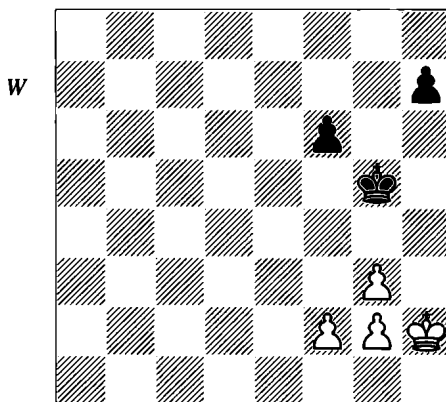
2) 1...♖f5 (1...♖g6, 1...♖f6 and 1...♖h6 lose the same way) 2 ♖h3 ♖g5 3 f4+ ♖f5 4 ♖h4 is easy.

3) 1...♖h5 2 ♖h3 (threatening g4+) 2...f5 3 f4 transposes to the Z1B analysis.

4) 1...h5 2 ♖h3 f6 (or 2...f5 3 f3) 3 f4+! transposes to the analysis of Z2B.

5) 1...h6 2 ♖h3 h5 (otherwise White wins by f4+ followed by ♖h4 or g4) 3 f4+ ♖f5 4 ♖h4 ♖g6 5 g4 hxg4 6 ♖xg4 f5+ (6...f6 is Z2B, note to Black's first move) 7 ♖f3 ♖h5 8 g3 ♖g6 9 ♖e3 and White wins.

6) 1...f5 2 ♖h3 and now 2...h6 and 2...h5 transpose into the above lines, while if the king retreats then ♖h4 followed by g4 wins. Finally, 2...♖h5 fails to 3 f4.



2 ♖h1!!

This incredible move is the only one to win. 2 ♖g1? h5! is Z2W, while 2 ♖h3? f5! is Z1W. 2 f3? f5 followed by ...h5 is a simple draw as White cannot gain the opposition on the e-file.

2...f5

Or:

1) 2...♖g4 3 ♖g1! h6 (3...h5 4 ♖h2! ♖f5 5 ♖h3 is the note to Black's first move in Z2B; 3...♖f5 transposes to the analysis of 2...♖g6 below; 3...f5 loses to 4 ♖f1) 4 ♖f1 and wins.

2) 2...h5 3 ♖g1! is Z2B.

3) 2...h6 3 ♖h2 ♘g4 4 f3+ ♘g5 5 g4 and White wins comfortably.

4) 2...♗h5 3 ♖g1! ♘g5 4 ♖f1 ♗f5 5 ♖e2 (Black has no time to set up the drawn position with king on e4 and pawn on h5) 5...♗e4 6 f3+ ♗e5 7 g4 and White wins.

5) 2...♘g6 3 ♖g1 (3 g4 also wins) 3...♗f5 (3...h5 transposes into Z2B) 4 f3 h5 (or else g4+) 5 ♗f2! ♗e5 6 ♗e2 ♗d4 7 g4 hxg4 8 fxg4 ♗e4 9 g3 and Black's king is gradually driven back.

**3 ♖g1! ♗f6**

Black must hurry, since otherwise White's king reaches e3, with an easy win.

**4 ♖f1 ♗e5 5 ♖e1!**

Extreme care is necessary. 5 ♗e2? ♗e4! gives Black the opposition.

**5...♗d5**

Black puts up the maximum resistance. We shall see later what happens if Black plays ...h6 or ...h5.

**6 ♗d1!**

As usual, the side with the opposition can only make progress if a by-pass is possible. Here White must choose exactly the right moment for his by-pass.

**6...♗e5**

6...♗c5 7 ♗e2! ♗d4 8 ♖f3 ♗e5 9 g4 is a win for White.

**7 ♗c2!**

The correct moment for the by-pass.

**7...♗d4**

7...♗e4 is met by 8 ♗c3, forcing Black to touch his h-pawn, whereupon 8...h6 9 ♗c4 h5 10 ♗c3! ♗e5 (Black has run out of reasonable pawn moves and must give way) 11 ♗d3 f4 12 gxf4+! ♗xf4 13 ♗d4 h4 14 ♗d3, gaining access to e3, gives White an easy win.

**8 ♗d2 ♗e4 9 ♗e2**

Now Black must move his h-pawn, or else White's king occupies f3.

**9...h6**

9...h5 10 ♖f1 also wins for White, since he has the tempo f3 in reserve to force his king to h4.

**10 ♖f1!**

All the previous manoeuvres have been designed to extract the concession ...h6 from Black. Now that Black has given up his reserve tempo, White can win by playing his king to h3. We have already seen the basic winning

technique in Z1B, but here it is again: **10...♗e5 11 ♖g1! ♗f6 12 ♗h2! ♘g6 13 ♗h3! ♘g5 14 f4+! ♗h5 15 g4+! fxg4+ 16 ♖g3! ♘g6 17 ♖xg4** and now White wins easily.

## 8) A. Davranian

5th Place, USSR vs Rest of the World Team Match, 1989

This position somewhat resembles that of the famous Joseph study (No. 4), but here the play is quite different as the a-file is blocked by a white pawn.

**1 h5**

White must not waste time.

**1...f3 2 h6 f2 3 h7 f1 ♖ 4 h8 ♖**

This type of position is familiar from the Joseph study. White is ready to give mate by discovery along the back rank, and Black must do everything in his power to prevent this.

**4...♖f7!**

4...♖f4 5 ♗d7+ ♖b8 6 ♖c3! is decisive as Black cannot cover both a3 and a5. The text-move puts White in an awkward situation; if the white queen quits the back rank, Black will have an easy draw by checking, but pushing the a-pawn deprives White's queen of vital checking squares on the a-file.

**5 a3!!**

It turns out that White can scrape a win so long as he still has access to both a4 and a5. Pushing the pawn any further would result in a draw; e.g., 5 a4? ♖f4 6 ♗d7+ ♖b8 7 ♖c3 ♖e5! 8 ♖c8+ ♖b8 9 ♖c5 ♖e5! and White is unable to make progress. It is worth noting that the position after 5 a3 is one of reciprocal zugzwang.

**5...♖f4**

5...♗b8 6 ♖e5+ ♗a8 7 ♖a5+ mates so this is forced.

**6 ♗d7+**

6 ♗e7+? is wrong because Black will reply 6...♖b8 followed by 7...♖e5+ even if White's queen is covering that square.

**6...♖b8 7 ♖c3!**

Now there is no double threat because a3 is blocked, but even the single threat on a5 is enough to force Black's reply. 7 ♖d4 ♖f4! forces White to return to h8 in order to win, while 7 ♖xb8+? ♗xb8 is a dead draw after 8 a4 ♗a8 9 a5 ♗b8 10 ♗d8 ♗a8 11 a6 ♗b8!.

**7...♖e5!**

The first stalemate attempt.

8 ♖c8+! ♜b8 9 ♜c5!

White again tries to reach a5, and thereby gains access to the a3-f8 diagonal with tempo.

9...♞e5!

This second stalemate attempt is forced. The parallels with the Joseph study are there, but with a twist. In the Joseph study the queens opposed each other along the eighth rank and a-file; here the relevant lines are the b8-h2 diagonal and the c-file.

10 ♜f8+! ♜b8 11 ♜b4!

White has been aiming to reach a square which creates a double threat on a4 and a5. However, it is not immediately decisive because White's queen is not on the c-file and so Black has a new stalemate try.

11...♜c8+!

The third stalemate attempt.

12 ♞e7!

Now, however, Black's resistance is broken. There are no more stalemate attempts and so the white queen reaches the a-file.

12...♞b8 13 ♜f4+!

13 ♜a5? would be a serious mistake due to 13...♜d7+!.

13...♞a8 14 ♜a4+ ♞b8 15 ♜a7#

## 9) N. Grigoriev

Hon. Men., *Shakhmaty v SSSR*, 1938

1 a4!

This is compulsory; if Black is allowed to gain space by playing ...a4, the position is a dead draw.

1...♞b7

1...♞b8 2 ♞g5 ♞c7 3 ♞g6! transposes to the main line.

2 ♞h5!!

An extraordinary move. The play is based on the opposition, but there are a couple of subtleties. At first sight the position is an easy win for White – the kings approach one another, then if White has the opposition he wins straight away, while otherwise he uses the reserve tempo b3 to gain the opposition. This argument holds if the white king is on the e-file and the black king is on the c-file, but if the kings face each other on the f- and d-files it breaks down. The key position is ♞f5 vs ♞d6; this is reciprocal zugzwang. It is easy to understand that Black to

play loses, since 1...♞d7 2 ♞f6 ♞d6 3 b3 wins for White, but why is it a draw with White to move? The answer is that after 1 ♞f6 ♞d7 2 ♞f7 ♞d6 White is stuck; 3 b3? even loses to 3...♞e5!, while if White makes an immediate by-pass with 3 ♞e8, then 3...♞e5 launches a counter-attack which draws precisely because White has not played b3 and therefore the c4-pawn is weak. The same argument shows that ♞f6 vs ♞d7 is reciprocal zugzwang. It follows that both sides must aim for the anti-opposition (see No. 5), since gaining the opposition is of no value when the pawn is on b2. When White has successfully gained the anti-opposition, he can, at an appropriate moment, use his reserve tempo to convert it into a true opposition. Specifically, ♞g6 vs ♞c7 and ♞g5 vs ♞c6 are also reciprocal zugzwang. It follows that 2 ♞g5? is incorrect since 2...♞c6! draws by gaining the anti-opposition: 3 ♞f5 (3 ♞g6 ♞c7! and 3 ♞f6 ♞d7! are drawn) 3...♞d6! 4 ♞f6 (4 b3 ♞d7 is a draw) 4...♞d7 5 ♞f7 (5 ♞e5 ♞e7 6 ♞d5 ♞d7 7 b3 ♞c7 and 5 b3 ♞d6! are also safe for Black) 5...♞d6! 6 ♞e8 ♞e5 7 ♞d7 ♞d4 8 ♞c6 ♞xc4 9 ♞xb6 ♞b4 10 b3 with a draw.

2...♞c6

2...♞c7 3 ♞g6! transposes to the main line.

3 ♞g5! ♞c7

3...♞d6 4 ♞f5! and 3...♞d7 4 ♞f6! both allow White to win more quickly.

4 ♞g6! ♞d6

Or 4...♞c6 5 b3! (not 5 ♞g7? ♞d6! threatening ...♞e5, and after 6 ♞f6 ♞d7 White is on the wrong end of the reciprocal zugzwang) 5...♞c7 6 ♞g7! (now Black cannot avoid a by-pass) 6...♞c6 7 ♞f8! ♞d6 8 ♞e8! ♞c7 9 ♞e7, etc.

5 ♞f5! ♞d7

5...♞e7 6 ♞e5! ♞d7 7 ♞f6 transposes.

6 ♞f6! ♞d6 7 b3!

Only now does this move win.

7...♞d7 8 ♞f7 ♞d6 9 ♞e8 ♞e5

Or 9...♞c7 10 ♞e7 ♞c6 11 ♞d8! ♞b7 12 ♞d7! ♞b8 13 ♞c6! ♞a7 14 ♞c7! and Black's pawns soon fall.

10 ♞d7 ♞d4 11 ♞c6 ♞c3 12 ♞xb6 ♞b4 13 ♞c6 ♞xb3 14 ♞b5! and wins.

There is a slight mystery surrounding this study. It was published by Grigoriev in 1938 and the solution given then (it actually appeared after his death) has been repeated many times, although it is incorrect and only leads to a draw.

In 1985 the correct solution appeared in print for the first time. It seems likely that the solution published in 1939 was an error, and Grigoriev actually intended the line finally given in 1985.

### 10) R. Brieger

1st Pr., *Chess Life & Review*, 1984

There is no complex analysis in this study, and the solution flows harmoniously from start to finish.

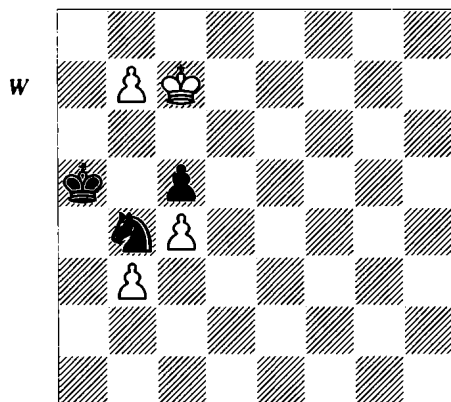
#### 1 ♖b7!

A paradoxical first move, blocking White's passed pawn. The only real alternative, 1 b7?, fails to 1...♔d8 2 b8♙? ♔c6+ wins for Black) 2...♖b4 and the b3-pawn falls.

#### 1...♔e5!

Black must meet the threat of 2 ♖c7 followed by b7. 1...♔d8+ 2 ♖c7 ♔e6+ 3 ♖d7! ♔f8+ 4 ♖c6 is an easy win for White, so the knight has to take the long way round to hold up the pawn.

#### 2 ♖c7 ♔d3 3 b7 ♔b4 (D)



Now 4 b8♙? ♔a6+ and 4 b8♙? ♔d3 5 ♔c6+ ♖a6, followed by ...♔c1, only draw. The correct move is a surprise.

#### 4 ♖b8!

For the second time White voluntarily blocks the b-pawn with his king. In fact, this is a position of reciprocal zugzwang; the key feature is that White can wait to see where Black moves his knight before deciding on a king move.

#### 4...♔a6+

The best try, as other moves lose without any fight: 4...♖b6 5 ♖c8 ♔a6 6 b8♙+, 4...♖a6 5

♖c8 ♔c6 6 ♖c7! (not 6 b8♙? ♔xb8 7 ♖xb8 ♖b6 with a draw) and 4...♔c6+ 5 ♖c8 ♖b6 (5...♖b4 6 ♖c7) 6 b8♙+.

#### 5 ♖a7!

5 ♖a8? ♖b4 6 ♖a7 ♖a5 is a reciprocal zugzwang with White to play.

#### 5...♔b4

Black fights to the bitter end, but White only has to find a final finesse to win.

#### 6 b8♙!

6 b8♙?? loses to 6...♔c6+.

#### 6...♔c2 7 ♔c6#

### 11) M. Matouš

2nd Pr., *Sinfonie Scacchistiche*, 1981

White has to find some tactical finesses to win this battle between his mass of passed pawns and Black's minor pieces.

#### 1 h7

The only winning chance, since 1 h5? ♔f6 2 ♖f7 ♖g5 3 h7 ♔xh7 4 gxh7 ♔f6 leads to a draw while 1 ♖xg8?? ♖xg6 is even a win for Black.

#### 1...♔f6+

1...♔h6 loses at once to 2 ♖xh6, so the text-move is forced.

#### 2 ♖f8!

White must keep open the possibility of promoting on g8 for the moment. 2 ♖f7?? ♔h6+ and 2 ♖xg8?? ♖xg6 are both wins for Black.

#### 2...♔e7

2...♔h6 loses to 3 g7.

#### 3 g7 ♔g6+

All these moves are forced, but now White has to consider how to evade the knight checks.

#### 4 ♖f7!

4 ♖g8? is tempting, but fails to 4...♖g4! 5 ♖f7 ♔xg7 6 ♖xg7 ♖h5 with a draw.

#### 4...♔h8+!

Black is preparing to set a diabolical trap. After 4...♔e5+ 5 ♖g8 ♔g6 6 h5! White wins easily.

#### 5 ♖g8 ♖g6

5...♔g6 6 h5 and 5...♔xg7 6 ♖xg7 ♔g6 7 h5 both leave Black dead lost, so the text-move is his only chance, hoping for 6 gxh8♙? ♔xh8 7 h5+ ♖f6 8 ♖xh8 ♖f7 with a draw.

#### 6 h5+!

White avoids the trap and it seems that Black can now resign.

**6...♖h6!**

How many players would now play 7 gxf8♖ without a thought? Quite a lot, I would guess.

**7 gxf8♖!!**

The only move to win. 7 gxf8♖? fails to 7...♙e5!, when White is in (reciprocal) zugzwang. If he is to avoid losing his queen for nothing then he must play 8 ♖xe5 but then Black is stalemated. 7 gxf8♖? also fails, since 7...e5 8 ♖f7+ ♗xh5 9 ♖d6 ♗g6 is an easy draw.

After the text-move, White promotes his h7-pawn in a couple of moves.

**12) A. Kazantsev**

*Shakhmaty v SSSR, 1948*

Black is two minor pieces up and has a strong passed a-pawn, so White must try to exploit his own advanced pawns. The surprise is that White must underpromote two of his three pawns in order to draw.

**1 d6! ♖b5!**

The only real alternative is 1...a3 but after 2 dxc7 a2 3 c8♖ a1♖ 4 h7 the advanced pawn coupled with Black's exposed king gives White an easy draw.

**2 dxe7**

Attacking the f6-bishop. Not 2 d7? ♖d6+ 3 ♗g8 ♖b7, when the pawns are stopped.

**2...♗e5**

2...♙e5 3 e8♖ ♖d6+ 4 ♗f8 ♖xe8 5 ♗xe8 a3 6 e7 a2 7 ♗f7 is also a draw.

**3 e8♖!**

The first underpromotion. 3 e8♖? loses to 3...♖d6+ 4 ♗f8 ♖xe8 5 ♗xe8 ♗xe6.

**3...♙h8**

White remains down on material, and the threat posed by the a-pawn has not gone away, so he must still act quickly.

**4 ♗g8**

Trapping the bishop. Black counters by bottling the white king up in the corner.

**4...♗xe6**

4...a3 5 ♗xh8 a2 6 h7 a1♖ 7 ♗g8 ♖g1+ 8 ♖g7 is a draw since Black cannot prevent the promotion of White's h-pawn.

**5 ♗xh8**

5 h7 a3 6 ♗xh8 is also possible, transposing to the main line.

**5...♗f7**

Mission accomplished. White's knight is very poorly placed to stop the a-pawn.

**6 h7!**

Playing for stalemate. 6 ♖d6+? loses after 6...♖xd6 7 h7 ♗g6 8 ♗g8 ♖f7.

**6...a3**

Activating the knight also fails to win; e.g., 6...♖d4 7 ♖d6+ ♗f8 8 ♖c4 ♖f5 9 ♖e5 a3 10 ♖d7+ ♗f7 11 ♖e5+ with a draw.

**7 ♖d6+ ♗f8!**

Taking the knight results in immediate stalemate.

**8 ♖xb5 a2**

White must play his knight to the long diagonal, but which is the correct square?

**9 ♖d4!**

9 ♖c3? loses to 9...a1♖! 10 ♖b5 ♗f7 11 ♖c7 ♖e1 12 ♖e6 ♖e5 13 ♖f8 (13 ♖d8+ ♗g6) 13...♖e7 followed by mate.

**9...a1♖!**

Still the best try.

**10 ♖e6+ ♗f7 11 ♖d8+**

Every other move leads to a quick mate.

**11...♗g6**

The only reasonable way to avoid a repetition.

**12 ♗g8 ♖a8**

Threatening mate.

**13 h8♖+!**

White's only defence is again to underpromote to a knight.

**13...♗f6 14 ♖hf7**

With a safe draw.

**13) G. Nadareishvili**

*2nd Pr., Lelo, 1950*

Two pieces down, White must make the most of his passed pawns.

**1 g6 ♗f6!**

The text-move introduces a cunning and far from obvious defence. 1...e5 loses to 2 g7 ♙b3 3 h6 ♖f3 4 h7, when 4...♖g5 5 g8♖ and 4...♖h4 5 g8♖ ♖g6+ 6 ♗g7 are both easily winning for White.

**2 g7 ♙h7!**

This is the point of Black's play; the idea is to deflect the king to h7 so that the knight can arrive on g5 with check. If White now accepts, the result is a draw; for example, 3 ♗xh7? ♖f3 4 g8♖ ♖g5+ 5 ♖xg5+ (White must give up his

queen to avoid perpetual check) 5...♙xg5 6 h6 c4 7 ♚g7 c3 8 h7 c2 9 h8 ♖c1 ♗10 ♗h6+ ♚g4 (10...♙f5? 11 e4+) 11 ♗xe6+ ♙f3 and there are no winning chances. However, it is hard to imagine that there is a better move than 3 ♙xh7.

**3 e4!!**

This mysterious pawn move is the key. The threat is 4 e5+ followed by 5 ♙xh7, so Black must take steps to avoid having his king deflected.

**3...♙f3**

3...e5 fails in a similar way to the main line: 4 ♙xh7 ♙f3 5 g8 ♗ ♙g5+ 6 ♗xg5+ ♙xg5 7 h6 c4 8 ♙g7 c3 9 h7 c2 10 h8 ♖c1 ♗11 ♗h6+ and White wins the queen.

**4 e5+!**

Black has to capture with the knight, but then it takes two more moves to bring the knight to g5.

**4...♙xe5 5 ♙xh7 ♙f3**

White has achieved a position similar to that after 3 ♙xh7? ♙f3, the only difference being the missing White e-pawn. This small change unexpectedly tips the balance in White's favour.

**6 g8 ♗ ♙g5+ 7 ♗xg5+!**

Or else perpetual check.

**7...♙xg5 8 h6 c4**

8...♙f6 loses to 9 ♙g8.

**9 ♙g7 c3 10 h7 c2 11 h8 ♖c1 ♗**

Now we see why the missing e3-pawn operates to White's advantage.

**12 ♗h6+**

Black loses his queen.

## 14) E. Kolesnikov

1st Pr., *Shakhmatny Vestnik*, 1993

White's three isolated pawns don't look like an especially impressive force to counter Black's rook and passed h-pawn. Indeed, White has to work hard to create any real counterplay.

**1 ♙f7!**

1 e7? loses at once to 1...♙e6.

**1...♙h8!**

By far the best move, preparing a check on h7. Completely wrong are 1...♙e5? 2 e7 ♙d5 3 a6! and 1...h5? 2 e7 h4 3 a6 h3 4 a7, which are even winning for White.

**2 e7**

2 ♙g7? loses to 2...♙e8, so White pushes his pawn and hopes for the best.

**2...♙h7+ 3 ♙f8 ♙f6!**

The point of Black's play. Now White has to underpromote as 4 e8 ♗? allows 4...♙h8#.

**4 e8 ♙+!**

It still looks grim for White; he has a knight and two isolated pawns against a rook and a passed h-pawn. Moreover, his king is badly placed on the back rank.

**4...♙e5!**

The king moves towards the dangerous c-pawn. The alternatives are:

1) 4...♙g6 5 c6 ♙a7 6 c7 ♙a8 7 ♙e7 h5 8 ♙f6 h4 9 ♙g4 ♙g5 10 ♙d7 draws.

2) 4...♙e6 5 ♙g7+ (White traps the rook on h7) 5...♙d5 (5...♙d7 6 ♙g8 ♙xg7+ 7 ♙xg7 h5 8 a6 ♙c6 transposes, while 5...♙f6 6 ♙e8+ repeats) 6 ♙g8 ♙xg7+ 7 ♙xg7 h5 8 a6 ♙c6 9 ♙f7 h4 10 ♙e7 h3 11 a7 ♙b7 12 c6+ ♙xa7 13 c7 draws.

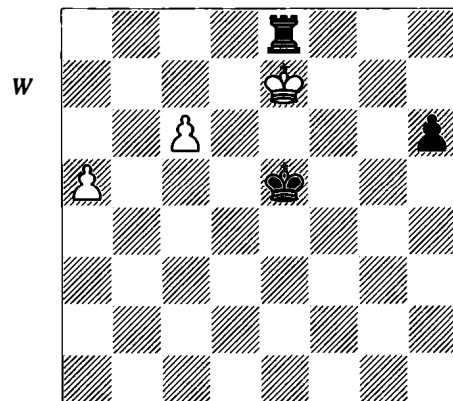
**5 c6!**

Now the plan of trapping the rook doesn't work since 5 ♙g7? h5! 6 a6 h4 7 a7 (or 7 ♙g8 ♙h6 8 a7 ♙a6) 7...♙h8+ 8 ♙f7 ♙a8 wins for Black. 5 ♙d6? is also bad, because after 5...♙d5 6 ♙f7 ♙xc5 7 ♙g8 ♙xf7 8 ♙xf7 h5 Black's pawn promotes.

**5...♙h8+**

Black's best try. 5...♙a7 6 c7 ♙a8 leads to a draw after 7 ♙e7 h5 8 ♙f6 h4 9 ♙g4+ ♙f4 10 ♙h2 ♙g3 11 ♙d7 ♙xh2 12 c8 ♗ ♙xc8 13 ♙xc8.

**6 ♙e7 ♙xe8+! (D)**



This looks decisive, because after 7 ♙xe8? ♙d6 White can neither promote one of his own pawns nor stop Black's h-pawn; e.g., 8 ♙d8 ♙xc6 9 ♙c8 h5 10 ♙b8 ♙b5 11 ♙b7 ♙xa5 12

♖c6 h4. However, White has a truly amazing defence.

7 ♖d7!!

It seems unbelievable that this is better than taking the rook, but remarkably it gains a critical tempo.

7... ♗d5

7... ♖h8 8 c7 ♖h7+ 9 ♖c6 is also a draw.

8 c7!

The point is that Black now loses a tempo with his rook.

8... ♖h8 9 c8 ♗ ♖xc8 10 ♖xc8 ♖c6! 11 ♖b8!

Threatening to promote the pawn.

11... ♖b5 12 ♖b7!

Renewing the threat of a6.

12... ♖xa5 13 ♖c6!

By means of the curiously roundabout route f8-e8-d7-c8-b8-b7-c6 White's king has entered the square of Black's h-pawn.

13... h5 14 ♖d5

The pawn is stopped.

## 15) J. Rusinek

1st Pr., *New Statesman*, 1971

Black has a large material advantage, but White has four(!) pawns close to promotion. However, White must take care with his king, as it is dangerously limited in freedom.

1 a7

1 g8 ♗? ♗xg8 2 a7 prevents the check on a6, but allows 2... ♗d5 3 b7 ♗e4 followed by mate. 1 b7? is also bad, as 1... ♗e4 again forces mate.

1... ♗a6+

After 1... ♗d5 2 a8 ♗ ♗xb6+ 3 ♖b8 Black has nothing better than 3... ♗d7+ with perpetual check, while following 1... ♗e4 2 ♖b7 ♗d6+ (after 2... ♗d5+ 3 ♖a6 White is sure to promote a pawn) 3 ♖c6 ♗b5+ 4 ♗d5 ♗xb6+ 5 ♖c5 it is time for Black to force a draw by 5... ♖f7.

2 b7 ♗e4

This is the best method of threatening mate because it also covers f6. 2... ♗b5 causes fewer problems since 3 g8 ♗ ♖e8 4 ♗f6+ ♖e7 5 ♗xd7 obliges Black to take a draw by 5... ♗xa7+ 6 ♖b8 ♗c6+ 7 ♖a8 ♗xb7+ 8 ♖xb7 ♗d8+.

3 g8 ♗+!

The only way to avoid immediate mate, and the first underpromotion.

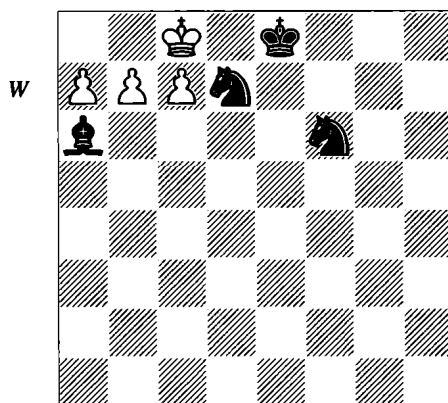
3... ♖e8

Black must prevent ♖d8.

4 ♗f6+

Another forced move.

4... ♗exf6 (D)



Now White again faces a mating threat, this time by ... ♗d5-e7 (or b6). At first sight there is no way to prevent this, but White has a remarkable defence.

5 a8 ♗!!

Not 5 a8 ♗? ♗d5 mating next move. White's only chance is to set up a stalemate by promoting to a bishop which is born immobilized.

5... ♗e5!

Black finds a way to continue the fight – he lifts the stalemate and thereby transfers his knight to c6 with gain of tempo.

6 ♖b8 ♗c6+ 7 ♖c8

Now the white king is exposed along the h3-c8 diagonal.

7... ♗f1

Yet another mating threat from Black. White must promote his b-pawn, but which is the correct piece?

8 b8 ♗!!

Amazingly, another underpromotion is required, completing the set of rook, bishop and knight underpromotions. 8 b8 ♗? is wrong as 8... ♗a6+ 9 ♗b7 ♗e4 forces mate next move.

8... ♗a6+ 9 ♗b7

White has again set up a stalemate position and Black has no way to play for a win. 9 ♗b7? is bad due to 9... ♗e7#.

9... ♗e7+

9... ♗c4 10 ♗b8 repeats.

10 ♖b8

Black has nothing better than to give perpetual check.

**16) D. Gurgenzidze**64 – *Shakhmatnoe Obozrene*, 1970

White's two main worries are 1...♟f7, winning the knight, and 1...♞e6, followed by 2...♟f5 and the advance of the h-pawn. At the moment, White's king is one tempo too slow to counter the first plan, so his first move must be to advance towards the b-pawn. However, the exact choice of square is extremely subtle and can only be appreciated once the whole drawing plan has been seen. The fact that a knight can stop a rook's pawn on the sixth rank without the help of the king plays a vital role in the solution.

**1 ♞a3!!**

Amazingly, this is the only move to draw. 1 ♞b2? loses to 1...♟f7! (1...♞e6? 2 ♟f8+ ♟f5 3 ♟d7 h5 4 ♟c5 h4 5 ♟b3! draws as in the main line of the study) 2 ♞c3 ♟g7 3 ♞b4 ♟xh7 4 ♞xb5 h5, while 1 ♞b3? loses to 1...♞e6! for reasons that will be explained later.

**1...♞e6!**

Black intends the second plan mentioned above. 1...♟f7 2 ♞b4 ♟g6 (2...♟g7 3 ♞xb5 ♟xh7 4 ♞c4 draws) 3 ♟f8+ ♟f5 4 ♟d7 draws as in the main line.

**2 ♟f8+!**

A quick examination shows that against the ...♟f5 plan, White's king is one tempo too slow to take the b-pawn and then stop the h-pawn, which implies that his knight must somehow play a role in the battle. Indeed, it must move straight away, as delaying by 2 ♞b4? loses to 2...♟f5! 3 ♟f8 h5 4 ♟d7 h4 5 ♟c5 h3 6 ♟d3 h2 7 ♟f2 ♟f4 8 ♞xb5 ♟f3 9 ♟h1 ♟g2.

**2...♟f5!**

The best move. Since g6 is covered, the knight must take the long way round.

**3 ♟d7 h5 4 ♟c5**

Not 4 ♟b6? h4 5 ♟d5 ♞e4! (5...h3? 6 ♟e3+ followed by ♟f1 is a draw) 6 ♟f6+ (or 6 ♟c3+ ♟f3) 6...♟f3 7 ♟h7 ♟f4 and the h-pawn is too fast.

**4...h4****4...♟f4 5 ♟d3+ draws.****5 ♟b3!**

This move explains why the king had to go to a3 and not b3 on the first move. 5 ♟d3? is wrong due to 5...h3 6 ♟f2 h2 – the pawn must be stopped on the sixth rank.

**5...h3 6 ♟d2 ♟f4**

Since 6...h2 7 ♟f1! h1♚ 8 ♟g3+ is an immediate draw, the pawn cannot advance beyond h3.

**7 ♟f1 ♟f3 8 ♞b4**

Indeed, White can play other king moves since his knight can stop the h-pawn on its own.

**8...♟f2 9 ♟h2 ♟g2 10 ♟g4 ♟g3 11 ♟e3**

Black cannot make progress.

This study is an adaptation of one by Grigoriev (w♞e2, ♟h7 vs b♞e7, ♠b4, h6; *Shakhmaty v SSSR*, 1932), with the solution 1 ♟d3 ♟f7 2 ♟c4 ♟g6 3 ♟f8+ ♟f5 4 ♟d7 h5 5 ♟c5 h4 6 ♟b3!, etc. However, this setting lacks the subtle king move of Gurgenzidze's version.

**17) K.A.L. Kubbel and A. Herbstman**

1st Pr., Leningrad Chess Section, 1937

♞+2♟ vs ♞ is generally drawn, but how about ♞+3♟ vs ♞+♟? If the defender can exchange a pair of knights, then the result will again be a draw, but it turns out that this is usually impossible. The attacker can drive the defender's king into a corner and force mate without ever allowing an exchange of knights. It follows that if ♞+3♟ vs ♞+♟ arises, the defender has to force a draw within the first few moves or he will lose.

**1 ♟g1**

White cannot prevent the pawn from promoting, so he has to aim for a knight fork. 1 ♟g5? is the wrong way to go about this, since 1...♞e3 2 ♟f3 ♟f4+ wins for Black.

**1...♟e3+**

Or 1...♟f4+ 2 ♞h1 e1♟ (2...♟g3+ 3 ♞h2 doesn't help Black) 3 ♟f3+ ♟xf3 and White has forced stalemate.

**2 ♞h3!**

The only square for the king, since 2 ♞h1? e1♚ pins the knight, while 2 ♞h2? e1♟ leads to a win on material for Black.

**2...♟f4+**

Black can't promote his pawn since 2...e1♟ 3 ♟f3+ ♟xf3 is another stalemate.

**3 ♞h2 ♟g4+**

3...♟f1+ 4 ♞h1 transposes into the note to Black's first move, and 3...e1♟ 4 ♟f3+ ♟xf3+ 5 ♟g3 illustrates a new drawing motif – forking two knights with the king.

**4 ♞h1 ♟f2+**

Black is once again unable to promote, since 4...e1♖ is stalemate, 4...e1♗ 5 ♖f3+ exchanges the bishop and 4...e1♗ 5 ♖f3+ ♖xf3 is yet another stalemate. Therefore Black continues checking, in the hope that a more favourable opportunity for promotion will arise.

### 5 ♖h2

Now it is the end of the line for Black – he must either repeat moves or promote.

### 5...e1♗ 6 ♖f3+!

A fantastic resource. 6 ♖g3? loses to 6...♗e3.

### 6...♖xf3+ 7 ♖g3

White's king forks all three black knights.

### 7...♗e3

The only move to save the knights, but the result is a spectacular stalemate.

## 18) D. Blundell

1st Pr., *Diagrammes*, 1994

The whole point of this study lies in White's first move, which is surely one of the least likely moves in the position.

### 1 ♖a1!!

This paradoxical retreat is the only move to win. There are several more natural moves, but they all lead to a draw:

1) 1 ♖e1? ♖g4 2 ♗c2 f3 3 ♖d3 f2 4 ♖xf2+ ♗f3 draws.

2) 1 ♖b4? f3 2 ♖d5 f2 3 ♖e3 ♖g5 4 ♗c2 ♗f4 5 ♗d3 transposes to line '3'.

3) 1 ♗c1? (attempting to stop the f-pawn with the king) 1...f3 2 ♗d2 f2 3 ♗e2 ♖g4 4 ♖e3+ ♗f4 5 ♗d3 ♖g3! (not 5...♗f3? 6 ♖f1!, reaching a reciprocal zugzwang with Black to play) 6 ♖f1+ (there is nothing else because any king move is met by ...♗f4, forcing the king back again) 6...♗f3 7 ♖d2+ ♗f4! (another reciprocal zugzwang) 8 ♗e2 f1♖+! 9 ♖xf1 ♗e3 drawing. This line suggests that the white knight is best placed on d2, where it both covers f1 and defends the e4-pawn.

4) 1 ♖a3? is therefore a natural move, heading for d2 as quickly as possible. However, it fails for a very subtle reason. After 1...f3! (the only move to draw; 1...♖g4? 2 ♗c2! f3 3 ♖c4 is a win for White, as we shall see) 2 ♖c4 we reach a key position. The following play can be understood in terms of a network of corresponding squares (which exists when White's knight is on c4 and Black's pawn is on f3) in

which ♗c2 vs ♖g4, ♗d3 vs ♗f4 and ♗c3 vs ♖g3 are the basic correspondences. When the white king is on d2 there is no correspondence, because in this case Black to play draws by 1...f2! (the white king blocks the knight's best square). The correspondence also breaks down when the kings are further back; for example, ♗b2 vs ♗h3 is not a correspondence because Black to play draws by 1...♖g2. The key position is drawn with Black to play:

4a) 2...♖g4? 3 ♗c2! is a position of reciprocal zugzwang. Here Black is to move, so White wins; e.g., 3...♖g3 (3...f2 4 ♖d2 ♗f4 5 ♗d3 ♖g3 6 ♗e3 ♖g2 7 ♗e2 ♖g3 8 ♗f1 is a win for White, while 3...♗f4 4 ♗d3 is again reciprocal zugzwang) 4 ♗c3! (4 ♗d3? f2 is a draw after 5 ♖e3 ♗f4! or 5 ♖d2 ♗f4!) 4...♖g4 (4...f2 5 ♖d2, 4...♗f4 5 ♗d3 and 4...♗f2 5 ♗d3 all win for White) 5 ♖xe5+ ♗f4 6 ♗d4 f2 7 ♖d3+ and White wins.

4b) 2...♗h4! is one drawing move:

4b1) 3 ♗c1 ♖g3 (3...♗h3? loses to 4 ♗d2) 4 ♗d2 f2 5 ♖e3 ♗f3 6 ♗d3 ♖g3 draws.

4b2) 3 ♗c2 ♖g4! is a reciprocal zugzwang with White to play. After 4 ♗d3 (4 ♗d2 f2 or 4 ♗c3 ♖g3) 4...♗f4 White is not making progress.

4b3) 3 ♗b2 ♗h3 4 ♗b3 (4 ♗c2 ♖g4!, 4 ♗c1 f2 5 ♖e3 ♖g3 6 ♗d2 ♗f3 7 ♗d3 ♖g3 and 4 ♗c3 ♖g3! are also safe for Black) 4...♖g2 5 ♗c2 (5 ♗c3 ♖g3 is also drawn) 5...f2 6 ♖e3+ ♗f3 7 ♗d3 ♖g3 with a draw.

4c) 2...♖g5! also draws; for example, 3 ♗c2 ♖g4 4 ♗d3 f2 5 ♖d2 ♗f4.

The text-move again heads for d2 (via b3), though there is a subtle but important difference compared to 1 ♖a3?: the position with ♖b3 vs ♖f3 is much better for White than ♖c4 vs ♖f3 since the c4-square is not blocked. The difference is that ♗c3 vs ♖g3 is not a reciprocal zugzwang because White to move can play 1 ♗c4. Thus the network of reciprocal zugzwangs is greatly simplified in this case, since it is restricted to the basic case of ♗d3 vs ♗f4. White wins with other king positions because he can simply march his king up the c-file, always keeping in contact with the d3-square in case Black should play ...♗f4.

### 1...f3 2 ♖b3 ♖g4

It doesn't make any difference what Black plays since White's basic plan is the same; for

example, 2...♔g5 also loses to 3 ♖c2 ♕g4 4 ♖c3 ♕g3 5 ♖c4.

3 ♖c2 ♕g3 4 ♖c3 ♕g4 5 ♖c4 ♕g3 6 ♖d5 ♖f4 7 ♖d2 ♖2 8 ♖f1

White wins.

**19) V. Kolpakov and Y. Seriozhkin (version)**  
1st Pr., *Shakhmatnaya Kompozitsia*, 1992

This is a study that needs to be solved to be appreciated. The first few moves are quite natural, but then you just hit a brick wall, with nothing appearing to work. Finally, if you are lucky, inspiration strikes and you wonder what was so difficult about it.

1 e7 c2 2 e8♖

It is wrong to give a knight check first, since neither 2 ♖e3+? ♕d6 3 e8♖ c1 ♖ nor 2 ♖f6+? ♕d6 3 e8♖ c1 ♖ 4 ♖d7+ ♕e5 5 ♖g4+ ♖f4 offers White any winning chances.

2...c1♖ 3 ♖d7+

3 ♖d8+? ♕e6 lets Black escape.

3...♕e4 4 ♖f2+

Black's moves are forced to avoid loss of the queen.

4...♕e3

Now it is hard to see how to continue the attack; there are various checks, but they do not seem to lead anywhere.

5 ♖d3+!

5 ♖e6+? is the wrong check; then 5...♕d2 is safe for Black.

5...♖f4 6 ♖g6! (D)

This quiet move is extremely hard to see. It threatens 7 ♖xh6+ and 7 ♖d3+, but Black can meet both threats by moving his queen away. It turns out that, despite the apparently large number of squares available to the queen, there is no safe spot. 6 ♖f3+? ♕g5 7 ♖e4+ ♕g6 8 ♖f6+ ♕h7 leads to nothing, although if Black were missing his h-pawn this would be the only way to win!

6...♕e3

All the queen moves have some defect. The main lines are:

1) 6...♖e3 7 ♖f6#.

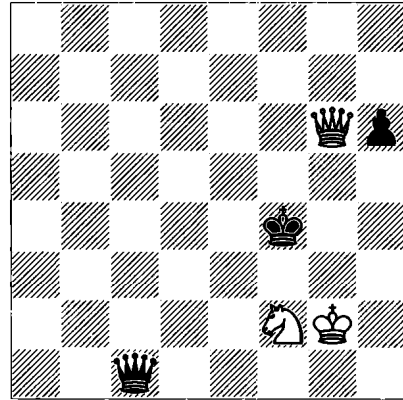
2) 6...♖b2 7 ♖g4+ ♕e5 8 ♖g7+.

3) 6...♖c3 7 ♖e4+ ♕g5 8 ♖g4+ ♖f6 9 ♖e4+.

4) 6...♖c8 7 ♖g3+ ♖f5 8 ♖g4+.

5) 6...♖a3 7 ♖f6+ ♕e3 8 ♖f3+.

B



6) 6...♖a1 7 ♖g4+ ♕e3 8 ♖f3+ ♕d2 9 ♖d3+ ♖c1 10 ♖d1+ ♖b2 11 ♖d3+ ♖a2 12 ♖a4+ ♖b1 13 ♖b3+.

In each case Black is mated or loses his queen.

The only other possibility is to move the king, but that too runs into problems.

7 ♖e4+!

Not 7 ♖xh6+? ♕e2! 8 ♖a6+ (8 ♖xc1 is immediate stalemate) 8...♕d2 (8...♕e3? loses to 9 ♖d3+ ♖f4 10 ♖f3+ ♕g5 11 ♖e4+ ♕h6 12 ♖f6+ ♕h7 13 ♖g5+) 9 ♖d3+ ♖e1 10 ♖f3 ♖c6+! 11 ♖e4 ♖f6+! 12 ♖xf6 with another stalemate.

7...♕d2 8 ♖d3+ ♖e1 9 ♖f3!

White's second quiet move completes the net around Black's king.

9...♖c6+ 10 ♖e4

It is mate in a few moves.

**20) V. Halberstadt (version)**

=1st Pr., *Groß* (Prague), 1938

The solution to this study is only two moves deep, but considerable thought is required to find these two moves. If White moves his knight, then Black replies ...♖f6 and the result is a draw (he could continue with ...♖c6 followed by ...♖e8, for example). Therefore White can only move his king, but which square is correct?

1 ♖a3!

The most unlikely-looking of White's king moves, but the only one to win. Other moves fail for varying reasons:

1) 1 ♖c3? ♖c5! puts White in zugzwang: 2 ♖d6 (2 ♖d3 loses the e-pawn after 2...♖e5+ 3 ♖e4 ♖c6 while alternative king moves permit

...♔d4, followed by ...♙e5-e6, with an easy draw) 2...♚f6 and now 3 ♚e4+ fails because 3...♚xe4+ is check. In fact, the position after 1...♙c5! is reciprocal zugzwang, but this fact plays no part in the solution so I will leave the proof as an exercise for the enthusiastic reader.

2) 1 ♙a4? ♙c6 (threatening a knight check followed by ...♔d7) 2 ♙b4 (2 ♙a5 ♚c5 3 ♚f6 ♚b7+ 4 ♙b4 ♚d6 and 2 ♙a3 ♚e5 3 ♚f6 ♚c4+ followed by ...♚d6 also draw) 2...♚c5 3 ♚f6 ♚a6+ 4 ♙c4 ♚c7 with a draw.

3) 1 ♙b3? ♚c5+ 2 ♙c4 ♚e6 (threatening ...♙c6-d7) 3 ♚d6 (or 3 ♙d5 ♚f4+ followed by ...♚g6) 3...♚g7 4 ♙d5 ♙c7 5 ♙e5 ♔d7 draws.

In each of these three lines Black saved himself by utilizing a knight check (on e4 in line '1' and on c5 in lines '2' and '3'). The text-move is effective precisely because it moves away from the enemy knight, and so denies Black a saving check. In other words, 1 ♙a3! works not because of any positive attribute but because it avoids any negative attributes.

#### 1...♙c6

Black must move his king, as a knight move would allow the pawn to promote (e.g., 1...♚e5 2 ♚d6). 1...♙a6 and 1...♙b5 are out of the question, while 1...♙c5 loses at once to 2 ♚d6 ♚f6 3 ♚e4+. That leaves two plausible alternatives:

1) 1...♙a5 fails to 2 ♚c7 ♚f6 3 ♙b3 with a nasty zugzwang (although some might say they are all nasty...) since 3...♙b6 runs into 4 ♚d5+.

2) 1...♙a7 2 ♙b3 ♙b8 (the motif 2...♙b6 3 ♚c7 ♚f6 4 ♚d5+ should be familiar by now, while 2...♚c5+ loses to 3 ♙c4 ♚e6 4 ♚d6 ♚g7 5 ♙b5 followed by ♙c6-d7 and ♚f5) 3 ♙c3 ♙a7 (Black must avoid white knight checks) 4 ♚d6 ♚f6 5 ♔d4 ♙b6 6 ♙e5 and White wins.

The text-move threatens to draw by 2...♚e5 3 ♚d6 ♚c4+ 4 ♚xc4 ♔d7, so White must again take care to avoid black knight checks.

#### 2 ♙a2!

2 ♙b4? ♚c5 transposes to the analysis of 1 ♙a4?, while 2 ♙b2? ♚e5 3 ♚d6 ♚c4+ is again a draw. White must also avoid b3 and a4 because of the immediate check, so that leaves the text-move as the only way to win.

After the text-move, Black is in zugzwang and cannot stop White promoting the pawn; e.g., 2...♙c5 3 ♚d6 ♚f6 4 ♚e4+ or 2...♙b6 3 ♚c7 ♚f6 4 ♚d5+.

## 21) P. Joitsa

3rd Pr., *Revista de Sah*, 1965

This is a remarkably subtle position, in which the moves make absolutely no sense until one understands the basic principles governing the play. The first point to note is that White's king cannot move to d1, d2, c2, c3, c4, c5, d5 or d6. In most cases this is to avoid an immediate knight check, while with the king on c3, c5 or d6 Black wins by ...♚d2 followed by ...♚e4+. Thus if the white king is to approach the black pawn, it must be via c6.

Black is also restricted as he cannot move his king to h5, g6, g5 or e6. Thus if Black wants to win the h-pawn, he has to march up the f-file. A further complication is that when Black's king reaches f5, White may be able to push his pawn. If there were no further finesses it would simply be a race in which White plays his king round via c6 and Black goes for the h-pawn. The subtlety arises because Black has a second winning idea. This involves playing 1...♚e3 2 ♚g3 ♚f5 3 ♚f1 and then going for the h-pawn with the king. This method wins the h-pawn much more quickly, as there is nothing to stop a direct advance by the black king. On the other hand, it also lifts the barrier obstructing the white king, allowing it to make a run for the f-pawn.

It turns out that when the white king is on the b-file, the ...♚e3 plan is too slow and White's king arrives in time. However, if the white king is on the a-file this plan wins when Black's king is within three squares of the h-pawn, provided **no special tactical elements come into play**. This last proviso is quite an important one, because special tactical elements do indeed come into play when Black's king is on e7, g7 or f6. In the first two cases it is because after 1...♚e3 2 ♚g3 ♚f5 White can take the knight with check, and in the last case because 2...♚f5 (there is an exception if White's king is on a1 or b5; in these cases 2...♙e5 wins because the f-pawn promotes with check) can be met by 3 ♚e4+ winning the pawn. Since the squares e6 and g6 are definitely out of bounds (due to ♚f4+ and ♚h3) this restricts Black's options considerably.

#### 1 ♙a2!!

Alert readers will have already realized that the logic of the previous note implies that the

position with ♖b2 vs ♜f7 is reciprocal zugzwang, and therefore White shouldn't move to b2 straight away. In order to see the concrete lines involved, let's suppose White continues 1 ♖b2?. Black replies 1...♜f7! and we have arrived at the position claimed to be reciprocal zugzwang. The reasoning is that f7 is not on the 'forbidden' list and therefore the ...♞e3 plan will win if White's king is on the a-file. However, with the king on b2 the only feasible king move **not** to the a-file is to c1, which loses too much time. Black wins in every line:

1) 2 ♖c1 ♜f6 3 ♖b2 ♞d2 4 ♞g3 ♜e5 5 ♜c2 ♜f4 and Black wins easily.

2) 2 ♖a3 ♞e3 3 ♞g3 ♞f5 4 ♞f1 ♜g6 5 ♜b3 ♜h5 6 ♜c4 ♜xh4 7 ♜d3 ♜h3 (Black is just in time to win) 8 ♜e4 ♜g2 9 ♞d2 ♞h6 (clearer than 9...♞h4 10 ♞c4 although that also wins for Black in the end) 10 ♜f4 ♞f7 11 ♜e4 ♞g5+ 12 ♜f4 (12 ♜e3 ♞f3) 12...♞f3 13 ♞c4 ♜g1 14 ♞e3 ♞e1 followed by ...♞c2.

**1...♜f7!**

The most awkward move. If Black plays his king to e7 or g7, he is in the forbidden zone for the ...♞e3 plan and therefore White can simply continue 2 ♖a3.

**2 ♖b2!**

Now the reciprocal zugzwang has arisen with Black to move. 2...♜e6 and 2...♜g6 are impossible, while moving to e7, g7 or f6 rules out the ...♞e3 plan, and so White can reply 3 ♖a3.

**2...♜f6**

Black continues directly. 2...♞e3 fails because White's king is on the b-file; after 3 ♞g3 ♞f5 4 ♞f1 ♜g6 5 ♜c2 ♜h5 6 ♜d3 ♜xh4 7 ♜e2 White is just in time to draw.

**3 ♖a3!**

It is safe to put the king on the a-file when Black's king is in the forbidden zone for the ...♞e3 plan. Note that White must not push his h-pawn too soon, since after 3 h5? ♜g5 4 ♞f4 (4 ♖a3 ♞d2 5 ♞g3 ♜h6 6 ♖b2 ♞e4 7 ♞f1 ♜xh5 8 ♜c2 ♜g4 9 ♜d3 ♜f3 also wins for Black) 4...♜xf4 5 h6 ♞d2 6 h7 f1 ♖ 7 h8 ♖ ♖b1+ 8 ♜c3 ♖a1+ Black wins the queen.

**3...♜f5**

After 3...♞e3 4 ♞g3 ♜g6 (4...♞f5 5 ♞e4+) 5 ♜b3 ♞f5 6 h5+ ♜f7 7 ♞f1 White's king makes it across with time to spare.

After the text-move, Black threatens to win by ...♜g4 (amongst other moves) and White

must take time out to deal with this before resuming his king march.

**4 h5!**

This move is awkward because it prevents not only 4...♜g4, but also 4...♜g5, which would be met by 5 ♞f4! (not 5 ♜b4? ♜h6! 6 ♜b5 ♞d2 7 ♞g3 ♞e4 8 ♞f1 ♜xh5 and Black wins) 5...♜xf4 (otherwise White plays ♞h3) 6 h6 with a draw as Black cannot win the white queen in this variation.

Therefore Black has to go the long way round to attack the h-pawn, and this gives White time for his own king march.

**4...♜f6 5 ♖b4**

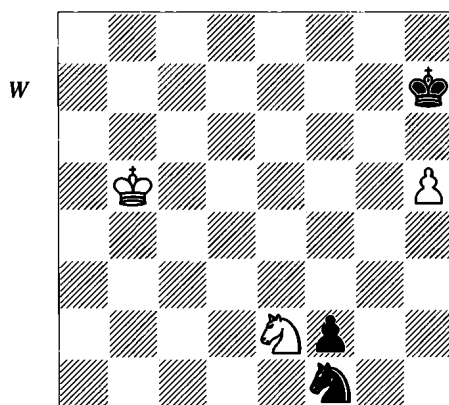
5 ♖a4 is also possible.

**5...♜g7**

Or 5...♞d2 6 ♞g3 ♜g5 7 ♜c5! drawing (but not 7 ♜c3? ♜g4 8 h6 ♜xg3 9 h7 f1 ♖ 10 h8 ♖ ♖a1+, when Black wins).

**6 ♖b5 ♜h7! (D)**

Black sets a nasty trap based on a second reciprocal zugzwang.



**7 ♖b6!**

Not 7 ♜c6? ♜h6!, when a reciprocal zugzwang arises with White to move. We already know that c5, d5 and d6 are out of bounds, so White is limited to b5 or d7. However, both moves lose: 8 ♜d7 (8 ♜b5 ♞d2! 9 ♞g3 ♞e4 10 ♞f1 ♜xh5 11 ♜c4 ♜g4 12 ♜d4 ♜f3 13 ♜d3 ♞f6 14 ♞d2+ ♜g2 15 ♜e3 ♞g4+ 16 ♜e4 ♞h2 transposes) 8...♞d2 9 ♞g3 ♞e4 10 ♞f1 ♜xh5 11 ♜e6 ♜g4 12 ♜e5 ♞g3 13 ♞d2 ♜h3 14 ♜d4 ♜g2 15 ♜d3 ♞h5 16 ♜e3 ♞f6 17 ♜d3 ♞g4 18 ♜e4 ♞h2 19 ♞c4 ♜g1 20 ♞d2 ♞f1 21 ♞f3+ ♜g2 22 ♜f4 ♞h2 23 ♞d2 ♞f3 24 ♞c4 ♜g1 25 ♞e3 ♞e1 and Black wins.

7...♖e3

7...♖h6 8 ♜c6! arrives at the reciprocal zugzwang with Black to play. White's king is one square closer to d5 than it was on b5 or d7, and so White draws; for example, 8...♖d2 9 ♖g3 ♖e4 10 ♖f1 ♖xh5 11 ♜d5 and Black is a tempo short.

8 ♖g3 ♖f5 9 ♖f1 ♖h6 10 ♜c5

10 ♜c6 is the same.

10...♖xh5 11 ♜d5 ♖h4!

Black sets yet another trap.

12 ♜e5!

12 ♜e4? ♖g4! puts White on the wrong end of yet another reciprocal zugzwang. After 13 ♖d2 ♖d6+! 14 ♜e3 ♖g3 15 ♜d3 ♖g2 Black wins as in the note to White's seventh move.

12...♖g5!

After 12...♖g4 13 ♜e4! Black must allow the white king access to e3.

13 ♖h2! ♖g3 14 ♜d4 ♖f4 15 ♜d3 ♖e4 16 ♜e2 ♖g3 17 ♖f3

17 ♖f1+? loses to 17...♖g2 18 ♖e3+ ♖gl.

17...♖g2 18 ♖e1+

White finally reaches a draw.

## 22) F. Prokop

1st Pr., *Bulletin Ouvrier des Échecs*, 1952

This study centres on the battle to stop Black's bishop occupying the rather long b8-h2 diagonal. If Black can achieve this, then the position is a draw, except if White can immediately shut the bishop off from c7 (for example, with w♖d7, w♖e4 and b♖h2, White to play wins by ♖d6, but Black to play draws by ...♖b8).

1 ♜c7!

White's first priority is to prevent 1...♖b8, and 1 ♜c8? (1 c7? fails to 1...♖b6) is wrong due to 1...♖d4 followed by ...♖e5. Thus White has to play his king to c7, even though it looks unnatural to block the pawn.

1...♖d4

It is amazing that with so many squares to choose from Black can't get his bishop to the key h2-b8 diagonal. After 1...♖g1 2 ♖b7 and 1...♖c5 2 ♖e4 ♖e3 3 ♖d7 ♖b6 4 ♖d2, followed by ♖c4, Black loses straight away, but 1...♖e3 is a trickier defence. Then White wins by 2 ♖e2! ♖c5 3 ♖c1+! ♖b1 (3...♖a3 4 ♖d3 ♖g1 5 ♖e5! {threatening ♖b7} 5...♖d4 6 ♖d6 and the pawn promotes) 4 ♖d3 ♖g1 (forced) 5

♖e5 ♖d4 6 ♖c4 (Black's bishop is totally dominated) 6...♖f2 7 ♖d7 ♖g3 8 ♖d6.

After the text-move, White must prepare to interpose his knight on d6. Which square is correct?

2 ♖e4!

2 ♖f5? is wrong because after 2...♖c3! 3 ♖d6 ♖a5+ 4 ♖d7 ♖b3! Black is just in time to prevent ♖c4.

2...♖b3 3 ♖d6

Threatening 4 ♖b7.

3...♖c5

3...♖c3 4 ♖b6 ♖a4 5 ♖c4 ♖d4+ 6 ♖b7 and c7 cannot be prevented.

4 ♖c8!!

Incredibly, this is the only move to win. In the diagram position, the pawn had an unobstructed path to the eighth rank, but now White has blocked the pawn's progress with every available piece! It is indeed paradoxical that this unlikely-seeming series of moves is the only way to win. c8 is a good square for the knight because it sets up both ♖b7 followed by ♖b6, and ♖d7 followed by ♖d6. c4 is an equally flexible square (and we have seen some lines in which the knight does powerfully occupy this square) but here Black's king rules out use of c4, so White has to settle for c8 instead.

4...♖f2

4...♖b4 loses to 5 ♖b7 ♖a5 (5...♖e1 6 c7 ♖g3 7 ♖d6 wins for White) 6 ♖b6.

5 ♖d7! ♖e1 6 c7 ♖g3

Or 6...♖a5 7 ♖b6.

7 ♖d6

White wins.

## 23) L. Palguyev

=1st Pr., *Chervoni Gornik*, 1981

This game-like position contains some unexpected finesses.

1 ♖d4!

White must make haste to transfer his knight to the key square a5. This move threatens 2 ♖c6!, which covers d8 and thereby threatens 3 b6. Whether Black takes the knight or not, the b-pawn will promote. Thus Black is forced to move his knight, which gives White the tempo he needs for his knight transfer. 1 b6? ♖d8 2 ♖d4 is wrong; Black replies 2...♖b2 and now the knight cannot reach a5. In this case 3 ♖c6 is

met simply by 3...♖b7 followed by ...♗c3-c4, homing in on the white pawns.

**1...♖d8**

Necessary to meet the threat of 2 ♖c6.

**2 ♖b3+! ♗b2 3 ♖a5**

The knight looks exposed to attack from the black king, but it turns out that it is invulnerable for tactical reasons.

**3...♗c3**

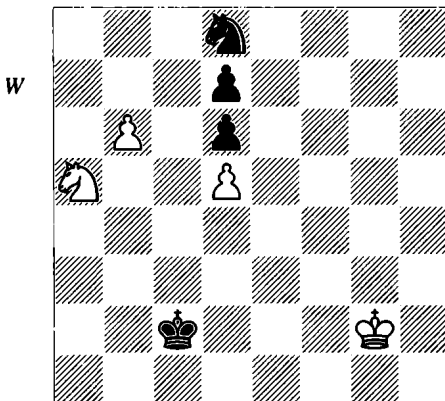
There is nothing better. Other king moves are also met by 4 b6; for example, 3...♗a3 4 b6 ♗a4 (4...♗b4 5 ♖c6+! dxc6 6 b7 ♖xb7 7 dxc6) 5 b7 ♖xb7 6 ♖xb7 ♗b5 7 ♗f3 and White defends the d-pawn with an easy win.

**4 b6**

After this move a curious situation arises. Black clearly cannot move his knight, so he is restricted to moving his king. However, he normally cannot play his king to b4 or d4, because then White continues 1 ♖c6+! dxc6 2 b7! ♖xb7 3 dxc6 and the pawn promotes. However, there are exceptions to this rule when White's king is on f4, f5 or g5. The reason is that in these cases, Black's knight can exploit a check to stop the c-pawn at the end of the above line. When the king is on f4 or g5 Black succeeds with 3...♖c5 followed by 4...♖e6+, while with the king on f5, Black continues 3...♖a5 4 c7 ♖c6 5 c8♗? (5 c8♖! still draws) 5...♖e7+ (Black's king is on b4 or d4, so the knight is not pinned) winning the queen.

**4...♗c2 (D)**

4...♗d2 5 ♗f2! ♗d3 6 ♗f3 transposes into the main line at move seven.



Gaining the opposition offers most resistance, since it turns out that White is also very limited

in his movements. If he moves his knight (including ♖c6), Black replies ...♖b7 and it is a draw. In most cases playing b7 does not win, because after giving up his knight Black can win the d5-pawn. Thus White too is reduced to manoeuvring with his king.

**5 ♗g3!**

White can gain the opposition by making use of the fact that Black's king cannot move to b4 or d4, but he has to be careful with his own manoeuvres. 5 ♗f3? is wrong because after 5...♗d3 6 ♗f4 (6 ♗g4 ♗e4 is also drawn) White's king is on one of the 'mined' squares and so Black can play 6...♗d4. Thus the attempt to gain the opposition using 'close' king manoeuvres (f-file vs d-file) fails. It is worth noting that the position with ♗f3 vs ♗d3 is reciprocal zugzwang.

**5...♗c3 6 ♗g4!**

This is the correct method. White's king is not on one of the 'mined' squares and therefore Black is unable to play his king to the fourth rank.

**6...♗d3**

6...♗d2 (6...♗c2 is the same) takes the king too far away and White wins by marching his king up the board; for example, 7 ♗g5 ♗d3 8 ♗f6 ♗d4 9 ♗e7 ♗c5 10 ♗xd8 ♗xb6 11 ♖b3. Thus the text-move is forced.

**7 ♗f3!**

In this position it is no good running towards d8 because White cannot avoid a 'mined' square. For example:

1) 7 ♗f4? ♗d4 8 ♖c6+? dxc6 9 b7 ♖xb7 10 dxc6 ♖c5 and Black wins.

2) 7 ♗f5? ♗d4 8 ♖c6+ dxc6 9 b7 ♖xb7 10 dxc6 ♖a5 11 c7 ♖c6 draws.

3) 7 ♗h5? and 7 ♗g5? fail to 7...♗e4.

The correct strategy is simply to gain the 'close' opposition.

**7...♗c3**

White's king is on a safe square, so 7...♗d4 loses to 8 ♖c6+ dxc6 9 b7 ♖xb7 10 dxc6. Thus Black's king has to retreat.

**8 ♗e4**

White will continue 9 b7, with an easy win.

## 24) O. Pervakov

1st Place, 12th Moscow Ch., 1989

No prizes for finding White's first move, as it is the only one to prevent immediate mate.

**1 g6+ ♖f6 2 ♘d5+!**

The main enemy is Black's e-pawn, and it is worth sacrificing the knight to get rid of it. If White continues more sedately with 2 g7? ♖xf5 3 ♘d5 e5 then the e-pawn will prove a decisive force; e.g., 4 ♘e3+ ♖g5 5 ♘c4 e4 6 ♘e3 ♙c8 7 ♘g2 ♙g8 8 ♘e3 ♙d6, etc.

**2... ♖xf5**

2... ♖g5 is an ingenious attempt to avoid the stalemates that occur in the main line. However, White can still draw by consistently playing to eliminate the e-pawn:

1) 3 ♘xe7? ♙xe7+ 4 ♖xg8 (4 g7 ♙f8 5 f6 ♙xf6 wins for Black) 4... ♖xh6 5 f6 ♙e8+ 6 ♖f7 ♙a8 and Black wins.

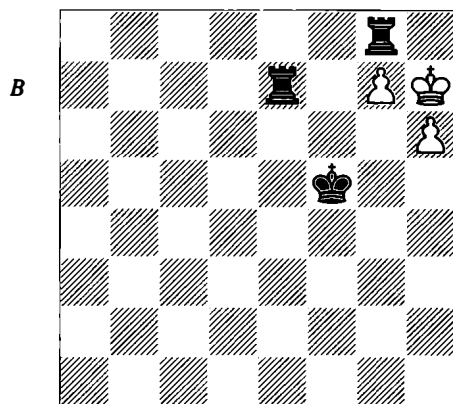
**2) 3 g7! and now:**

2a) 3... ♙a8 allows White a simple escape route by 4 ♘xe7 ♙ge8 (4... ♙g8 5 f6 ♖xf6 6 g8♙ is also a draw) 5 f6 ♖xf6 6 ♘d5+ ♖f7 7 ♘c7 drawing.

2b) 3... ♙b8! (the best try, avoiding various potential knight forks) 4 f6! (4 ♘xe7? loses to 4... ♙ge8 5 g8♙+ ♙xg8 6 ♘xg8 ♙b7+ 7 ♖h8 ♖xf5 8 h7 ♖g6) 4... exf6 5 ♘xf6 (White again defends by a series of stalemate ideas) 5... ♙g8 6 ♘d7! ♙b7 7 ♘f8! ♖f6 8 ♖h8 ♙f7 9 g8♙ ♙xf8 10 ♖h7! drawing.

**3 ♘xe7+!**

This looks crazy, because 3... ♙xe7+ 4 ♖xg8 ♖xg6 is an obvious loss for White. However, thanks to the removal of White's f-pawn, this move draws.

**3... ♙xe7+ 4 g7! (D)**

This is the key move. It appears unlikely to succeed, since Black is to play and has the large material advantage of two rooks against two

pawns. However, the various stalemates conspire to thwart any winning attempt by Black.

**4... ♙xg7+**

Other moves also lead to stalemate; e.g., 4... ♖g5 5 ♖xg8 ♖xh6 (5... ♖g6 6 ♖h8 ♙xg7 or 4... ♖f6 5 ♖xg8 ♙e8+ 6 ♖h7 ♖f7 7 g8♙+ ♙xg8).

**5 hxg7 ♖f6 6 ♖h8 ♙xg7**

Stalemate.

**25) M. Liburkin**

64 – *Shakhmatnoe Obozrene*, 1931

White is a rook down, but his passed e-pawn is so strong that he can immediately win Black's rook.

**1 ♘d8**

Clearly the only move.

**1... ♙xd8 2 exd8♙!**

The first underpromotion. After 2 exd8♙? ♘c6+ White would be struggling to draw.

**2... a3**

2... ♘xf5 3 ♖xa4 transposes to the main line.

**3 ♖xa3 ♘xf5**

Not 3... ♖xa5 4 f6, when Black can't stop the pawn.

After the text-move, we have a knight and pawn ending in which White has an extra pawn. With all the pawns on one side, and taking into account the limited material, the result should normally be a draw. Here, however, we have a special situation because Black's king is imprisoned on a6. In order to win, White must not relax his grip.

**4 ♖a4!**

4 ♖b4? is wrong because the king is vulnerable to a later knight check; e.g., 4... ♘d6 5 c5 ♘b7 6 c6 ♘xd8 7 c7 ♘c6+ 8 ♖c5 ♘e7 9 ♘d6 ♖b7 with a draw.

**4... ♘d6**

Here, too, playing the knight to b7 is the only chance. Against other moves White pushes the pawn to c6 and then either promotes the pawn or mates Black.

**5 c5 ♘b7**

After 5... ♘c8, for example, 6 c6 wins easily: 6... ♘b6+ (6... ♘e7 7 ♘e6 ♘xc6 8 ♘c5#) 7 ♖b4 ♘d5+ 8 ♖c5 ♘c7 (8... ♘e7 9 ♘d6 ♘c8+ 10 ♘d7) 9 ♘b7 ♘e6+ 10 ♖b4 followed by mate.

**6 c6!**

White sacrifices his knight to ensure that the pawn promotes. 6 ♖xb7? ♖xb7 7 ♖b5 ♖c7! is a draw; e.g., 8 ♖c4 ♖c6 9 ♖d4 ♖c7 10 ♖d5 ♖d7 11 c6+ ♖c7 12 ♖c5 ♖d8 13 ♖d6 ♖c8 14 c7 a6.

**6...♖xd8!**

The best defence, aiming for stalemate. The alternative 6...♖c5+ 7 ♖b4 ♖d3+ 8 ♖c4 ♖e5+ 9 ♖d5 wins for White.

**7 c7 ♖b7**

This is the point of Black's play; promotion to a queen pins the knight and stalemates Black, but White must promote to something as Black is threatening ...♖d6.

**8 c8♖!**

The second underpromotion.

**8...♖xa5**

8...♖d6 loses to 9 ♖c6+ so this is forced.

**9 ♖c5! ♖b7 10 ♖c6#**

A surprising finish. There are several studies based on the same conclusion, but this is probably the most attractive.

## 26) M. Liburkin

64 – *Shakhmatnoe Obozrene*, 1939

White must first stop Black's pawns. As these pawns are rather far advanced, there is little chance of White reaching a winning 2 ♖ vs ♖ ending, so he also has to keep his own pawn.

**1 ♖f5**

White must use the h6-knight to stop the g-pawn, leaving the other knight to help in the battle against the a-pawn. Trying to do it the other way round doesn't work; e.g., 1 ♖e6? g2 2 ♖d4 ♖d1 3 ♖f3 a4+ 4 ♖c3 a3 and the h6-knight is too far away. 1 ♖g4?? is even worse, as Black promotes after 1...g2 2 ♖e5 ♖e2.

**1...g2 2 ♖h4**

2 ♖d4?? is the wrong way due to 2...♖f2.

**2...g1♖**

The best chance, gaining time to push the other pawn. After 2...g1 ♖ 3 c4 the c-pawn is too strong; e.g., 3...♖e2 4 ♖e6 ♖g3 5 c5 ♖e4 6 c6 ♖d6 7 c7 ♖d2 8 ♖f5 ♖c8 9 ♖a4 ♖d3 10 ♖xa5 ♖c4 11 ♖a6 ♖d5 12 ♖b7 and White wins.

**3 ♖f3+ ♖d1 4 ♖xg1**

One down, one to go!

**4...a4+ 5 ♖c3**

5 ♖b2? a3+ draws.

## 5...a3

Now White has to use his other knight, but it is far from clear how the a-pawn can be stopped.

**6 ♖d5 a2 7 ♖e3+ ♖c1**

Black must prevent ♖b2.

**8 ♖e2+ ♖b1**

The checks have run out, and Black even threatens to promote with check. Here, however, White reveals the point of his play.

**9 ♖d2!**

White makes no attempt to stop the a-pawn and instead plays for mate!

**9...a1♖**

Or 9...♖b2 10 ♖c4+ ♖b1 11 ♖c3+ ♖a1 12 ♖xa2 and White wins.

**10 ♖c3+ ♖b2 11 ♖c4#**

A very attractive study that has to be solved to be appreciated.

## 27) V. Israelov and A. Sarychev

1st Pr., 64 – *Shakhmatnoe Obozrene*, 1980

White's first task is to bring a knight to f3.

**1 ♖hg5+!**

It is important to choose the right knight. 1 ♖eg5+? ♖h6 2 ♖f3 ♖f1 3 ♖d2 ♖xf3 4 ♖gl ♖e3 5 ♖xe2 ♖g5 gives Black a simple technical win.

**1...♖g8**

Black has to retreat his king to the first rank since 1...♖h6 2 ♖f7+ repeats moves (g6 and h5 are out of bounds for the king). 1...♖h8 2 ♖f3 is essentially the same as the main line.

**2 ♖f3**

Black's immediate promotion has been prevented, but White is still in trouble.

**2...♖f1!**

After 2...e1 ♖+, 3 ♖xel ♖xel 4 ♖xf4 draws. However, the text-move is very awkward because if White plays 3 ♖ed4 or 3 ♖eg5 then he is no longer attacking the f4-pawn and Black can simply play 3...e1 ♖+ with a win on material. It requires a considerable leap of the imagination to see any other possibility for White.

**3 ♖d2**

White's king joins the battle, but this move seems doomed to failure as 3...♖xf3 4 ♖xe2 ♖e3+ wins both white knights.

**3...♖xf3 4 ♖e1!**

This is the remarkable point behind White's play. Black's options are very limited, since if

the rook moves then he loses both pawns. Moreover, Black cannot play his king to f7 or h7 due to the fork on g5, while f8 and g7 are covered directly by White's knight; therefore his king is in a box. White's only problem is that he has no pass moves himself, so he can only push his h-pawn.

**4...♟h8**

Black waits for the h-pawn to advance within range of his king, when he hopes to capture it and thus force White into a fatal zugzwang.

**5 h3!**

The position after White's ninth move in the main line is reciprocal zugzwang, and White must take care that it arises with Black to play. After 5 h4? the opposite would be the case.

**5...♟g8 6 h4 ♟h8 7 h5 ♟g8 8 h6 ♟h8 9 h7**

If this position had arisen with White to play, then he would have to move king or knight, whereupon Black would have an easy win on material.

After the text-move, however, White draws easily, since Black must either give up his rook with 9...♟xh7 or suffer the loss of both pawns after a rook move.

## 28) M. Mikhailov

1st Pr., *Shahmatna Misal*, 1955

White is a piece down but he has two advanced connected passed pawns.

**1 g7!**

The only reasonable move.

**1...♞xg7 2 f6+ ♟f8 3 ♞c5!**

This is the point of White's pawn sacrifice, threatening 4 ♞cd7+ followed by f7+, when the pawn promotes. 3 ♞d6? has a similar threat (4 ♞g6+), but this can be met by 3...♞e6, covering the promotion square.

**3...a2!**

The only defence.

**4 ♟xa2**

4 ♞cd7+? ♟g8 5 f7+ ♟h7 6 f8 ♖a1 ♖ leads nowhere; e.g., 7 ♞f6+ ♟h6 8 ♖h8+ ♟g5 9 ♖xg7+ ♟f5 and Black escapes.

**4...♞c3+**

Again forced, since 4...♞a3 5 ♟xa3 leaves Black defenceless.

**5 ♟b3 ♞a3!**

The point of Black's defence, defending f8 through the c5-knight.

**6 ♟xa3**

6 ♞cd7+? ♟g8 7 f7+ ♟h7 8 ♟xa3 ♞e6 is safe for Black, so White does better to take the bishop while his knight is still preventing ...♞e6. Now, however, Black's other knight can jump to the defence.

**6...♞b5+ 7 ♟b4 ♞d6**

Controlling f7, but this does not save Black.

**8 ♞cd7+ ♟g8 9 f7+!**

The valiant pawn is sacrificed in a good cause.

**9...♞xf7 10 ♞f6+ ♟f8 11 ♞g6#**

The conclusion has a powerful visual impact. After having looked at several studies based on deep and subtle reciprocal zugzwangs, it is refreshing to see a good straight mate.

## 29) G. Rinder

2nd Pr., *Bayerische Problemmeisterschaft*, 1966

White's situation looks absolutely hopeless and in a game many players would be tempted to resign. Black is threatening 1...♞xh6+ and 1...h2, and if 1 ♞g4+ then simply 1...♞xg4+. There hardly seems to be anything else to analyse, yet somewhere there is a hidden draw.

**1 ♞g4+!**

1 ♟xh3? ♞xh6+ 2 ♟g4 f3 is indeed hopeless; for example, 3 ♞f4 ♞h8 4 ♟g3 ♞g8+ 5 ♟h2 ♟f5 6 ♟h3 ♞h8+ 7 ♟g3 ♞h7 8 ♞d5 ♞g7+ 9 ♟h3 ♞g2 and Black wins.

**1...♞xg4+**

Not 1...♟f5?? 2 ♞d4#.

**2 ♟xh3!**

This is the first point; White takes the pawn and not the rook. Now if the rook moves then White plays ♞xf4 with a drawn ending. However, Black can preserve his f-pawn.

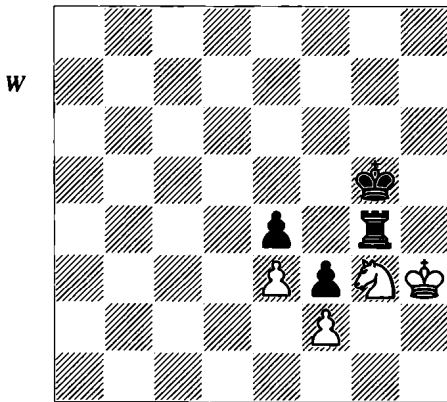
**2...f3!**

2...fxe3 3 ♟xg4! exf2 4 ♞g3 is a clear draw, while 2...♞g8 3 ♞xf4 is also enough for the half-point; e.g., 3...♟f5 4 ♟h4 ♞h8+ 5 ♟g3 ♞h7 6 f3. After the text-move, by contrast, it seems that White cannot avoid falling into the type of lost ending which arose in the note to White's first move.

**3 ♞g3!**

The first step – White attacks both rook and e-pawn. Black has only one move to preserve both.

**3...♟g5 (D)**

**4 ♖h1!!**

This unlikely-looking move forces a draw. Other moves lose:

1) 4 ♖f1? ♜h4+ 5 ♜g3 ♜h1 6 ♖d2 ♜g1+ 7 ♜h2 ♜g4 8 ♜h3 ♜f5 followed by ...♜g2.

2) 4 ♜h2? ♜h4+ 5 ♜g1 ♜f6 6 ♜f1 ♜e5 7 ♜e1 ♜h3 (there are various ways to win but this is the simplest) 8 ♜f1 ♜xg3 9 fxg3 ♜f5 10 ♜g1 ♜g4 11 ♜h2 f2! 12 ♜g2 f1♚+ 13 ♜xf1 ♜xg3 with a winning king and pawn ending.

**4...♜h4+**

Black has few constructive moves. 4...♜f5 and 4...♜h5 are both met by 5 ♖g3+, while 4...♜g2 5 ♖g3 ♜f6 6 ♖xe4+ ♜e5 7 ♖g3 ♜xf2 8 ♜g4 ♜d5 9 ♜f4 picks up Black's last pawn in a couple of moves.

**5 ♜g3**

Now 5...♜xh1 or 5...♜h8 is stalemate, while 5...♜g4+ repeats the position. A remarkable situation.

**30) S. Kaminer**

2nd Pr., Trud, 1935

Two bishops are much stronger than two knights in this type of open position, so White must make use of his advanced h-pawn.

**1 h7**

The only reasonable move. It is clear that Black cannot prevent the promotion of the h-pawn, but he can start a dangerous attack against the white king.

**1...♜h5!**

Now the obvious continuation for White is 2 h8♚? (after 2 h8♖+? ♜f6 Black wins a piece and the game), but after 2...♜xg6+ 3 ♜a1 ♜e7! Black threatens to regain the queen by ...♜f6+,

with an easy win. The only defence against this is 4 ♖f3 ♜f6+ 5 ♖e5+, but after 5...♜e7 White is obliged to give up his queen in any case, with an inevitable win for Black. At first it seems that this line is White's only option, and imagination is required to see that White does have an alternative.

**2 ♖f4!!**

This desperado is the key idea. White's knight is going to be captured in any case, so White might as well use it to deflect Black's pawn from g5 to f4. It is not immediately obvious why this is a help, but the point will be revealed at White's seventh move. Note that the h5-bishop is attacked, so Black has no time for 2...♜g7.

**2...♜xf4 3 h8♚ ♜g6+ 4 ♜a1 ♜e7!**

Play proceeds just as before.

**5 ♖f3 ♜f6+ 6 ♖e5+ ♜e7**

Now White reveals the point behind his second move.

**7 ♜h4!!**

Threatening 8 ♜xf4, so Black has no choice.

**7...♜xh4 8 ♖xg6+**

This picks up both bishops, after which White has a technically winning position.

**31) T. Gorgiev and G. Preuyt**

1st Pr., *Tijdschrift v.d. KNSB*, 1959

Both sides have advanced passed pawns, but the most immediate danger is posed by Black's, which threatens to promote with check.

**1 ♖e3**

Not 1 ♖d2? ♜d4 2 ♜c2 ♜xd2+ 3 ♜xd2 f1♚ 4 b8♚ ♜f2+ and Black delivers perpetual check.

**1...f1♚+**

Black does best to cash in his own advanced pawn and hope to use his pieces to restrain White's pawn army. 1...♜b4 2 f7 is hopeless for Black.

**2 ♖xf1 ♜xf1+ 3 ♜e2**

White must attack the rook, because if Black can play ...♜h2 then all the white pawns will be under control.

**3...♜f2+ 4 ♜e1 ♜b2**

Halting the b-pawn, but White has three more pawns in reserve!

**5 ♖e6!**

Defending the c5-pawn and freeing the path for the f-pawn. Other moves are inferior:

1) 5 f7?  $\text{xc5}$  6  $\text{d7}$   $\text{d6}$ ! 7 b8 $\text{W}$   $\text{xb8}$  8  $\text{xb8}$ +  $\text{b6}$  9  $\text{e2}$   $\text{c7}$  is a draw.

2) 5  $\text{d7}$ ?  $\text{h2}$  6 f7  $\text{g3}$ + 7  $\text{c1}$   $\text{f2}$  8 f8 $\text{W}$   $\text{xf8}$  9  $\text{xf8}$   $\text{b5}$  and, rather surprisingly, White will lose two of his three pawns straight away, with a clear draw.

5... $\text{f2}$ +

5... $\text{h2}$  6 f7  $\text{g3}$ + 7  $\text{c1}$  transposes to the main line.

6  $\text{c1}$

6  $\text{c1}$ ?  $\text{g3}$  7  $\text{g1}$   $\text{h2}$ + 8  $\text{h1}$   $\text{f2}$  9 f7  $\text{b8}$  10 f8 $\text{W}$   $\text{xf8}$  11  $\text{xf8}$   $\text{b5}$  is drawn.

6... $\text{g3}$

The bishop takes over the duty of keeping the b7-pawn under control, while the rook switches to cope with the f-pawn.

7 f7  $\text{f2}$

In the note to White's fifth move we reached this position with the difference that White's knight was on d7 rather than e6. Now White reveals why e6 is the better square.

8  $\text{f4}$ !

With the lines of bishop and rook intersecting at f4, that is the square for White's knight to cause the maximum disruption.

8... $\text{xf4}$

The only chance.

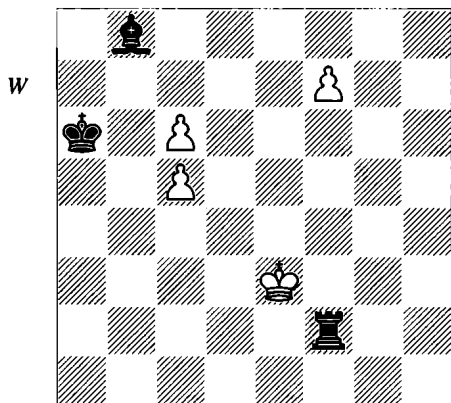
9 b8 $\text{W}$

Now Black can win the queen with a discovered attack, but this is likely to leave the f-pawn free to promote.

9... $\text{f1}$ + 10  $\text{e2}$   $\text{f2}$ + 11  $\text{c3}$

Black has no more checks and must abandon his rook, but he has set a devilish trap.

11... $\text{xb8}$  (D)



12 c7!!

The obvious 12  $\text{xf2}$ ? only draws due to 12... $\text{a7}$ ! 13 f8 $\text{!}$  (the best chance, since 13 f8 $\text{W}$   $\text{xc5}$ + 14  $\text{xc5}$  is an immediate draw by stalemate) 13... $\text{b6}$ !! (a remarkable and easily overlooked move which stops the c6-pawn in its tracks and prepares ... $\text{b5}$ ; note that 13... $\text{b8}$ ? loses to 14  $\text{d6}$ ) 14  $\text{d6}$  (or 14  $\text{c3}$   $\text{b5}$ ) 14... $\text{a5}$ ! (again threatening ... $\text{b5}$ ) 15 c7  $\text{b7}$  and White loses his c7-pawn.

12... $\text{xc7}$  13  $\text{xf2}$

Now there is no stalemate and White wins.

### 32) P. Benko

1st Pr., *Magyar Sakkélet*, 1967

This position does not look especially complicated, but it is actually a deep study in corresponding squares. At first sight White can draw by playing his bishop somewhere along the diagonal, say 1  $\text{e5}$ . Black replies 1... $\text{g4}$ , then White continues 2  $\text{g2}$ , followed by  $\text{d4}$  and  $\text{xf2}$ . However, matters are not that simple. The first point is that White has to choose the square for his bishop carefully, in order to prevent Black from switching his rook behind the pawn. Thus:

1) 1  $\text{e5}$ ? is wrong due to 1... $\text{a5}$ ! 2  $\text{d4}$  (2  $\text{d6}$   $\text{f5}$ ! wins for Black, since he can follow up with ... $\text{g4}$  and ... $\text{f3}$ ) 2... $\text{g3}$  3  $\text{xf2}$ +  $\text{f3}$  4  $\text{d4}$   $\text{d5}$  and Black wins. The idea of sacrificing the pawn to reach a winning  $\text{f}$  vs  $\text{g}$  position is a typical theme in this ending.

2) It is slightly harder to explain why 1  $\text{b8}$ ? loses. Black replies 1... $\text{b2}$ ! 2  $\text{d6}$  (2  $\text{c7}$   $\text{g4}$  3  $\text{g2}$   $\text{b7}$  followed by ... $\text{f7}$  wins for Black, while 2  $\text{e5}$   $\text{b5}$ ! wins as in line '1') 2... $\text{h3}$ ! and now we have a position of reciprocal zugzwang with White to play. You will just have to accept this for now, but later we will show that with the black king on h3, the positions  $\text{c7}$  vs  $\text{a2}$ ,  $\text{d6}$  vs  $\text{b2}$  and  $\text{e5}$  vs  $\text{c2}$  are all reciprocal zugzwang.

3) For the same reason, 1  $\text{c7}$ ? fails to 1... $\text{h3}$ ! as this is one of the positions in the list of reciprocal zugzwangs.

1  $\text{d6}$ !

Here the attempt to switch the rook behind the pawn by 1... $\text{a6}$  fails to 2  $\text{c7}$ ! (2  $\text{e5}$ ? loses to 2... $\text{a5}$ !) 2... $\text{c6}$  (2... $\text{f6}$  3  $\text{d8}$  is the tactical point behind the choice of c7 for the bishop) 3  $\text{e5}$ !  $\text{c5}$  (after 3... $\text{e6}$ , 4  $\text{g3}$ + is

the simplest) 4 ♖d4 with a clear draw. Since 1...♖a6 fails, Black has only one move to deal with White's threat of ♖g2.

1...♖h3

There are two main ideas White has to prevent. The first is the transfer of Black's king to f3. This wins even if Black loses his pawn in the process. It follows that White has to be ready to meet ...♖g4 with ♖g2. The second idea is that of switching the rook behind the pawn. In this case White has to be able to meet ...♖ to the f-file with ♖xf2. If Black manages to put his rook on the f-file and also play ...♖g4, then he wins even if White can meet ...♖g4 with ♖xf2 (because then ...♖f3 gives a winning ♖ vs ♖ position).

2 ♖c7!

Now we see why the bishop has to be two files away from Black's rook. If Black now plays 2...♖a7, then White replies 3 ♖b6 **attacking the rook**, which gives White time to take on f2 before Black can play ...♖g3. 2 ♖e5? ♖a5 3 ♖d4 ♖g3, 2 ♖f4? ♖g4, 2 ♖g3? ♖a1+ 3 ♖xf2 ♖a2+ 4 ♖f3 ♖a3+ and 2 ♖b8? ♖a8 3 ♖d6 ♖a6 are all wrong for White. The position after 2 ♖c7 is actually reciprocal zugzwang.

2...♖b2 3 ♖d6!

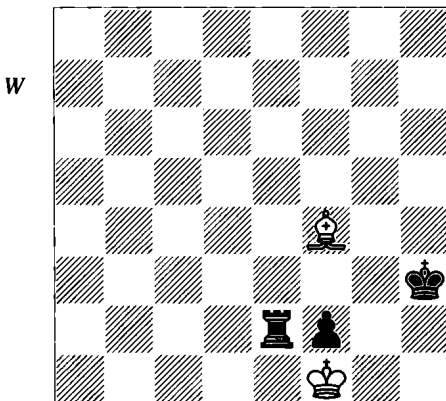
The same formula again: White is ready to meet 3...♖b6 with 4 ♖c5, attacking the rook.

3...♖c2 4 ♖e5! ♖d2 5 ♖f4!

In this position ♖f4 attacks the enemy rook, so Black has no time for ...♖g4.

5...♖e2! (D)

5...♖d4 6 ♖e3 shows that the usual principle holds.



However, the text-move creates a dilemma for White. He must move his bishop, but he

does not want to fall into one of the reciprocal zugzwangs. Where should the bishop go?

6 ♖b8!!

Only here! So far the b8-square has not been found to correspond to any of the squares on the second rank, so it is the ideal choice. If Black moves his rook along the second rank, then White will always be ready to regain the correspondence by moving to the appropriate square. This means that we can complete the list of correspondences by adding ♖b8 vs ♖e2 to the three given earlier (♖c7 vs ♖a2, ♖d6 vs ♖b2, ♖e5 vs ♖c2). There is just one final question to answer: why can't Black now play ...♖e8 and switch his rook behind the pawn?

6...♖e8 7 ♖g3!!

This stalemate resource is the answer; it only works when Black's rook is on the e-file but it provides the perfect solution to White's problem. Now White can take the f-pawn without allowing Black's king to f3. 7 ♖d6? is wrong as 7...♖d8 8 ♖e7 ♖d7 wins for Black.

7...♖g4 8 ♖xf2

With an easy draw.

### 33) N. Zaitsev

2nd Pr., *Sovietskaya Kuban*, 1977

This seemingly simple position conceals a great deal of subtlety.

1 ♖d1!

The first step is to hold up Black's e-pawn. After 1 a7? e2 2 a8♖ e1♖ White has no winning chances.

1...g3 2 a7

2 ♖f3? is an attempt to promote with check (if Black takes the bishop), but 2...e2 3 ♖xe2 g2 draws easily.

2...e2!

Black must deflect the bishop. After 2...g2 3 a8♖ g1♖ (3...e2 4 ♖a7+) White mates at once by 4 ♖f3+ ♖e1 5 ♖e2#.

3 ♖xe2 g2 4 a8♖ g1♖

The introductory phase is over and the position has clarified to ♖+♖ vs ♖. Many such endings are decided by a series of checks, and the only difficulty lies in selecting the right ones, but this position involves more finesse.

5 ♖a7+!

The only move to win. With the bishop on e2, 5 ♖f3+? ♖e1 leads nowhere as White doesn't

have another check. 5 ♖f8+? is also wrong since after 5...♗g3 6 ♖g7+ ♔h2! 7 ♖h6+ ♗g3 8 ♖g5+ ♔h2 9 ♖h4+ ♗g2 White can give a lot of checks but cannot make any genuine progress.

5...♗g2 6 ♖f3+

Thanks to his previous move, White is able to improve the position of his bishop with gain of tempo. 6 ♖g7+? ♔h2 transposes to the previous note.

6...♔h2

6...♗f1 7 ♖a1+ ♗f2 8 ♖d4+ transposes to the main line.

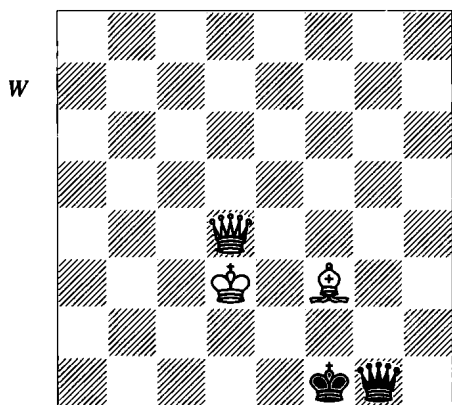
7 ♖h7+ ♗g3 8 ♖g7+!

8 ♖g6+? ♗f2! 9 ♖b6+ ♗f1 10 ♖b1+ ♗f2 is a draw since White is unable to bring his queen closer with checks.

8...♗f2

After 8...♔h2, 9 ♖h6+ ♗g3 10 ♖g5+ ♗f2 11 ♖e3+ wins Black's queen.

9 ♖d4+ ♗f1 (D)



White has brought his queen as close as possible by means of checks, but it is not clear how he can make further progress.

10 ♖c4!!

A very surprising quiet move, threatening 11 ♖c1+ ♗f2 12 ♖e3+. The fact that White has formed a queen and king battery nullifies Black's queen check on g6.

10...♖g5

This puts up most resistance. The alternatives lose as follows:

1) 10...♖f2 11 ♖c1+ ♖e1 12 ♖e2+ ♗f2 13 ♖e3+ ♗g2 14 ♖f3+ ♗f1 15 ♖g2+ wins the queen.

2) 10...♗f2 11 ♖c5+ ♗f1 12 ♖c1+ ♗f2 13 ♖e3+ ♗f1 14 ♖e2#.

3) 10...♖g6+ 11 ♖e3+ ♗g1 12 ♖c1+ ♔h2 13 ♖h1+ followed by ♖g2+ and White wins the queen.

11 ♖e4+!

The only move to win. White must guard the bishop.

11...♗g1

Or 11...♗f2 12 ♖e2+ ♗g1 13 ♖e1+ ♔h2 14 ♖h1+ ♗g3 15 ♖g2+ ♔h4 16 ♖h2#.

12 ♖d4+! ♔h2

12...♗f1 13 ♖d1+ ♗f2 14 ♖e2+ mates as in the previous note.

13 ♖f2+ ♔h3 14 ♖f1+ ♔h4 15 ♖h1+

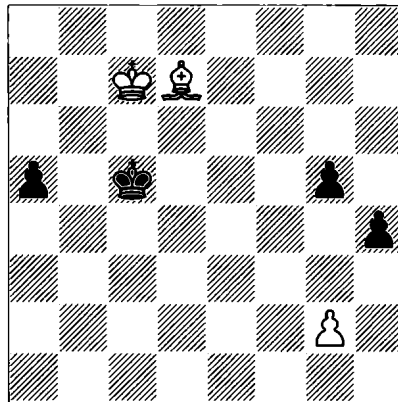
White mates in two more moves.

### 34) A. Chéron

*Journal de Genève*, 1955

Amazingly accurate play is required to draw this game-like position.

The solution is quite complex and the logic will be clearer if we first tackle two preliminary positions.



### Reciprocal Z1

We will use the notation 'Z1W', for example, to mean Z1 with White to play.

#### White to play:

The analysis is not difficult, since after 1 ♖c6 g4, 1 ♗b7 ♗b4 2 ♗c6 a4 3 ♗d6 a3 4 ♖e6 g4 or 1 ♗d8 ♗b4 2 ♗e7 a4 3 ♗f6 a3 4 ♖e6 g4 the black pawns run through.

#### Black to play:

Here the analysis runs:

1) 1...♖b4 2 ♖d6 a4 3 ♗xa4 ♖xa4 4 ♖e5 is an easy draw.

2) 1...♗d4 2 ♖b6 ♖e3 3 ♖xa5 ♖f2 4 ♗c6 is also drawn.

3) 1...♗d5 2 ♖b7! (now we have transposed to the main line of the study) 2...♖c4 (2...♖c5 3 ♖c7 repeats, while 2...♗d6 3 ♖c8! does not help Black) 3 ♖c6 transposes to line '4c'.

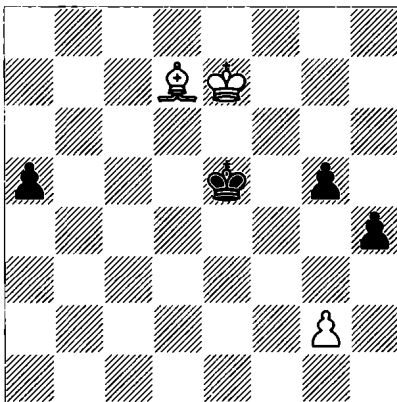
4) 1...♖c4 (the critical move) and now:

4a) 2 ♗e6+? ♗d4! 3 ♖b6 (3 ♗d7 ♖c5! is Z1W) 3...a4 4 ♖b5 a3 5 ♖b4 g4 6 ♖xa3 h3 and Black wins.

4b) 2 ♗d6? ♗d4 puts White in (reciprocal) zugzwang. 3 ♖c6 and 3 ♖e6 allow a pawn to advance, while 3 ♖c7 ♖c5! and 3 ♖e7 ♖e5! lead to Z1W and Z2W respectively. One must take care to avoid self-reference in analysis of this type, and readers may check for themselves that I have not fallen into this trap (hint: start by determining the results of Z1 and Z2 with White to move; then analyse Z1 with Black to move).

4c) 2 ♖c6! a4 (2...♖b4 3 ♗d5 a4 4 ♗xa4 ♖xa4 5 ♖e5 and 2...♗d4 3 ♖b5 are comfortable draws) 3 ♗d6 a3 4 ♖e5 with a draw, as thanks to the position of the king on c4 Black cannot promote his a-pawn.

This shows that Z1 is indeed reciprocal zugzwang.



**Reciprocal Z2**

### White to play:

In order to draw, White must be able to meet ...♖f4 with ♗d6 and this is impossible if White is to play; e.g., 1 ♖f7 (even worse is 1 ♖e8 ♖f4) 1...♖f4 2 ♖g6 (2 ♖e6 g4 3 ♗d6 h3 4

gxh3 g3 5 ♗c6 a4 wins for Black) 2...g4 3 ♖h5 h3 4 gxh3 g3 and Black wins.

### Black to play:

1...♖f4 (1...♗d4 2 ♖f6 and 1...♖e4 2 ♖f6 are easy draws, while 1...♗d5? 2 ♖f6 even wins for White) 2 ♗d6 g4 3 ♖c5 and White saves the game.

Thus Z2 is also reciprocal zugzwang.

Now we can move on to the study itself.

### 1 ♗c6!

It is far from obvious why this is the only move to draw. The alternatives are:

1) 1 ♗d6? h3 (if the bishop doesn't move, then this reply is very strong) 2 ♗d5 h2 3 g4 a5 4 ♖c5 ♖xg4 and the advance of the g-pawn is decisive.

2) 1 ♗e2? (1 ♗d1? is met the same way) 1...a5 2 ♗b5 g4 3 ♗d6 h3 4 gxh3 g3 5 ♗c6 a4 and one of the pawns promotes.

3) 1 ♗d5? a5 2 ♗c6 (the loss of a tempo is decisive; 2 ♖c6 fails to 2...a4 3 ♖c5 ♖e5! 4 ♗c4 a3 5 ♖b4 ♗d4 6 ♗e6 g4 7 ♖xa3 h3 8 gxh3 g3 promoting) 2...♖e5! (this retreating move is one of Black's main weapons; Black's pawns cannot be stopped by the bishop alone, so it is worth Black spending time to prevent the white king from joining the battle) 3 ♖c7 g4 4 ♖b6 ♗d6 (the same motif again; now the white king is tied to the defence of the bishop and if the bishop moves, it has to abandon an important diagonal) 5 ♗b5 h3 6 gxh3 gxh3 7 ♗c6 h2 and the a-pawn cannot be stopped.

### 1...♖e5!

Once again, this is Black's best move. 1...a5 2 ♗d6 is a simple draw, because the king can cope with the a-pawn, while the bishop prevents Black from winning on the kingside.

### 2 ♖c7

White cannot save the game without using his king, so he tries to creep round the bishop.

### 2...a5

This is the right pawn to push, since 2...g4 3 ♖b6 ♗d6 4 ♗a8 is an easy draw.

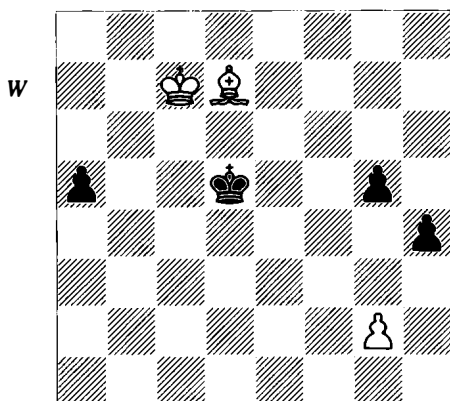
### 3 ♗d7!

A very difficult move to find. The obvious continuation is 3 ♖b6? but then Black wins by 3...♗d6! 4 ♗b5 (the bishop must quit the long diagonal in order for White to take the a-pawn) 4...g4 5 ♖xa5 g3! (threatening 6...h3, and so

forcing White to spend a tempo with his bishop)  
6 ♖f1 ♖c5 7 ♗a6 ♖d4 8 ♖b6 ♖e3 9 ♖c5 ♖f2  
10 ♖a6 h3 and Black promotes.

3...♖d5! (D)

Black again finds an awkward move, this time trying to support the passed a-pawn with his king.



4 ♖b7!!

An absolutely remarkable move. It turns out that it is often bad for White's king to be stuck on the central files, since the unavailability of d7 restricts the king's manoeuvres. It is very interesting to see why other moves lose (this analysis depends heavily on Z1 and Z2):

1) 4 ♖d8? ♖d4 (now White is in non-reciprocal zugzwang) 5 ♖e8 (5 ♖c7 ♖c5! and 5 ♖e7 ♖e5! are Z1W and Z2W respectively, while after 5 ♖c8 ♖e3 the white king is too far away) 5...♖e4! (5...♖e5? 6 ♖e7 is Z2B) 6 ♖c6+ (after 6 ♖f7 ♖f4 Black wins as in the analysis of Z2W; 6 ♖e7 ♖e5! is Z2W) 6...♖e5! (threatening ...g4) 7 ♖d7 ♖f4 8 ♖e7 g4 9 ♖d6 h3 10 gxf3 g3 11 ♖c6 a4 and Black wins.

The question arises as to why this ♖d8 vs ♖d4 position is not a reciprocal zugzwang, since it seems to depend on opposition-like features similar to those governing Z1 and Z2. The reason is that if Black is to play he can maintain the zugzwang with 1...♖d5!. A quick check of the above lines reveals that Black meets all White's king moves by playing his king to e5, c5 or e4. These squares are all accessible from d5 as well as d4, so the analysis is identical. It follows that positions with ♖d8 vs ♖d5 and ♖d8 vs ♖d4 are winning for Black whoever moves first. The reason for the breakdown of

the opposition in these positions is the fact that White cannot play his king to d7.

2) 4 ♖c6+? ♖c4! (4...♖c5? 5 ♖d7 is Z1B) 5 ♖d6 (5 ♖b6 ♖b4 wins for Black, while 5 ♖d7 ♖c5 is Z1W) 5...g4 6 ♖e5 (6 ♖d7 h3 7 gxf3 g3 8 ♖c6 a4) 6...♖c5! 7 ♖e4 h3 8 gxf3 gxf3 9 ♖f4 ♖d4! 10 ♖c6 h2 11 ♖g3 a4 and Black wins.

3) 4 ♖b6? (this loses, although the reason has nothing to do with zugzwang) 4...♖d6! (Black dislodges the bishop and frees a black pawn to advance) 5 ♖b5 g4 transposing to the note to White's third move.

4) 4 ♖b8? (the alternative 4 ♖c8? ♖c4! is the same) 4...♖c4! 5 ♖e6+ (5 ♖c7 ♖c5 is Z1W, while 5 ♖c8 and 5 ♖b7 are met by 5...♖b4, when the white king is too far away) 5...♖d4 6 ♖d7 ♖e3 and Black wins.

The text-move is the only one to draw because it keeps open a wide range of options (meeting ...♖c5 with ♖c7, ...♖d6 with ♖c8 and ...♖c4 with ♖c6) while avoiding playing the king to d8, which invariably loses, as we have seen. In some respects the position is similar to a king and pawn ending, since White's bishop is tied to d7 by the need to control all the black pawns, so only the kings can move freely. Thus it is not surprising that some of the analysis contains 'opposition-like' features. However, it would be wrong to say that one can deduce all the analysis simply by considering the opposition. For one thing, the d7-square is out of bounds to White's king, and secondly there is always the possibility of Black running to one side or the other with his king.

4...♖c4

4...♖c5 5 ♖c7! is Z1B, while 4...♖d6 5 ♖c8! ♖e5 (5...♖c5 6 ♖c7 is Z1B again) 6 ♖c7 ♖f4 7 ♖d6 g4 8 ♖c5 is also a draw.

5 ♖c6!

We know this is drawn from the analysis of Z1B.

5...a4 6 ♖d6 a3 7 ♖e5! ♖d3 8 ♖e6 ♖e3 9 ♖f5

Now the draw is clear.

This is a remarkable and difficult study. I think the difficulty derives mainly from the curious mixture of reciprocal and non-reciprocal zugzwangs, which means that the situation cannot be analysed solely in terms of the opposition or corresponding squares. Chéron's analysis

contains a few inaccuracies, but his main lines are all valid and I have corrected the inaccuracies without comment.

### 35) G. Zakhodiakin

1st Pr., 64 – *Shakhmatnoe Obozrene*, 1931

The material balance indicates a draw, especially as Black's king is easily able to blockade White's pawn. However, there are a couple of features of the position that should cause Black to worry: both his pieces stand passively and they are widely separated. It might seem that White's best chance lies in cutting the knight off from the enemy king and rounding it up, but surprisingly the winning method involves driving Black's pieces together, so that they end up stepping on each other's toes.

**1 ♖c5!**

White must act quickly; if Black succeeds in playing ...♙g7 and rescuing his knight from the queenside, then the draw will be clear. Not 1 ♖d5? ♖b6+ 2 ♖c6 ♖a4, when the knight slips away.

**1...♘c7**

Forced, to meet the threat of 2 ♖c6.

**2 ♖d6 ♖e8+**

A key moment: should the king go to d7 or e7?

**3 ♖e7!**

3 ♖d7? is wrong, but for a subtle reason. After 3...♗g7 4 ♗g6 ♖g8 5 ♖e7 ♖h8 we arrive at a position of reciprocal zugzwang with White to play. It might seem odd that White cannot lose a tempo, but he is restricted in his movements. The bishop must stay on g6 to prevent the knight from escaping via f5 or h5, so White can only move his king. If White could meet ...♖g8 with ♖f7+ then he would win, but he can never force this: 6 ♖d6 (6 ♖f7 ♖f5! uses a stalemate trick to get the knight out) 6...♖g8 7 ♖d7 ♖f8! (not 7...♖h8? 8 ♖e7, when White has transferred the move to Black) 8 ♖d6 ♖g8! 9 ♖e7 ♖h8 and White is not making progress.

**3...♗g7**

Going backwards by 3...♘c7 loses to 4 ♖f7 ♖d5 5 g6 followed by mate.

**4 ♗g6!**

Now it is Black to move in the reciprocal zugzwang.

**4...♖g8**

Forced, but now White can use the check on f7 to rearrange his pieces.

**5 ♖f7+! ♖h7**

5...♖h8 6 ♖f6 ♖h7 7 ♖e5! ♖h8 8 ♖f4 transposes to the main line.

**6 ♖f6 ♖h8**

Black is very restricted, but still the win is not easy; for example, 7 ♖g6? ♖e6! would let Black escape. White's aim is to meet ...♖h7 with ♖g4; after the forced ...♖h8 White will play g6, winning the knight.

**7 ♖e5**

Heading for g4.

**7...♖h7**

Now the direct 8 ♖f4?! ♖h8 9 ♖g4 ♖h7 doesn't work as the wrong player is to move. White must lose a tempo, but he must take care that his king remains guarding f5 so as to keep the knight imprisoned.

**8 ♖e4!**

This triangulation is the key to success.

**8...♖h8 9 ♖f4 ♖h7 10 ♖g4**

Now everything is well.

**10...♖h8 11 g6**

White wins the knight and the game.

### 36) V. Tiavlovsky

1st Pr., *Shakhmaty v SSSR*, 1958

Even the first move in this study is quite difficult.

**1 ♗h5!!**

Other moves fail for various reasons:

1) 1 g4? ♖e3 and the black pawn cannot be stopped.

2) 1 ♖c6? f2 2 ♗g2 ♖e3 3 ♗h3 ♖c4! 4 ♖c6 (4 g4 ♖xg4 5 ♖f1+ ♖d4 6 ♗e2 ♖e3 7 ♖c6 ♖g2 transposes) 4...♖d4 5 g4 (5 ♖d6 loses to 5...♖e4 followed by ...♖f3 and ...♖g2) 5...♖xg4 6 ♖f1 ♖e3 7 ♗e2 ♖g2 8 ♖d6 ♖f4 9 ♖f1 ♖e4! 10 ♖c4 (10 ♖c5 ♖e3 11 ♖c4 ♖d2 is similar) 10...♖e3 11 ♖f1 ♖d2 12 ♖e5 ♖e1 13 ♗a6 ♖e2 and the pawn promotes.

3) 1 ♗b5? is tempting since 1...f2? 2 ♗e2! transposes to the main line which, as we shall see, is drawn. However, Black has a more accurate continuation in 1...♖e3! (Black threatens 2...♖c4+ and so forces White's reply) 2 ♗d3 (this square is inferior to e2 because Black gains an extra tempo by attacking the bishop with ...♖c3) 2...f2 3 g4 ♖c3 4 ♗e2 ♖d2 5 ♗b5

♖d5+ 6 ♜c6 ♜f4 7 ♙f1 ♜e1, followed by ...♜e2, and Black wins.

4) 1 ♙d7? f2 2 ♙h3 ♜e3 gives White a tempo more than line '2', but it is not enough to save the game: 3 g4 (3 ♜c6 ♜c4 4 ♜d6 ♜d4 (threatening ...♜e4-f3 followed by ...♜g2) 5 g4 ♜xg4 transposes) 3...♜xg4 4 ♜c6 ♜c4 5 ♜d6 ♜d4 6 ♙f1 ♜e3 7 ♙e2 ♜g2 and Black wins exactly as in line '2'.

The text-move is most accurate as White's bishop at once settles on the best square, e2, without giving Black the opportunity to gain any extra tempi.

**1...f2 2 ♙e2 ♜e3**

2...♜d4 3 ♙f1 ♜f5 4 g4 ♜e3 5 ♙e2 transposes to the main line.

**3 g4!**

White must initiate his counterplay without loss of time. 3 ♜c6? is too slow and loses to 3...♜c3 4 ♜c5 ♜d2 5 ♙b5 ♜f5 6 ♙f1 (or 6 g4 ♜g3, followed by 7...♜e2) 6...♜xg3 7 ♙g2 ♜h5 followed by ...♜f4 and ...♜e1.

**3...♜d5+!**

The critical move. In this position taking the g-pawn only draws: 3...♜xg4 4 ♜c6 ♜c3 5 ♜d5 ♜d2 6 ♙a6 ♜e3 7 ♙b5 ♜f6+ 8 ♜e5 ♜e4 9 ♙f1! ♜g3 10 ♙g2 ♜e2 11 ♜f5 ♜f4 12 ♙f1 and Black cannot make progress because the white king is too close.

**4 ♜a6!!**

This paradoxical move is the only one to draw. 4 ♜c6? ♜f4 5 ♙f1 ♜c3 6 g5 ♜d2 wins for Black because White's king has lost touch with the drawing square a5 (see later in the main line).

**4...♜c3**

4...♜f4 5 ♙f1 ♜c3 6 g5 transposes to the main line.

**5 g5!**

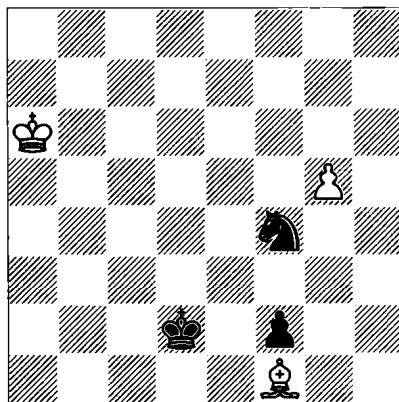
White's move-order must be accurate. 5 ♙f1? ♜e3! 6 g5 (6 ♙b5 ♜c4) 6...♜xf1 7 g6 fails because Black promotes with check, while 5 ♜a5? ♜d2 6 ♙f1 ♜e1 7 ♙c4 (for other squares see the note to White's eighth move) 7...♜e3! followed by ...♜xg4 wins for Black.

**5...♜f4**

5...♜d2 6 ♙f1 ♜e1 (6...♜f4 transposes to the main line) 7 ♙c4! draws here because Black cannot win the g-pawn with ...♜e3. That is why White must play g5 before ♜a5.

**6 ♙f1 ♜d2 (D)**

W



For the moment White cannot push the g-pawn, because Black simply takes it. A bishop move is also ruled out due to ...♜e2. Therefore White can only move his king, but he must choose the right square.

**7 ♜a5!!**

This is the position White has been aiming for. Black can force his pawn through, but in this particular situation it doesn't win.

**7...♜e1**

Black may as well play this straight away, since 7...♜d1 8 ♜b4 ♜e1 9 ♙c4 ♜e2 10 g6 f1 ♖ 11 g7 is clearly drawn.

**8 ♙c4!**

The bishop must cover the pawn's promotion square or Black will easily round up the pawn with his queen. This is also why White had to play 7 ♙c4 in the analysis of 5 ♜a5?.

**8...♜e2 9 g6 f1 ♖ 10 g7**

Although Black has a check, he is unable to win. At move four White had a choice as to where he could move his king. Counting the spare tempo at move seven, the white king could reach the following squares: a5, b5, c5, a6, b6, c6, d6, a7, b7, c7, a8, b8 and c8. However, the squares on the sixth rank fail to ...♜f6+, a7, b7, c5 and a8 fail to ...♜g1+ or ...♜g2+, while c7, b8 and c8 fail to ...♜f4+ or ...♜f5+. That only leaves b5 to be eliminated, but this loses to ...♜c3+. Thus a5 really was the only target square for White's king.

**10...♜f5+**

Black's only check.

**11 ♜b4!**

11 ♜a4? loses to 11...♜c3+ 12 ♜b3 ♖b1+ 13 ♜xc3 ♖a1+.

**11...♜b1+**

Again the only check.

**12 ♖c5! ♜f5+**

Black cannot avoid the repetition without allowing the white pawn to promote.

### 37) A. Chéron

*Journal de Genève*, 1956

This natural position can only be won by extremely accurate play.

**1 ♖d8+!**

The only chance. After 1 ♖b7? ♖e6 2 ♖c6 ♖c2 Black draws easily, while after 1 a6? ♖b5+ 2 ♖b7 ♖e6 3 ♖d8 (3 ♖c6 ♖d4+ and then ...♖b5 repeats) 3...♖d5 4 ♖b6 ♖c4 Black has secured the position of his knight on b5, so he can push his own pawns with an easy draw.

**1...♖e6**

After other moves White can easily promote his pawn by a6 followed by ♖b6 or ♖b7 as appropriate.

**2 a6**

2 ♖b7? ♖d5 3 a6 ♖b5 draws as in the note to White's first move.

**2...♖d7**

2...♖b5+ 3 ♖b6 ♖d7 4 ♖e7! transposes to the main line.

**3 ♖b6!**

The correct square for the king. 3 ♖b7? only draws due to 3...♖b5 4 ♖f6 (or 4 ♖b6 c4 5 ♖d4 d5 6 ♖e5 ♖e6) 4...c4 5 ♖d4 d5 6 ♖e5 ♖e6 7 ♖d4 ♖d7, when White cannot make progress.

**3...♖b5!**

Black plays to reach an 'a-pawn plus wrong bishop' draw.

**4 ♖e7!**

A spectacular move, although almost forced since Black was threatening ...♖c8 followed by ...♖b8 with a clear draw.

**4...c4!**

4...♖c8 loses at once to 5 ♖xd6, but 4...♖c7 is a tough defence. Then White can only win by some clever manoeuvring, starting with 5 a7:

1) 5...♖c8 6 ♖c6! (6 ♖xd6? ♖d5+ 7 ♖c6 ♖b4+ draws) 6...c4 (other moves are similar) 7 ♖xd6 ♖a8 8 ♖e5 c3 9 ♖xc3 ♖c7 10 ♖e1 ♖a8 11 ♖a5 ♖c7 12 ♖b6 ♖a8+ 13 ♖a6 ♖d7 14 ♖b7 and White wins.

2) 5...♖d5+ 6 ♖b7 ♖c7 7 ♖f8 c4 8 ♖g7 ♖d8 9 ♖c3 ♖d7 10 ♖a5 ♖a8 11 ♖xa8 ♖c8 12

♖c3 ♖c7 13 ♖b4 d5 14 ♖c3 ♖c8 15 ♖e5 is also winning for White.

3) 5...c4 6 ♖f6! (6 ♖b7? c3 7 ♖f6 c2 8 ♖g5 d5 9 ♖f4 d4 draws) 6...♖c8 7 ♖c6 ♖a8 (7...d5 loses more quickly because 8 ♖d4 ♖a8 9 ♖e5 forces Black to give up one of the pawns) 8 ♖c3 (White's first task is to force Black to play ...d5) 8...♖c7 9 ♖d2 ♖a8 10 ♖a5 d5 (now White can switch the bishop to e5) 11 ♖c3 ♖c7 12 ♖d4 ♖a8 13 ♖e5 and Black starts to shed his pawns, whereupon White wins as in line '1'.

**5 ♖xb5!**

Now is the time for White to take the knight, even though doing so allows Black to make a queen.

**5...♖c8**

5...c3 loses to 6 a7 c2 7 ♖g5.

**6 ♖xd6**

Forced, or else ...♖b8 draws.

**6...c3 7 ♖b6**

Before White can play a7, he must prevent the reply ...♖b7. Of course 7 ♖c6? is wrong since Black can then promote with check.

**7...c2 8 a7 c1 ♜ 9 a8 ♜+ ♖d7**

So the ending has reduced to a situation of ♜+♖ vs ♜. This material usually leads to a draw, but there are some special cases which are winning. This is one of them.

**10 ♜d5!**

This quiet move makes an effective conclusion to the study. White threatens mate by 11 ♖c5+ (11 ♖b4+ and 11 ♖a3+ are just as good). Black has several queen checks, but these are all met by a deadly discovered check from the queen and bishop battery.

**10...♜b1+**

10...♖c8 and 10...♖e8 are answered by 11 ♜e6+.

**11 ♖b4+ ♖e8 12 ♜e6+**

White mates.

### 38) E. Pogossiants

1st Pr., *Shakhmatnaya Moskva*, 1964

White is a pawn down but has the advantage thanks to Black's poorly placed knight, which cannot easily combat White's d-pawn. However, White cannot push his pawn immediately since 1 d6? allows 1...♖f5+, so he first plays to exploit the knight's position.

**1 ♖f6 ♖h6**

Forced, or else White simply takes the knight.

**2 d6**

At first sight decisive, but Black has a tricky stalemate defence.

**2...dxe8+!**

2...e3 3 d7 e2 4 dxe2 dxe8+ is another stalemate try, but this one is easily refuted by 5 dxe5.

**3 dxe8 e3**

The point of Black's play is that 4 dxb5? only draws after 4...e2 5 dxe2 stalemate. Therefore White's only chance is to push his pawn.

**4 d7! e2**

After 5 d8♖? e1♗ White has no checks and thus no winning chances, but what else is there?

**5 d8♗!**

This is the answer.

**5...e1♗!**

Black matches White in cunning, but he is doomed by the bad position of his king. 5...e1♗ loses to 6 d7f7+ ♖h5 7 dxe5+ ♖h4 (7...♖h6 8 d7g4#) 8 d7f3+.

**6 d7c6!**

White's knight can mate from three possible squares: g4, f5 and g8. Black's knight can arrive in time to stop the mate if White aims for f5 or g4, but g8 is too far away.

**6...d7g2 7 d7e7! d7e3**

Black is one tempo too slow to give a check disrupting the mating-net.

**8 d7g8#**

### 39) V. Berg

1st Place, 10th Russian Team Ch., 1989

This game-like position does not appear likely to give rise to interesting play, since it seems that White will either round up the b-pawn within a couple of moves or lose.

**1 ♖d3**

This is forced, as White must be prepared to meet ...b2 with ♖c2.

**1...d7c1+! 2 ♖d2**

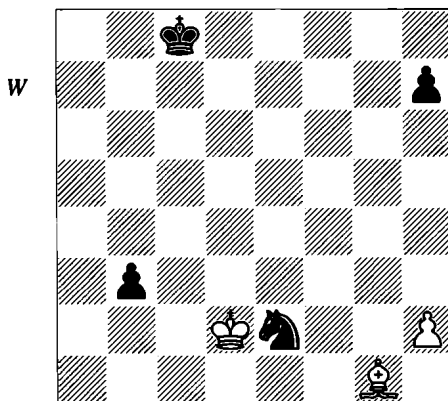
After 2 ♖c3? d7e2+ 3 ♖xb3 d7xg1 4 ♖c4 ♖d7 5 ♖d5 ♖e7 Black wins easily, so again White's move is forced.

**2...d7e2! (D)**

2...b2 3 ♖c2 d7e2 is also met by 4 ♖a7!, just as in the main line.

**3 ♖a7!!**

Remarkably, this is the only safe square for the bishop. The alternative lines 3 ♖f2? b2 4



♖c2 d7c3 5 ♖xb2 d7d1+, 3 ♖c5? b2 4 ♖c2 d7c3 5 ♖xb2 d7d1+ 6 ♖c2 d7xe3+ 7 ♖d3 d7g2 8 ♖e4 ♖d7 9 ♖f5 ♖e7 10 ♖g5 ♖f7 11 ♖h6 ♖g8 and 3 ♖b6? b2 4 ♖c2 d7c3 5 ♖xb2 d7a4+ all lead to the loss of the bishop in situations where the resulting position is hopeless.

After the text-move, the bishop is safe for the moment, but given that a7 is the only safe square on the a7-g1 diagonal, Black has a rather obvious retort.

**3...♖b7!**

Now the bishop is lost, but the fact that Black has been forced to play his king one square further away from the kingside has a decisive impact on the play.

**4 ♖e3!!**

This is the correct square on which to surrender the bishop. After other moves, Black's king is in time to prevent White's king from running towards the h-pawn; for example, 4 ♖c5? b2 5 ♖c2 d7c3 6 ♖xb2 d7a4+ 7 ♖b3 d7xc5+ 8 ♖c4 ♖c6 or 4 ♖f2? b2 5 ♖c2 d7c3 6 ♖xb2 d7d1+ 7 ♖b3 d7xf2 8 ♖c4 ♖c6.

**4...b2 5 ♖c2 d7c3 6 ♖xb2 d7d1+ 7 ♖c2! d7xe3+ 8 ♖d3**

With the knight on e3, White is able to gain time with his king.

**8...d7d5**

The most troublesome reply, because if the white king marches straight for h6, Black can defend the pawn with ...d7f6. 8...d7g4 9 ♖e4! ♖c6 10 ♖f5 d7xh2 11 ♖g5 and 8...d7f5 9 ♖e4 d7d6+ 10 ♖e5 allow White a simpler draw.

**9 ♖e4**

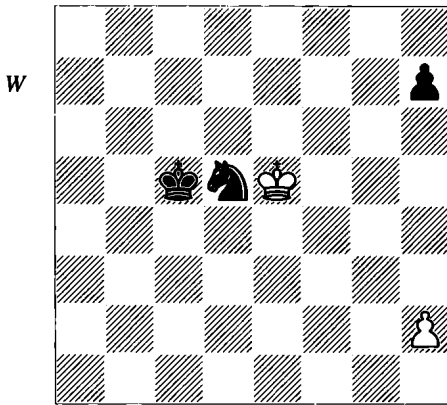
9 ♖d4 ♖c6 10 ♖e5 is also possible, transposing to the main line.

**9...♖c6 10 ♖e5!**

The text-move does not so much threaten anything as ask Black how he intends to make progress. If the knight moves, then White's king can penetrate via f6, while otherwise Black's king is tied to defending the knight. 10 ♖f5? loses to 10...♗d6 11 ♖g5 ♗e6 12 ♖h6 ♗f6.

**10...♗c5 (D)**

The best try, keeping the king in a flexible position ready to move to d6 or d4 according to how White moves his king.

**11 h3!!**

Therefore White doesn't move his king! The text-move is the only one to draw and gives rise to a position of reciprocal zugzwang. Other moves lose as follows:

1) 11 ♖e4? ♗d6 is an easy win for Black.

2) 11 ♖e6? ♗d4! 12 ♖f7 (12 ♖f5 loses to 12...♗e3 13 ♖g5 ♗e4 14 ♖h6 ♗f6) 12...♗e5 13 ♖g7 h5 14 ♖g6 ♗f4+! (14...h4? 15 ♖g5 h3 16 ♖g4 ♗f4 17 ♖f3 is a standard draw) 15 ♖g5 ♗e4! 16 ♖h4 ♖f5 17 h3 ♖f6 18 ♖g3 ♗g6 and Black wins easily.

3) 11 h4? ♗c4 is a second position of reciprocal zugzwang:

3a) 12 ♖e4 ♗f6+ 13 ♖e5 ♗g8! 14 h5 (14 ♖e4 h6 15 ♖e5 ♗d3 16 ♖e6 ♖e4 17 ♖f7 ♖f5 also wins for Black) 14...h6! 15 ♖e4 (or 15 ♖e6 ♗d4 16 ♖f7 ♖e5 17 ♖xg8 ♖f6!) 15...♗c3 16 ♖e5 (16 ♖e3 ♗f6) 16...♗d3 17 ♖e6 ♖e4 and Black wins.

3b) 12 h5 ♗c5! (the third reciprocal zugzwang) 13 ♖e6 (after 13 ♖e4 ♗d6 14 ♖f5 ♖e7 Black wins comfortably) 13...♗d4! 14 ♖f5 (14 ♖f7 ♖e5 15 ♖g7 ♗f6 is similar) 14...♖e3 15 ♖g5 ♖e4 16 ♖h6 ♗f6 17 ♖g5 (17 ♖g7 ♖f5

only accelerates White's loss) 17...♖e5 18 ♖h6 ♖f5 19 ♖g7 ♖g5 gives rise to a key position. White is forced to push his pawn, but then Black gains the extra option of sacrificing his pawn to force mate with the white king bottled up on h8; for example, 20 h6 ♖f5! 21 ♖f7 ♗g4 22 ♖g7 ♖e6 23 ♖h8 ♖f6 24 ♖xh7 ♖f7 25 ♖h8 ♗e5 26 ♖h7 ♗d7 27 ♖h8 ♗f8 28 h7 ♗g6#.

**11...♗c4**

11...♗c6 12 h4 is similar; Black has nothing better than to return to c5.

**12 h4**

12 ♖e4? loses to 12...♗f6+ 13 ♖e5 ♗g8! 14 ♖e4 (14 ♖e6 ♗d4 15 ♖f7 ♖e5 16 ♖xg8 h5! is also winning for Black) 14...h6 15 ♖e5 ♗d3.

**12...♗c5 13 h5**

The third reciprocal zugzwang mentioned above now arises with Black to play. It is essentially a case of the opposition but with an additional subtlety. White cannot oppose kings on e4 and c4 when the h-pawn is on h3 or h4, because Black then wins with the ...♗f6+ and ...♗g8 manoeuvre. In this case Black can afford to sacrifice the knight on g8, because he wins the pawn ending by a timely ...h5. However, when White's pawn is on h5, this manoeuvre is not available to Black and so White can oppose kings – in this case it is a true opposition. Therefore, White has to arrange to have the opposition when his pawn arrives on h5, and that explains the stuttering advance of the white pawn.

**13...♗c4**

13...♗c6 14 ♖e6 is also drawn.

**14 ♖e4**

The position is a draw; the only attempt to make progress is 14...♗f6+ 15 ♖f5 ♗g8 (or 15...♗xh5 16 ♖g5) but then 16 ♖e6 ♗d4 17 ♖f7 ♖e5 18 ♖xg8 is a draw precisely because the pawn is on h5. Any further back and ...h5 would win here. An impressively subtle study.

**40) N. Grigoriev**

*Shakhmatny Listok*, 1931

The first two moves are easy since White only has to push his pawn, but then it becomes tricky.

**1 h5 ♗e6**

Playing the bishop to g8 is the only way to stop the pawn.

**2 h6 ♖g8**

White's first task is to prevent Black's king from running across to attack the h-pawn, so he has to control c6 with his bishop. 3 ♙e4? ♜c7 4 ♜c5 ♜d7 5 ♜d4 ♜e6 6 ♙d5+ ♜f6 7 ♙xg8 ♜g6 8 h7 ♜g7 is a clear draw, so the bishop must control c6 from b5. Then if Black plays ...♜c7, White replies ♜c5 and the black king still cannot make it across to the kingside. There are two ways White can arrange to play ♙b5; either immediately, or via 3 ♙c4 and only then 4 ♙b5. It turns out that this decision is the crux of the study, since one line wins while the other draws. The key fact is that the position with ♙b5 vs ♙h7 is reciprocal zugzwang, which we will prove in the following notes.

**3 ♙c4!!**

Only this move wins. After 3 ♙b5? ♙h7! White is to play in the reciprocal zugzwang. The analysis runs 4 ♙a4 (this is the only constructive move, since 4 ♜c4 ♙g8+ repeats, while 4 ♙e8 ♜c7 5 ♜c5 ♜d8 gives Black an extra tempo to bring his king to the kingside) 4...♙g8! (a second position of reciprocal zugzwang) 5 ♙b3 (both 5 ♙d7 ♜c7 6 ♙e6 ♙h7 7 ♜c5 ♜d8 8 ♜d6 ♜e8 and 5 ♙e8 ♜c7 6 ♜c5 ♜d8 7 ♙f7 ♜e7! give Black's king a saving extra tempo) 5...♙h7 6 ♙d5 ♜c7 7 ♜c5 ♜d7 and Black is safe.

**3...♙h7 4 ♙b5!**

Now it's Black to play in the first of the reciprocal zugzwangs mentioned above.

**4...♙g8**

Or:

1) 4...♙b1 (once the bishop moves down the diagonal away from h7, White can play ♜c4) 5 ♜c4 ♙h7 (5...♙a2+ is no longer effective since White can simply reply 6 ♜d4) 6 ♙a4 ♜c7 7 ♜d5 ♜d8 8 ♜e6 ♙b1 9 ♜f7 ♙d3 10 ♜g7, followed by playing the white bishop round to g6, and White wins.

2) 4...♜c7 5 ♜c5 ♜d8 6 ♜d6 ♙g8 7 ♙a4 ♙h7 8 ♜e6 and again the king reaches g6.

**5 ♙a4!**

Now the second reciprocal zugzwang arises with Black to play.

**5...♙h7**

Black must allow the white king to either c4 or c5. After 5...♜c7 6 ♜c5 ♜d8 7 ♜d6 White penetrates to g7, while 5...♜b7 6 ♜c5 ♜c7 7 ♙b5 again forces Black to give way.

**6 ♜c4 ♜c7 7 ♜d5! ♜d8 8 ♜e6!**

White wins.

**41) J. Gunst**

1st Pr., *Suomen Shakki*, 1946

Both sides have passed pawns on the seventh rank. White might seem to have an easy win since not only is it his turn but Black's passed pawn is blocked by his king.

**1 e8♙!**

Already White must display great care since after 1 exd8♙? ♜g1 the position is drawn. If White checks then Black can take the bishop and reach a theoretically drawn position with queen against rook's pawn on the seventh. The only alternative is to allow Black to promote and try to reach a winning ♙+♙ vs ♙ position, but this isn't possible; for example, 2 ♙d1 (2 ♙d4+ ♜xf1 3 ♙h4 ♜g2 4 ♙g4+ ♜f2 5 ♙h3 ♜g1 6 ♙g3+ ♜h1 is a draw) 2...h1♙ 3 ♙c4+ ♜h2 4 ♙d6+ ♜g1 5 ♙d4+ ♜h2 6 ♙e5+ ♜g1 and White can achieve nothing with queen checks alone, while Black has too many queen checks for a quiet move to work; e.g., 7 ♙d5 ♙h4+!.

**1...♙e7+!**

Black makes it as tough as possible for White. The alternative is 1...♜g1 (1...♙a5+ 2 ♜c4 ♜g1 3 ♙e3+ is the same) but then 2 ♙e3+ ♜xf1 leads to a win for White because the bishop interferes with Black's stalemate defence. Some positions with ♙ vs ♙+♙h2 are drawn; for example, if Black's bishop were on c7 instead of d8 White would be unable to win, but this one is lost for Black after 3 ♙f3+ ♜g1 4 ♙g3+ ♜h1 5 ♙f2! ♙b6 6 ♙f1+ ♙g1 7 ♙f3#.

**2 ♙xe7!**

A surprising move; what difference does it make that White's queen is on e7 instead of d8? Other moves fail because Black can reach a drawn ♙ vs ♙+♙ position. A typical line is 2 ♜c4? ♜g1 3 ♙g6+ ♜xf1 4 ♙e4 ♜g1 5 ♙g4+ ♜f2 (5...♜f1? 6 ♙h3+ ♜g1 7 ♙g3+) 6 ♙h3 ♙d6! (6...♜g1? loses to 7 ♙g3+ ♜h1 8 ♙f2) 7 ♜d3 and now accurate play is required:

1) 7...♜g1? loses attractively to 8 ♙g4+ ♜f2 9 ♙d1 ♜g2 10 ♙c2+ ♜g1 (10...♜g3 11 ♙c6 ♜f2 12 ♙h1 is a slow but sure win for White) 11 ♜e3! (Black cannot promote his pawn, and both bishop checks are covered) 11...♙c5+ (or

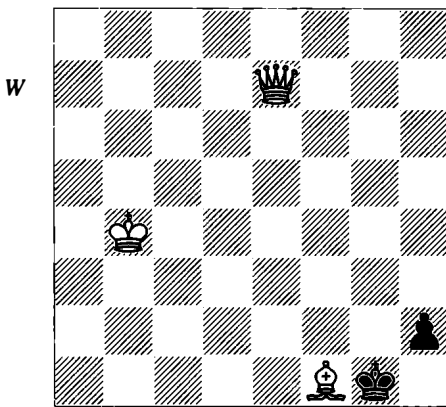
11...♙f4+ 12 ♖xf4 h1♚ 13 ♖g3) 12 ♜xc5 h1♚ 13 ♖e2+ ♖h2 14 ♜e5+ ♖g2 15 ♜g5+ ♖h3 16 ♜h5+ ♖g2 17 ♜g4+ ♖h2 18 ♖f2 mat-ing.

2) 7...♙e5! and now:

2a) 8 ♜f5+ ♖g2 (8...♖g1? 9 ♖e2!) 9 ♜g5+ ♖f2 and White is not making progress.

2b) 8 ♖e4 ♖g1 9 ♜e3+ ♖g2 10 ♜e2+ ♖g1 11 ♜e1+ (11 ♖e3 ♙d4+!) 11...♖g2 12 ♜d2+ ♖g3! (12...♖g1? 13 ♖e3!) and the white king is blocking the long diagonal, thus preventing the otherwise decisive ♜d5.

2...♖g1 (D)



The key moment. White must exploit the position of his queen on e7, from where it prevents Black's potential queen checks on e4, h4 and b7.

3 ♙a6!

The only square. White's bishop must be transferred to the long diagonal and 3 ♙d3? h1♚ 4 ♙e4 doesn't work because White's check on e1 is blocked.

3...h1♚ 4 ♙b7!

Black is helpless; the coming ♜e1+ will be decisive.

4...♜h3

After 4...♜h3 5 ♜e1+ ♖h2 6 ♜h1+ the black queen is lost.

5 ♜e1+ ♜f1 6 ♜g3+

White mates next move.

#### 42) P. Heuäcker

*Neue Freie Presse*, 1930

White's only hope is to promote his h-pawn, and Black's king is so close that White must

hurry. If Black can open the long diagonal so that his bishop controls h8, then he will have enough time to round up the pawn.

1 ♙a7!

The first bishop offer. Black cannot accept, because then White could promote his pawn.

1...♙a1

1...♙c3 2 ♖c2 is one move shorter. This study can be solved by a process of elimination; since ...e4 must be prevented, very few moves come into consideration.

2 ♖b1

White gains time by attacking the bishop.

2...♙c3 3 ♖c2 ♙a1

White has transferred his king from c1 to c2 with gain of tempo, but now further progress seems elusive. Most endgame studies involve a leap of the imagination at some point; here White must be prepared to offer his bishop.

4 ♙d4!

A spectacular move, putting the bishop *en prise* to two black units. Whichever way Black captures, White gains time to blockade the enemy pawn with his king, sealing the long diagonal shut.

4...♙xd4

4...exd4 5 ♖d3 is also winning for White.

5 ♖d3

Black must spend another tempo moving his bishop away from the bad square d4, and thus White gains the time he needs to occupy e4.

5...♙a1 6 ♖e4

Black cannot prevent the pawn from promoting.

#### 43) A. Troitsky

*Deutsche Schachzeitung*, 1906

The position looks pretty grim for White. Black is a pawn up, and his passed pawn is barely two squares away from promotion. By contrast, White has yet to make a passed pawn.

1 ♙c6+!

The only move worth considering as White must create a passed pawn without loss of time. After 1 ♙c8? ♙f5 Black wins easily.

1...♖a3

Black must avoid the b4-square because he would like to promote with check. Thus the only alternative is 1...♖a5 2 ♙xd7 b2, although in this case White draws by 3 ♙e6! preparing

♠a2. Not, however, 3 ♠a4? ♠f5 4 ♠c2 ♠xc2 5 d7 b1 ♖+ 6 ♠c7, when 6... ♗b6+ wins.

**2 ♠xd7 b2!**

In this line Black's king covers a2, so there really seems to be no way to prevent Black from promoting with check.

**3 ♠a4!**

3 ♠e6? ♠d3 is an easy win for Black. However, the mysterious text-move appears no better.

**3... ♠f5**

Of course; White's pawn is stopped while Black's is free to promote.

**4 ♠c2!**

This bishop sacrifice is the key. White deflects Black's bishop to c2, where it will hem in the queen.

**4... ♠xc2 5 d7 b1 ♖+ 6 ♠c7**

A remarkable position: Black has ♖+♠ vs ♜ and it is his turn to move, but he cannot win because there are no checks and he is unable to pin the pawn. The position of the bishop on c2 is crucial, because it prevents Black from checking along the c-file. This explains why White had to choose a4 at move three, and not some other square.

**6... ♗b4**

Black's last chance is to try to win ♖+♠ vs ♗, but a few accurate moves secure the draw for White.

**7 d8 ♗ ♗a5+ 8 ♠d7! ♠a4+ 9 ♠c8!**

Certainly not 9 ♠e7? ♗g5+. However, after the text-move Black cannot make progress.

#### 44) A. Manvelian

1st Pr., *Zadachy i Etudy*, 1997

At the moment Black has more material, so White must rush to promote his b-pawn.

**1 ♠c7+ ♠b4**

Black plays for a counterattack against the white king.

**2 b8 ♗**

Certainly not 2 ♠d6+? ♠c3 3 ♠e5+ ♠c2, when Black wins.

**2... ♠c4+!**

An excellent defence. Black is prepared to sacrifice his rook in order to box in the white king. After 2...a3 3 ♗f8+ ♠c3 4 ♠a5+ White wins easily; e.g., 4... ♠c2 5 ♗f2+ followed by mate.

**3 ♠xb1 ♠a3**

3... ♠b3 allows 4 ♗d8 with a simple win, but after the text-move Black is threatening both 4... ♠d3# and 4... ♠a2+.

**4 ♗f8+**

The only move, since 4 ♠d6+? ♠b3 and 4 ♗d8? ♠a2+ actually win for Black.

**4... b4 5 ♗f3+ ♠b3**

Now White has a problem. Black is stalemated, but if White unpins the bishop then Black can play ... ♠a2+. The solution is simple and elegant.

**6 ♗c3!**

White offers his queen to force mate with his last piece.

**6... bxc3 7 ♠d6#**

#### 45) P. Joitsa and V. Nestorescu

1st Pr., *Tidskrift för Schack*, 1967

White must move his bishop, but where?

**1 ♠e7!**

1 ♠h6? ♠f4+ 2 ♠h5 ♠xh6 3 ♠xh6 ♠f4 and 1 ♠a3? ♠e4+ 2 ♠h5 ♠f6+ 3 ♠g6 ♠d7 4 ♠b2+ ♠e5 are hopeless for White. The bishop is better placed on e7 as it rules out a knight check on f6.

**1... ♠e4+**

1... ♠f3+ 2 ♠h5 is an immediate draw, so this is the only chance.

**2 ♠h5**

After 2 ♠g6? ♠c6+ Black wins: 3 ♠h5 ♠f6+ or 3 ♠f5 ♠d6+.

**2... ♠g3+ 3 ♠g6!**

Now, by contrast, g6 is the correct square. 3 ♠g5? loses to 3... ♠f4+ 4 ♠g6 ♠c6+ 5 ♠f6+ ♠xf6+ 6 ♠xf6 ♠d6.

**3... ♠c6+**

Or 3... ♠g4+ 4 ♠f6 ♠h5+ (4... ♠f4+ 5 ♠g6) 5 ♠f5 ♠f4+ 6 ♠g6 and Black will have to give up his rook for the f-pawn.

**4 ♠g5 ♠e4+**

The knight returns to e4, but Black's rook is in a more promising position, covering the f6-square.

**5 ♠h4**

Not 5 ♠g4? ♠f6+.

**5... ♠h6+**

5... ♠g3+ 6 ♠g4 ♠f6+ 7 ♠xg3 is a draw.

**6 ♠g4 ♠f6+**

Black seems to be making definite progress; the check on f6 enables him to bring the knight back to cover f8.

7 ♖g5

The only chance or else ...♘h7 wins.

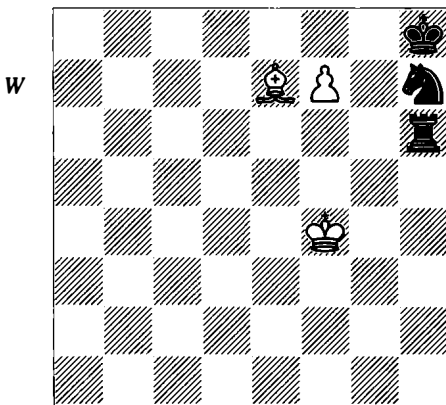
7...♙f4+!

This sacrifice saves Black's rook with gain of tempo.

8 ♖xf4 ♘h7 (D)

White draws immediately after 8...♘d7 9 ♖g5 ♖g7 10 f8♙+ ♘xf8 11 ♙xf8+.

The text-move is more awkward because it prevents ♖g5; indeed, it is quite hard to see how White can hope to draw now that Black's knight is covering f8.



9 f8♙+!

Surprisingly, White gives up his trump card.

9...♘f8 10 ♖g5

Both rook and knight are under attack, but Black has a way to save both. Not 10 ♙xf8? ♙f6+, when Black wins.

10...♙g6+ 11 ♖h5 ♙g8 12 ♖h6!

Suddenly White is able to exploit the confined position of Black's king. The threat is 13 ♙f6+ and if 12...♙e6 then 13 ♙f6+ ♘g7 14 ♖g6 wins the knight.

12...♘d7

12...♘h7 is met similarly to the text-move.

13 ♙f6+!

A surprising final twist.

13...♘xf6

Stalemate.

#### 46) M. Matouš

1st Pr., *Thèmes-64*, 1985

Everything depends on the f-pawn, because if Black can eliminate this pawn he can draw even if he loses both knights.

1 f7

After 1 ♙e5+? ♖c8 2 f7 ♘d7 Black draws easily.

1...♘d6!

Black's best chance is to play for stalemate. Other moves allow White to win without any great effort:

1) 1...♘d8g7+ 2 ♖g6 ♖c8 (2...♘f8+ loses at once to 3 ♖xg7 ♘d7 4 ♙e5+ ♖a8 5 ♙d6) 3 ♙xg7 ♘d7 4 ♙c3 ♘f8+ 5 ♖g7 ♘e6+ 6 ♖f6 ♘f8 7 ♙b4 ♘e6 8 ♙a3 with zugzwang.

2) 1...♘d8c7 2 bxc7+ ♖xc7 3 ♙b4 ♘d7 4 ♖g6 b6 5 ♖f6 b5 6 ♙a3 and again Black ends up in zugzwang.

2 ♙e5 ♖a8 3 ♙xd6 ♘d8

If Black does not play this immediately White lifts the stalemate and wins much more easily; for example, 3...♘f4+ 4 ♖h6 ♘e6 5 ♙b4 (releasing his guard on b8 and cutting out the stalemate defence) 5...♖b8 6 ♖g6 ♖c8 7 ♖f6 ♘d7 8 ♙a3 winning as usual.

4 f8♙!

This is the only possibility; after 4 f8♙? Black would draw even without his knight, because his king cannot be driven away from the squares a8 and b8.

After the text-move, White has a clear extra piece and stands to win on material, provided only that he can avoid the exchange of knights. This is easier said than done because, thanks to the stalemate possibility, Black can chase the white knight with his own, continually threatening to swap knights. White has to play very accurately to evade the unwelcome attentions of the enemy knight.

4...♘e6! 5 ♘d7!

The only square. 5 ♘g6? is wrong because 5...♘f4+ forces a draw, while 5 ♘h7 wastes time since 5...♘g5 6 ♘f6? (White would have to play 6 ♘f8 with a repetition of position) allows 6...♘e4! 7 ♘e8 ♘f6+!, again forcing a draw.

5...♘c5

5...♘f8 6 ♘e5 ♘g6 (6...♘d7 also transposes) 7 ♘c4 ♘e5 transposes to the main line.

6 ♘e5!

The only way to make progress, as both 6 ♘f6? ♘e4 and 6 ♘b8? ♘d7 lead to immediate draws. Although White's moves are forced in any case, it is still not clear how he is going to interfere with Black's single-minded plan. The

key idea is to play the white knight to a3. Black will of course attack this knight with his own, but then White plays the knight away from a3. Black will be unable to continue his game of follow-my-leader because White will be able to take the knight on a3 with his bishop, relieving the stalemate.

**6...d7**

6...d3 7 d4 b2 8 a3 d4 transposes to the main line.

**7 d4**

Again White's only move, this time because he has to defend the b6-pawn.

**7...e5 8 a3!**

Forced, because if the knight moves to d2, e3 or a5, the fork 8...d4 really does draw.

**8...d4**

In this precise position it is possible for White to allow a fork.

**9 b5!**

The critical moment. Black cannot play his knight to a3 and if he does not take on b6 or d6 White will lift the stalemate and win with the extra piece. However, 9...xd6 loses after 10 dxd6; for example, 10...b8 11 g6 a8 12 f6 b8 13 e7 a8 14 d7 b8 15 d4 a8 16 a5 b8 17 d8 a8 18 d6! bxc6 19 c7 followed by mate. That only leaves taking the b6-pawn, but this costs Black a piece.

**9...xb6 10 d7+ b8**

Or 10...a7 11 d5.

**11 d5+ a7 12 d5**

White wins.

#### 47) V. Anufriev and B. Gusev

1st Pr., *Shakhmaty v SSSR*, 1986

White has two passed pawns against Black's one, but it is White who is fighting for the draw because Black's bishop already occupies the long diagonal.

**1 g8!**

1 h8? e4+ 2 g8 xh8 3 xh8 a1+ 4 g7 allows Black a simple win; e.g., 4...f5 5 h7 a7 6 h8 d4 7 h7 h4+ winning the bishop. White also cannot afford to wait; e.g., 1 g3? e4+ 2 g8 f5 3 g7 xg7 4 xg7 a1+ with a quick mate to come.

**1...e4**

The best try. As we shall see, White's main defence involves occupying one of the longish

diagonals a3-f8 or c1-h6 with his bishop. The idea is that when Black's bishop moves out from in front of the a2-pawn, the white bishop will oppose it from one of these two diagonals. By playing the king to e4, Black prevents White occupying one of the diagonals (because the bishop cannot move to f4) and at the same time prepares to approach the white pawns by ...f5. The alternative 1...d5 2 f4! (2 g3? loses to 2...b2 since White cannot move to 'd0') shows White's plan in action:

1) 2...h8 3 xh8 a1+ 4 g8 is an easy draw.

2) 2...e6 3 h6! c3 (3...f5 4 g7 is better for White, while 3...h8? definitely loses after 4 g7) 4 h8 (4 g7 also draws) 4...xh8 5 g7 draws.

3) 2...c3 3 d2! d4 4 e3! e5 5 f4! f6 6 g5 and so on.

**2 d6!**

As the c1-h6 diagonal is unavailable, White occupies the a3-f8 diagonal instead.

**2...f5**

Or 2...b2 3 a3 a1+ (3...c3 4 b4, etc.) 4 xb2 a8+ 5 g7 b7+ 6 g8 (6 h6? loses to 6...xb2 7 g7 f6+) 6...b8+ 7 f7 and Black cannot make progress; e.g., 7...c7+ 8 g8 d8+ 9 f7 d7+ 10 g8 or 7...xb2 8 g7 b7+ 9 f8 c8+ 10 f7 d7+ 11 f8 f5+ 12 g8.

**3 f8!**

Threatening 4 g7.

**3...h8!**

After 3...xg6 White reveals a key point of his defence: 4 h8! xh8 5 g7 xg7 is stalemate.

The beautiful text-move causes a new headache for White. The idea is to prevent h8 and so ensure that if White promotes on h8, he has to use the g-pawn to do so.

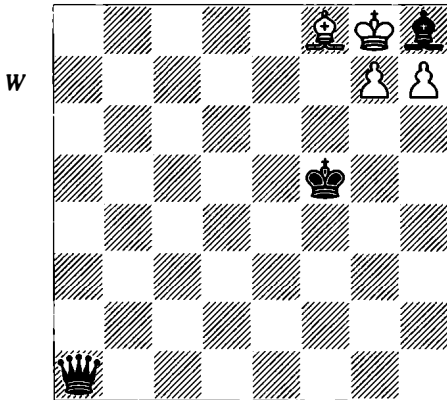
**4 g7**

Not 4 xh8? a1+, when Black wins however White replies:

1) 5 g8 a2+ 6 g7 a7+ 7 h6 (7 g8 xg6 8 h8 d+ f6 mates quickly) 7...e3+ 8 g7 e5+ 9 h6 f6 and Black mates next move.

2) 5 g7 g6 6 g8 d4 7 h8 d+ f6 8 h7 e4+ 9 g8 f5 10 f7 d5 11 h8 h5+ and Black wins the knight with check.

**4...a1 (D)**



Now only one move draws.

**5 gxf8!**

Surprisingly, this underpromotion is the only good move. 5 ♖xh8? ♜g6 transposes to the previous note, while 5 gxf8♙? allows mate via a staircase manoeuvre: 5... ♖a2+ 6 ♜g7 ♖b2+ 7 ♜g8 ♖b3+ 8 ♜g7 ♖c3+ 9 ♜g8 ♖c4+ 10 ♜g7 ♖d4+ 11 ♜g8 ♖d5+ 12 ♜g7 ♖e5+ 13 ♜g8 ♖e6+ 14 ♜g7 ♖g6#.

**5... ♖a2+**

5... ♖g1+ 6 ♜g7 followed by ♜f7 is also drawn.

**6 ♜f7!**

Not 6 ♜g7? ♖e6 7 ♜a3 (or 7 ♜f7 ♖g6+) 7... ♖e5+ 8 ♜g8 ♜f6 mating in a few moves.

**6... ♜g6**

Black threatens mate, but the correct reply is now obvious:

**7 h8♙+**

White draws.

Looking at the original diagram, it is hard to imagine that White can only draw by underpromoting both pawns.

#### 48) V. Korolkov

3rd Pr., FIDE Tny, 1962

White is a piece and a pawn down but his c-pawn poses a genuine danger in view of Black's miserably placed pieces.

**1 c5**

Even though Black's pieces are very passive, White doesn't have unlimited time and should push the pawn without delay. After 1 ♜e5+? ♜h7 2 c5 f4 3 c6 f3 4 exf3 e2 5 c7 ♜e7! Black is better, while after 1 ♜g6? f4 2 ♜e5+ ♜f6 3 c5 ♜g8 4 ♜xf6 (or 4 ♜xf6 f3 and the f-pawn

promotes with check) 4... ♜f8 5 ♜xg5 f3 6 c6 ♜e8 7 exf3 ♜f2 Black's e-pawn will cost White his bishop.

**1...f4**

Black's only real chance is to make a passed pawn of his own. The alternatives are:

1) 1... ♜h2 2 ♜xh2 f4 3 c6 f3 4 exf3 e2 5 ♜g3 and White wins easily.

2) 1... ♜h6+ 2 ♜g6 ♜g8 3 ♜xh6 gives White a winning bishop ending; for example, 3... ♜f7 4 c6 ♜e6 5 c7 ♜d7 6 ♜xg5 ♜c8 7 ♜xf5 ♜d7 8 ♜e4 ♜f2 9 ♜f4 and White can win the e-pawn without giving up the c-pawn.

**2 c6**

2 ♜g6? ♜f6 3 ♜e5 transposes to the analysis of 1 ♜g6?.

**2...f3**

Both sides make haste.

**3 exf3**

The only move, as 3 c7? f2 4 ♜g6 ♜h2! 5 c8♙ (5 ♜xh2? ♜e7+) 5... f1♙ 6 ♖c3+ ♖f6+ leads to a draw while 3 ♜g6? ♜h2! leaves White with nothing better than 4 c7, transposing to 3 c7?.

**3...♜e7!**

An ingenious defence, hoping to deflect the white king and so promote the e-pawn with check. Other moves lose as follows:

1) 3... ♜h6+ 4 ♜g6 ♜f5 5 ♜e5+ ♜g8 6 ♜xf5 e2 7 c7 e1♙ 8 c8♙+ ♜f7 9 ♖d7+ ♜f8 10 ♖g7+ ♜e8 11 ♜e6 mating.

2) 3...e2 4 c7 ♜h7 (the alternatives 4...e1♙ 5 c8♙ and 4... ♜h6+ 5 ♜g6 e1♙ 6 c8♙+ ♜g8 7 ♖h3+ ♖h4 8 ♜e5+ ♜f6 9 ♖c8# also lead to mate) 5 c8♙ ♜h6+ 6 ♜f8 e1♙ 7 ♖c2+ ♜h8 8 ♖b2+ is another mating line.

**4 ♜xe7**

4 ♜xe7? is inferior: 4...e2 5 ♜g3 (5 ♜b4 ♜h2 is a draw while 5 c7 e1♙+ 6 ♜f7? ♖c1 wins for Black) 5... ♜h2! 6 c7 e1♙+ 7 ♜xe1 ♜xc7 draws right away.

**4...♜h2**

Black has succeeded in halting the pawn for the moment, but White has a tactical finesse which gets it moving again.

**5 f4!**

After 5 ♜xg5? the extra pawn isn't enough for a win: 5...e2 6 ♜d2 ♜h7 (Black's bishop is well posted on a diagonal which controls both white pawns, so he is content to improve the position of his king) 7 ♜f6 (7 ♜e6 ♜g6 8 ♜d7

♟f5 9 c7 ♙xc7 10 ♟xc7 e1♚ 11 ♙xe1 ♟f4 draws) 7...♟g8 8 ♟f5 (8 ♟e6 ♟g7 9 ♟d7 ♟g6 10 c7 ♙xc7 11 ♙xc7 ♟f5 followed by ...e1♚ is a draw) 8...♟f7 9 f4 ♙xf4 10 ♟xf4 ♟e6 11 ♙b4 e1♚ 12 ♙xe1 ♟d6 and again Black draws.

The text-move deflects the black bishop onto a square which allows a skewer.

5...♙xf4 6 ♙xg5

An ingenious idea. It is clear that White wins if he can take the e3-pawn, but what happens if Black simply pushes the pawn?

6...e2

6...♙c7 7 ♙xe3 ♟h7 8 ♟e7 ♟g6 9 ♟d7 ♙a5 10 ♙c5 ♟f5 11 ♙e7 followed by ♙d8 promotes the pawn.

7 ♙xf4!

This looks unlikely to yield any more than a draw but appearances can be deceptive.

7...e1♚ 8 c7

Oddly enough, Black cannot save the game even when it is his turn to move. White's bishop prevents queen checks, controls c1 and stands ready to deflect Black's queen. If White promotes his pawn, the result will be a quick mate as Black's king is so badly placed.

8...♚c3

The only way to control c8.

9 ♙e5+!

The final finesse. White sacrifices his bishop to force mate.

9...♚xe5 10 c8♚+ ♟h7 11 ♚g8+

Or 11 ♚h3+.

11...♟h6 12 ♚g6#

#### 49) H. Mattison

*Rigaer Tageblatt*, 1914

White has a wrong bishop plus rook's pawn combination, so he must prevent Black from giving up his rook for the e-pawn. In addition, White must stop Black transferring his rook to his first rank.

1 ♙e3+

Blocking the e-file with gain of tempo is the only chance, as 1 e7? ♙e1+, 1 ♟f5? ♙e1 2 ♙e5 ♙f1+ 3 ♟g6 ♙f8 and 1 ♙d2? ♙h1 all allow an easy draw.

1...♟b7

The best chance, as Black hopes for ...♙xa3 followed by ...♙a8, so he shouldn't block the a-file or the back rank.

2 e7 ♙xa3

2...♙e1 3 ♟e4 is hopeless for Black, but after the text-move White has to deal with the twin threats of 3...♙xe3+ and 3...♙a8.

3 ♙a7!!

This spectacular sacrifice is the only way to meet both threats.

3...♙a1

The best defence, because after 3...♟xa7 4 ♟d4 ♙a4+ 5 ♟d5 ♙a5+ 6 ♟d6 ♙a6+ 7 ♟d7 White promotes the pawn, while 3...♙a2 loses quickly to 4 ♟f4 ♙e2 5 ♙e3.

4 ♟f4

The only way to meet the threat of 4...♙e1+, since 4 ♟e4? ♟xa7 and 4 ♙e3? ♙a8 are both clearly drawn.

4...♙f1+

Again the toughest defence, since 4...♙e1 5 ♙e3 and 4...♙a4+ 5 ♟f5 ♙a5+ 6 ♟f6 ♙a6+ 7 ♟f7 are easy wins for White.

After the text-move, White faces a problem. If he moves to the g-file, then Black can play ...♙e1, while moving to the e-file allows ...♟xa7 (except for 5 ♟e3, which is met by an immediate check on e1). By a process of elimination, the solution must be not to move the king at all!

5 ♙f2!!

An echo of the sacrifice at move three. The black rook is deflected nearer the white king.

5...♙xf2+

Now White can keep the rook away from the e-file using only his king. The idea is similar to that of the Saavedra position (No. 2).

6 ♟e3 ♙f1 7 ♟e2

White wins.

#### 50) V. Kivi

1st Pr., *Tidskrift för Schack*, 1945

The position is apparently quite simple, but the play turns out to be astonishingly complex. Indeed, White has to be prepared to promote to a knight and a rook in order to win!

1 g7

The first move is easy enough, but now it starts to become tricky.

1...♙c8

The only alternative is 1...♙c1+, when White must choose carefully:

1) 2 ♟b2? ♙c8 3 g4 (3 ♙e6 ♙b8+ 4 ♟c3 ♟f6 5 g8♚ ♙xg8 6 ♙xg8 ♟f5 costs White his

last pawn) 3...♖b8+ and, thanks to this check, Black gains sufficient time to capture the g4-pawn.

2) 2 ♖a2! ♜c2+ 3 ♖a3 ♜c3+ 4 ♖a4 (now there are no more checks and Black has to retreat to the back rank) 4...♜c8 5 g4 and White wins as in the main line.

### 2 g4!

White must advance his g-pawn so that it can be defended by the bishop. 2 ♖e6? is wrong and allows Black to draw by 2...♜a8+ 3 ♖b2 ♖f6 4 g8♞ ♜xg8 5 ♖xg8 ♖f5.

### 2...♜b8

Just now 2...♖xg4 is impossible because of 3 ♖e6+, so Black has to move his rook to a safer square. He chooses b8 to try to cut off White's king.

### 3 ♖e6

Forced, to defend the pawn. Now both players are restricted in their movements. Black's king must stay in contact with the g4-pawn, or else White can just promote, so he is limited to rook moves along the first rank or ...♖f4-g5-h4, etc. For the moment he moves his king, so as to keep the white king confined to the edge of the board.

### 3...♖f4 4 ♖a2

White is restricted to moving his king, so he marches up the board to displace Black's rook, whereupon he hopes to continue his march along the seventh rank and use his king to force the g-pawn home. At first this looks like a simple win, and it is true that if White frees his king from the a-file without making any concessions then he does indeed win easily. However, as we shall see, Black has some unexpected defensive resources.

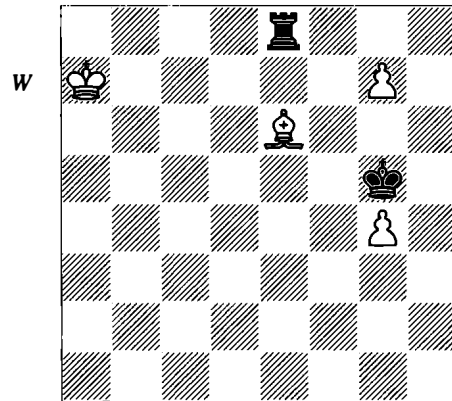
### 4...♖g5 5 ♖a3 ♖f4

If Black ever plays his king to h6, then White can win without difficulty by promoting to a rook, but it is interesting to note that in this position White can also win by promoting to a queen; e.g., 5...♖h6 6 g8♞ ♜b3+ 7 ♖a4 ♜b4+ (7...♜a3+ loses more quickly: 8 ♖b4 ♜a4+ 9 ♖c5 ♜a5+ 10 ♖d6 ♜a6+ 11 ♖e5 ♜a5+ 12 ♖f6) 8 ♖a5 ♜b5+ 9 ♖a6 ♜b6+ 10 ♖a7 ♜b7+ 11 ♖a8 ♜a7+ 12 ♖b8 ♜b7+ 13 ♖c8 ♜c7+ 14 ♖d8 ♜d7+ 15 ♖e8 ♜e7+ 16 ♖f8 ♜e8+ 17 ♖f7 ♜e7+ 18 ♖f6 ♜f7+ 19 ♖e5 and the checks run out. Whichever checks Black gives, the basic principle is the same: White runs his king to f6,

and is soon able to take the rook with his pawn, lifting the stalemate.

6 ♖a4 ♖g5 7 ♖a5 ♖f4 8 ♖a6 ♖g5 9 ♖a7 ♜e8! (D)

9...♜d8 would make matters easier for White, as he could continue 10 ♖b7.



After the text-move, however, Black threatens 10...♜e7+, and neither 10 ♖b7 nor 10 ♖b6 is possible.

### 10 ♖f7!

The only move, blocking the seventh rank. White can only leave the g4-pawn hanging because he is attacking the black rook.

### 10...♜d8

The other defence is 10...♜e7+ 11 ♖b6 (other king moves also win) 11...♖h6 and now White has to choose the right piece to promote to:

1) 12 g8♞? leads to a draw when the bishop is on f7: 12...♜e6+ 13 ♖c5 ♜c6+ (Black is always able to choose a check that prevents the bishop interposing) 14 ♖b4 ♜b6+ 15 ♖c3 ♜b3+ 16 ♖d4 ♜d3+ (not 16...♜b4+? 17 ♖c4) 17 ♖e5 ♜e3+ (after 17...♜d5+? 18 ♖f6 ♜f5+ 19 ♖e7 White escapes from the checks) 18 ♖f6 ♜e6+ 19 ♖f5 ♜e5+ with perpetual check.

2) 12 g8♞+! ♖g7 13 ♖xe7 ♖xf7 14 ♖f5 ♖f6 15 ♖e3 wins.

At first sight, the text-move forces White's bishop back to e6 with a repetition, but now that White's king is so close he can afford to sacrifice the g4-pawn.

### 11 ♖b6!

Once again White must be very precise. 11 ♖b7? (11 ♖a6? ♖xg4 draws) 11...♖h6! 12 g8♞ (12 g8♞ ♜d7+ draws as in the note to Black's 10th move, and 12 g8♞+ ♖g7 is no

better) fails due to 12...♖d7+, picking up the bishop.

### 11...♜h6

This forces White to show off his rook promotion. The alternatives are:

1) 11...♜f6 loses to 12 g8♞.

2) 11...♜xg4 12 ♜c7 (this leaves the rook short of squares on the eighth rank) 12...♞a8 13 ♙e6+ ♜g5 14 ♙c8 ♞a7+ 15 ♙b7 and White wins.

3) 11...♞a8 (if Black moves his rook, then White wins by playing his king across to the kingside) 12 ♙e6 (securing the g4-pawn and at the same time preventing ...♞c8) 12...♞e8 13 ♜c5 ♞d8 14 ♜c6 and now Black must either allow the king across the d-file or move his king to an inferior square:

3a) 14...♞a8 15 ♜d6 ♞b8 16 ♜e7 ♞b7+ (16...♞a8 transposes to line '3b') 17 ♙d7 ♞b8 18 ♜f7.

3b) 14...♜f4 15 ♜c7 ♞e8 (15...♞a8 16 ♙c8) 16 ♜d7 ♞a8 17 ♜e7 ♜g5 forces a final accurate move by White:

3b1) 18 ♙d7? ♜g6 draws.

3b2) 18 ♜f7 ♞a7+ 19 ♜g8? (White should return with 19 ♜f8 ♞a8+ 20 ♜e7) 19...♜f6 is also a draw.

3b3) 18 ♙f7! ♞a7+ (18...♞b8 19 ♙e8 ♞b7+ 20 ♙d7 ♞b8 21 ♜f7 and 18...♜xg4 19 ♙e8 ♞a7+ 20 ♙d7+ win for White) 19 ♜f8 ♞a8+ (19...♜h6 20 g5+) 20 ♙e8 wins.

4) 11...♞b8+ 12 ♜c6 ♞d8 13 ♙e6 and White has freed his king, whereupon he wins just as after 11...♞a8.

### 12 g8♞!

The only winning move since 12 g8♞? ♞d6+ draws as in the note to Black's 10th move.

## 51) F. Bondarenko and A.G. Kuznetsov

1st Pr., *Shakhmaty v SSSR*, 1979

White is a piece for two pawns up but his bishop is not ideally placed for stopping the h-pawn. The first few moves are forced.

### 1 ♙b5 h3 2 ♙f1 h2 3 ♙g2

Now that the h-pawn has been prevented from promoting, it might seem to be all over: White just takes the b-pawn with his king and then promotes the c-pawn. However, Black has two possible defensive ideas. The first involves advancing the king to h4 and then playing ...h1♞.

White has to take, and then ...♜h3-h2 traps and wins the bishop, when Black can hope to promote his rear h-pawn. As we shall see, White can counter this plan, but then he runs into Black's second defensive idea.

### 3...♜g5 4 ♙b6!

White must block the b-pawn for the moment. 4 ♙b5? is too slow and allows Black to attack the c-pawn with his king: 4...♜f6! 5 ♙b6 ♜e5 6 ♜c5 (6 c4 ♜d4) 6...h4 7 ♙h1 h3 8 ♜c4 ♜d6 9 ♜d4 ♜e6 10 ♜c5 ♜e5 and White cannot make progress. 4 c4? is also wrong. Black replies 4...♜h4, and now:

1) 5 ♙h1 (this prevents Black's first defensive plan but it runs straight into the second: self-stalemate by ...♜h3 and ...h4) 5...b5! (Black only needs to get rid of his b-pawn) 6 c5 (White tries to avoid taking it) 6...b4 7 c6 (7 ♜xb4 ♜h3 8 c6 h4 also draws) 7...b3 8 c7 b2 9 c8♞ b1♞ is an easy draw for Black.

2) 5 ♙b6 h1♞ 6 ♙xh1 ♜h3 7 c5 transposes into line '3'.

3) 5 c5 (it looks as if White is well in front, but it turns out to be not so easy) 5...h1♞ 6 ♙xh1 ♜h3 7 ♙b6 ♜h2 8 ♜xb7 ♜xh1 9 c6 h4 10 c7 h3 11 c8♞ h2 (the row of pawns on the f-file proves a severe hindrance to White) 12 ♞xf5 ♜g2 13 ♞xf4 (13 ♞g4+ ♜xf2 14 ♞h3 ♜g1 is a clear draw since without the check on g3, there is no way to force Black to play ...♜h1) 13...h1♞ (White has two extra pawns, but Black's king is too close to the white pawns and he cannot win) 14 ♞g3+ ♜f1 15 ♙b6 ♞h6+ 16 ♙b5 ♞d2 and White cannot both defend the pawns and prevent perpetual check.

The text-move aims for play similar to that in line '1' above, but without allowing Black to give up his b-pawn so easily.

### 4...♜h4

After 4...h1♞ 5 ♙xh1 ♜h4 6 ♙g2 White wins easily.

### 5 ♙h1!

Not 5 c4? h1♞ 6 ♙xh1 ♜h3 7 c5, transposing into line '3' of the note to White's fourth move.

### 5...♜h3

As we have seen before, Black's only chance against ♙h1 is to execute his self-stalemate plan.

### 6 c3!!

A very subtle move. White's king must remain blocking the b7-pawn, preventing it from

advancing too soon, so the c-pawn must move. But why not 6 c4? The answer is that White needs the c4-square for his king. After 6 c4? h4 7 ♖b5 (7 ♖a5 b5 8 c5 b4 9 c6 b3 10 c7 b2 11 c8 ♗b1 ♗ defends f5 and draws) 7...b6 White's king cannot reach f1 in four moves because the c4-pawn is in the way. This deprives White of his only winning chance. Note that 6 ♖b5? b6! 7 c3 does not lead to a transposition because Black can play 7...♖h4! 8 ♙g2 h1 ♗ 9 ♙xh1 ♖h3 10 c4 ♖h2 11 ♖xb6 ♖xh1 12 c5 h4 13 c6 h3 14 c7 h2 with an easy draw (Black is a tempo up over line '3' in the note to White's fourth move).

#### 6...h4

Black has successfully stalemated himself on the kingside, but White has been careful to block the b-pawn on its original square. This gives White four moves to play with, or five if he starts with ♖b5. After 6...♖h4 Black loses too much time and White wins by 7 c4 ♖h3 8 c5 h4 9 ♖a7 b5 10 c6 b4 11 c7 b3 12 c8 ♗b2 13 ♗xf5#.

#### 7 ♖b5!

Forcing Black to waste a tempo with his b-pawn.

#### 7...b6 8 ♖c4!

Making use of the unoccupied c4-square.

8...b5+ 9 ♖d3 b4 10 ♖e2 bxc3 11 ♖f1 c2 12 ♙g2#

Just in time!

## 52) V. Anufriev

1st Pr., *Voenni Vestnik*, 1988

Black is threatening 1...♖g2, so White's first move is forced.

#### 1 ♖f3

At first sight this is decisive, because there seems nothing Black can do to free his king. In the meantime, White can move his bishop and push the a-pawn. However, the confined position of Black's king gives him the chance to aim for stalemate.

#### 1...b3!

First of all, Black tries to get rid of the mobile b-pawn.

#### 2 ♙f2!!

A very surprising reply. 2 cxb3? allows Black to complete his plan: 2...♙f2! 3 ♙b8 ♙a7 (not 3...♖g1? losing to 4 ♙xh2+) and it is time for

White to acquiesce to the stalemate, since otherwise he will lose. Moving the bishop to a square other than f2 is also wrong; e.g., 2 ♙e3? bxc2 3 a7 (3 d4? c1 ♗ 4 ♙xc1 ♖g1 even wins for Black) 3...c1 ♗ 4 a8 ♗ ♗c4! 5 d3 ♗c2 and Black defends.

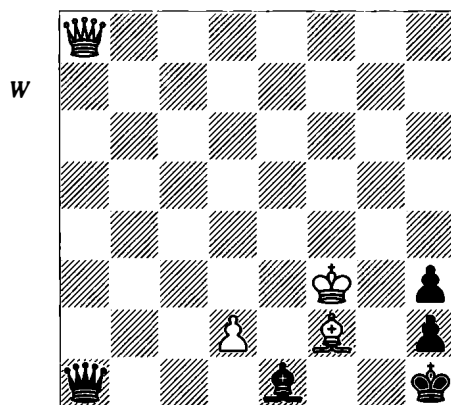
#### 2...bxc2

Everything else leads to a quick mate; for example, 2...♙xf2 3 ♖xf2 bxc2 4 a7 or 2...b2 3 a7 bl ♗ 4 a8 ♗ ♗a1 5 ♗b7 ♗b1 6 ♗e4.

#### 3 a7 c1 ♗ 4 a8 ♗

Thanks to the choice of f2 on move two, White has the g3-square available for his king, and so Black can no longer defend by playing ...♗c4. He is thus forced to resort to a stalemate defence.

#### 4...♗a1! (D)



White must keep his queen on the long diagonal, but he must also escape the attentions of the black queen. The deciding factor is that Black's queen is limited to moving along the first rank, and this allows White to free himself.

#### 5 ♗b7!

Forced, as after 5 ♗c6?, for example, Black will defend by 5...♗g7!. 5 ♗e4? is no better in view of 5...♗g7 6 ♖f4+ ♗g2 7 ♗xel+ ♗g1.

#### 5...♗b1 6 ♗c6!

Once again, White's priority is to stop Black moving his queen to the g-file.

#### 6...♗c1

Black, of course, must continue to oppose. The effect is similar to that in No. 172, although the position is quite different.

#### 7 ♗e4!

In this position, White's pawn on d2 blocks ...♗g5, so he has more freedom to move his

queen. Since we already know that Black has a satisfactory reply to ♖c6, ♖b7 and ♖a8, that leaves d5 and e4 as potential squares. 7 ♖d5? fails to 7... ♖xd2 so by elimination the correct square must be e4.

**7... ♖b1**

Black has been forced to abandon his vertical opposition and must now resort to a diagonal one, but this is less satisfactory.

**8 d3 ♖b4**

The only way to avoid immediate mate.

**9 d4 ♖b1**

Now Black again has an open diagonal to the g-file, so White must prevent ... ♖g6.

**10 ♖c6! ♖c1**

Transferring the pawn from d2 to d4 has cut out Black's ... ♖xd2 defence, so now White wins quite easily.

**11 ♖d5!**

It is mate in a few moves.

### 53) G. Zakhodiakin

=1st Pr., 64 – *Shakhmatnoe Obozrene*, 1937

There's not much doubt about the first move, as White can't allow 1...hxg6+, and 1 gxf7? fails to 1...h2.

**1 g7 h2**

The best defence is to counterattack. The passive 1... ♖g8 2 ♖xh3 ♖xc7 3 ♖f8 (3 ♖f6 also wins) 3... ♖d7 4 ♖h4 ♖e8 5 ♖h5 ♖xf8 6 ♖h6! ♖g8 7 ♖xh7 ♖f7 8 g6+ wins for White, while 1... ♖c8 is even worse since 2 ♖xh3 threatens 3 ♖f8, forcing Black to lose a tempo with 2... ♖g8.

**2 gxf8 ♖h1 ♖+**

The big question is whether White can somehow evade the checks.

**3 ♖g3!**

3 ♖g4? ♖e4+ 4 ♖h5 ♖h1+ 5 ♖g4 ♖e4+ 6 ♖g3 ♖e3+ really is a perpetual.

**3... ♖g1+**

It doesn't matter much which checks Black gives as the end result is the same.

**4 ♖f4**

Simply running across the board doesn't help; for example, 4 ♖f3 ♖f1+ 5 ♖e3 ♖e1+ 6 ♖d3 (6 ♖d4? ♖a1+) 6... ♖d1+ 7 ♖c4? (up to here, White could still retrace his steps and enter the winning line, but now Black can force perpetual check) 7... ♖d5+ 8 ♖b4 ♖e4+ 9 ♖a3

♖f3+ 10 ♖a2 ♖d5+ with a draw since Black always has a check on the d5-h1 line that prevents White from interposing his queen or bishop. The only exception is when White's king is on a4, in which case Black must play ... ♖d1+, returning to the d5-h1 line next move. It follows that White must try going up the board instead.

**4... ♖f1+ 5 ♖g4!**

After 5 ♖e4 ♖b1+ White cannot make immediate progress and must return to f4.

**5... ♖g2+**

5... ♖e2+ leads to the same thing.

After the text-move, it appears that White's plan has come to nothing since 6 ♖h5?? allows mate in one, while 6 ♖f5 ♖f3+ leads to the loss of his queen within a few moves.

**6 ♖f5!!**

A very surprising move. White is prepared to sacrifice his queen to evade the checks.

**6... ♖f3+**

6... ♖h3+ 7 ♖f6 transposes.

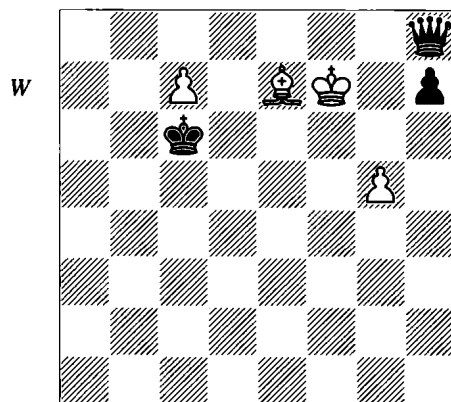
**7 ♖e6**

It is important to reach f7 with the king. 7 ♖e5? loses to 7... ♖c3+ 8 ♖e6 ♖xh8 9 ♖d8 ♖e8+.

**7... ♖d5+**

Black must play to capture the queen, since otherwise White wins with his extra material.

**8 ♖f6 ♖d4+ 9 ♖f7 ♖xh8 (D)**



White has only a bishop and a pawn for the queen, but there is a forced win.

**10 ♖d8!**

The next step is to force Black's king to c8, which prevents Black's queen from escaping along the back rank.

10...♖d7

10...♖b7 11 c8♗+ transposes.

11 c8♗+ ♖xc8 12 ♖f6

This is the point: Black's queen is trapped and any attempt to give it up for the bishop leads to a lost pawn ending.

12...h6

The last try, hoping to exchange White's pawn.

13 g6

Black's attempt is easily avoided.

#### 54) S. Kruchkov

5th Hon. Men., Chigorin Memorial Tny, 1938

White has a dangerous d-pawn, but Black is so far ahead in material that White must do more than win a minor piece for his advanced pawn.

1 d7

This is the only chance.

1...♗g6+

1...♗f5?! is wrong since after 2 ♖h3 Black has to find 2...♞xh2+ 3 ♖xh2 ♖f4+ 4 ♖xf4 ♖e7 in order to draw.

2 ♖h3!

The only square. 2 ♖g4? ♗e5+ 3 ♖xe5+ ♖e7, 2 ♖g3? ♖f4+ 3 ♖xf4 ♖e7 and 2 ♖h5? ♗f4+ 3 ♖xf4 ♖e7 4 ♖xd2 ♞xh2+ all lose for White.

2...♗f4+

Black hopes to play 3...♗e6, so White must take this knight.

3 ♖xf4 ♖a5

Here the h2-pawn is defended, so 3...♖e7 can be met by 4 ♖xd2.

Up to this point the play has been rather forced, and it seems that events have favoured Black. He now has the d-pawn under control, and is ready to round it up by ...♞d1 or ...♖e7. White needs a little fantasy to come up with the right idea.

4 b6!

The ultimate target is stalemate, so White must get rid of his stray b-pawn. This sacrifice serves the secondary purpose of allowing White to transfer his bishop to the g1-a7 diagonal with gain of tempo.

4...♖xb6 5 ♖e3! ♖a5

5...♖c7 is no different, while after 5...♖d8 White continues with 6 ♖d4+ as in the main line.

6 d8♗+!

This second sacrifice draws the bishop onto the h4-d8 diagonal.

6...♖xd8

White has given up all his pawns bar one, but he is now almost ready for the execution of his drawing idea.

7 ♖d4+!

The one remaining missing element is that Black's bishop must guard h4, so first White has to check Black's king off the d8-h4 diagonal.

7...♖e7 8 ♖c5+

White keeps checking; sooner or later the king must quit the diagonal.

8...♖d7

Now everything is prepared.

9 ♖g1!!

This spectacular move is the point. The rook is trapped in the corner and White threatens ♖g2. Therefore Black has nothing better than to take, but then...

9...♞xg1

...it is stalemate. This is an example of a position in which the moves make little sense until the final idea is seen. The only way to find the solution is to spot the key idea and then work out how the desired position can be reached.

#### 55) A. Beliavsky and L. Mitrofanov

2nd Pr., *Kommunist*, 1985

It is worth noting that this Beliavsky is not the well-known over-the-board grandmaster (the same comment applies to No. 235).

Both sides have dangerous pawns, but it is the poor position of Black's king which proves the deciding factor.

1 f6

Forced, as White must stop Black promoting for the moment.

1...gxf6

Black must eliminate one of the pawns.

2 ♖e7!

Opening the diagonal from e4 to a8 for the white bishop is more important than recapturing on f6: after 2 gxf6? ♖b8! 3 b6 ♞f2 4 ♖d7 ♞xf6 5 c6 ♞f7+ 6 ♖d8 Black can draw by either 6...♞f8+ or 6...♞xh7. 2 ♖e4? is also wrong as 2...♞e2 forces White's bishop off the long diagonal.

The text-move threatens 3 b6 and 3 gxf6.

**2...♖d5!**

An excellent defence. Black attacks the white pawns while at the same time ensuring that ♖e4 does not come with check. The only real alternative is 2...♗e2 but after 3 gxf6 ♖e5 4 ♖d6! ♖e1 5 f7 ♗f1 6 ♖e7 ♖e1+ 7 ♖d7 ♗f1 8 ♖e4+ ♖b8 9 ♖e7 Black loses his rook.

**3 ♖e4!**

Not 3 gxf6? ♗xc5+ 4 ♖d6 ♗xb5 5 f7 ♗b8 drawing. However, the text-move also looks unlikely to win, since after 3...b1♗ 4 ♖xb1 ♗xc5+ Black's rook makes mincemeat of White's remaining pawns.

**3...b1♗**

3...♖a7 4 b6+ ♖a6 5 c6! ♗xg5 6 ♖d3+ ♖a5 7 b7 wins for White.

**4 b6!**

The key idea is not to worry too much about material, but to concentrate on confining Black's king to the corner. 4 ♖xd5+? ♖a7 5 b6+ ♖a6 leaves White struggling for a draw.

**4...♗b3**

Forced, as the queen must cover both d5 and b7. Black's move is not entirely defensive, however, since he now threatens 5...♗g3+; therefore White has no time to take on f6.

**5 ♖f3**

Preventing the queen check takes priority.

**5...fxg5**

Clearly Black cannot allow White another passed pawn on the kingside.

**6 ♖c8**

There is no other move. Both sides are practically paralysed.

**6...g4 7 ♖g2!**

Just at this moment Black has no check on h3, so the bishop can move. However, only this square wins because White needs to blockade the pawn on g3 to prevent a queen check. 7 ♖e4? g3 8 ♖g2 also blocks the pawn, but White has wasted a valuable tempo and Black draws by 8...♗xb6 9 cxb6 (9 ♖xd5+ ♖a7) with stalemate.

**7...g3 8 ♖c7!**

This is the move which nullifies Black's stalemate defence. 8 ♖h1? fails to 8...g2 9 ♖xg2 ♗h3+ (9...♗xb6 also draws) 10 ♖xh3 ♗xc5+ with a draw.

**8...♗xb6+ 9 ♖xb6**

White lifts the stalemate and wins.

## 56) V. Smyslov

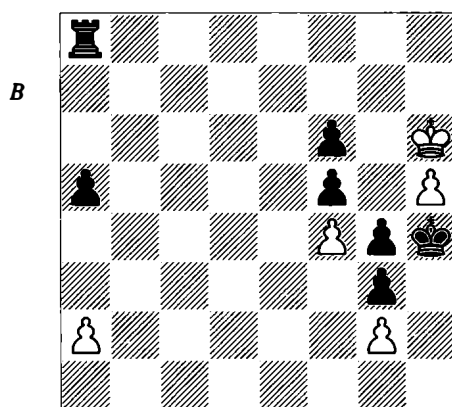
4th Pr., *Shakhmaty v SSSR*, 1938

White is the exchange and a pawn down, and apparently has very little to show for it. It is true that Black's king is rather confined, yet it is not easy to see how White can exploit this. White could perhaps put some hope in the h-pawn, but it looks like a feeble weapon compared to the mass of black pawns on the f- and g-files. The solution is more like magic than chess.

**1 ♖f6+!!**

This seems strikingly nonsensical, apparently giving up the bishop for nothing. The immediate 1 f4? fails to 1...♖a6+ followed by ...♖xh5, when Black's material advantage will be decisive.

**1...exf6 2 f4 (D)**



Now White is a rook and a pawn down, and on top of that Black can win the h-pawn by 2...♖h8+. Why is this a draw? The first point to note is that Black has no option but to take the h5-pawn. If he waits, then the pawn will advance and Black's rook will be tied down to preventing the pawn from promoting; e.g., 2...♖c8 (2...♗g8 does not help in view of 3 ♖h7) 3 ♖g6 a4 (3...♖c2 4 h6) 4 h6 a3 5 h7 ♖a8 6 ♖h6 with a draw.

**2...♖h8+ 3 ♖g7!**

The correct square. 3 ♖g6? is wrong because after 3...♖xh5 4 ♖g7 (forced, to prevent ...♖h8) 4...♗g5+! White has no good square for his king:

1) 5 ♖h7 a4! (this position is reciprocal zugzwang) 6 a3 (6 ♖h8 a3 7 ♖h7 ♖h5 followed by ...♖g6 and Black wins) 6...♖h5 and again the king reaches g6.

2) 5 ♖h8 ♖h5! (threatening ...♙g6) 6 ♖h7 ♙g6 7 a3 (7 a4 ♙g5!) 7...♙h6+ 8 ♖g7 a4 and Black frees himself.

White's problem in this line is that he has to decide how to meet ...♙g5+ while there are still spare tempi on the queenside. Black can wait to see where White puts his king before deciding whether to play ...a4.

3...♙xh5 4 a4

This is another position of reciprocal zugzwang.

4...♙g5+

Now that there are no spare tempi on the queenside, White can draw provided he makes the right choice here.

5 ♖h8!

Amazingly, Black cannot extract his king or rook from the kingside box. Not 5 ♖h7? ♖h5.

5...♙g6

5...♖h5 6 ♖h7 ♙g6 transposes.

6 ♖h7 ♖h5 7 ♖h8 ♙h6+

7...♖h6 is stalemate.

8 ♖g7 ♙g6+ 9 ♖h8

Black cannot make progress.

## 57) O. Pervakov

2nd Pr., *Schakend Nederland*, 1996

White is a rook down and his bishop is attacked, but his a-pawn is a potential game-winner. It is a convention of endgame studies that if king and rook stand in the correct position for castling, then one should assume that castling is legal unless it can be proved impossible by retro-analysis. In order to avoid any confusion, I explicitly mentioned that castling is still legal when giving the position; clearly this is Black's main hope for halting the a-pawn.

1 ♖h7!

White stops ...0-0 by the most direct means possible. Other moves are easily refuted; e.g., 1 ♖f5? 0-0+ 2 ♖b7 h5 3 a6 h4 4 a7 g3 or 1 ♖xd5? 0-0+ 2 ♖b7 ♖xd3 and in either case Black is heading for an easy win on material.

Curiously, White's first move seems so strong that it is quite hard to see any defence against it. Black may still castle by giving up his bishop with 1...♖xd3 2 ♖xd3 0-0+ 3 ♖b7 but White will soon win Black's rook for the a-pawn, when suddenly it will be White heading for a win on material, especially as Black's king is

effectively imprisoned. The critical line runs 3...h5 4 a6 h4 5 a7 g3 6 hxg3 hxg3 7 ♖f1 ♖h7 8 a8♙ ♙xa8 9 ♖xa8 ♖g6 10 ♖b7 ♖xf6 11 ♖c6 ♖e6 12 ♖h3+ f5 13 ♖c5 and Black's pawns start to fall.

1...g3!

A surprising defence, clearing the diagonal from e2 to h5 in order to play his bishop to g6. 1...♙xh7 is easier to refute since Black's poor piece coordination means that any ♙ vs ♙+♖ endings which result are hopeless; e.g., 2 a6 ♖f8 (2...h5 3 a7 ♙h6 4 a8♙ ♙xf6 5 ♖c7+ ♖e7 6 ♙d8+ ♖e6 7 ♙d7#) 3 a7 ♖g8 4 a8♙ ♙h8 5 ♖d7+ ♖h7 6 ♙xd5 winning.

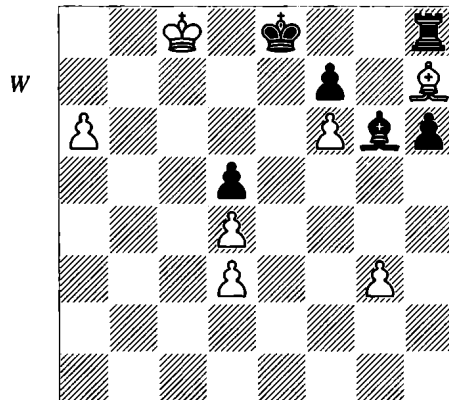
2 hxg3

White has to take time out to remove the pawn since 2 a6? fails to 2...♖xd3! 3 ♖xd3 (3 a7 ♖xh7 4 a8♙ 0-0+) 3...0-0+ 4 ♖b7 gxh2 and Black wins.

2...♖h5! 3 a6!

Accuracy in move-order is essential. 3 ♖g8? fails to 3...♖f8! 4 ♖h7 ♙xh7 5 a6 ♙h8 6 a7 ♖g8, when Black is in time to win the queen.

3...♖g6 (D)



This is the point of Black's defence. He intends to take the h7-bishop with his own bishop, thus preserving the right to castle. 4 a7?, for example, loses to 4...♖xh7 5 a8♙ 0-0+.

4 ♖g8!

Once again, the fight to prevent castling takes precedence over everything else. If Black plays 4...♙xg8, then the a-pawn runs home.

4...♖f8!

Black finds a way to keep the game alive. White's bishop is now within range of Black's king, so this new defence becomes possible.

**5 ♖h7!**

This is the solution. Black has given up the right to castle by moving his king, so White can return to h7. Instead, 5 a7? fails to 5...♙xg8 6 a8♙ ♖h7+.

**5...♙xh7**

There is nothing better, but now h7 is blocked by the bishop and Black cannot play ...♙g8-h7.

**6 a7**

White can also play his moves in the reverse order: 6 ♙c7 ♙f5 7 a7.

**6...♙f5+ 7 ♙c7!**

The final finesse. After 7 ♙b7? ♙g8 8 a8♙+ ♙h7 9 ♙a5 ♙e6! followed by ...♗g8 Black can set up a fortress.

**7...♙g8 8 a8♙+ ♙h7 9 ♙xd5**

White wins on material.

**58) D. Gurgenzidze**

1st Pr., *Biulleten Tsentralnovo Shakhmatnovo Kluba SSSR*, 1970

This position looks ripe for resignation, as there is clearly no way to stop the f2-pawn from promoting. However, White can generate some active play against Black's somewhat vulnerable king.

**1 a5+**

It is necessary to force the king to a6 straight away. If Black is allowed to play ...a5+, all White's attacking chances disappear.

**1...♙a6 2 e3!!**

An extremely subtle move. White must push his e-pawn to make way for ♙g4, threatening mate at c8, but which of the three possible moves is correct? It is clear that 2 exd3? fails to 2...f1♙ 3 ♙g4 ♙f4+ but 2 e4? is a tempting idea. However, after 2...f1♙ 3 ♙g4 ♙f8 4 ♙a4 ♙h8! (4...♙b8? loses to 5 b4 ♙b5+ 6 ♙b3) 5 ♙c8+ (5 e5 ♙b8 6 b4 ♙b5+ 7 ♙a3 ♙xd5 is also lost for White) 5...♙xc8 6 b4 ♙b8 a position of reciprocal zugzwang arises with White to play. He will have to move his king very soon, when Black wins easily with ...♙b5. The text-move, holding the tempo e3-e4 in reserve, allows White to switch the reciprocal zugzwang around.

**2...f1♙**

There is nothing better, since 2...h5 3 ♙xh5 does not help Black.

**3 ♙g4 ♙f8**

Forced, but apparently strong since Black now threatens to win by 4...♙b8+ 5 ♙a4 ♙b5+.

**4 ♙a4**

Now it is White who threatens to win, by 5 b4 ♙b8 6 ♙c8+ ♙xc8 7 b5#.

**4...♙h8**

Setting up a deadly check on a1. White now seems to be at the end of his resources, but a surprise sacrifice proves effective. 4...♙b8 is met the same way.

**5 ♙c8+!!**

A truly amazing continuation. White gives up his bishop, and plays on with only two pawns against Black's queen.

**5...♙xc8 6 b4**

Threatening mate, so the reply is forced.

**6...♙b8 7 e4!**

Now White uses his reserve tempo, and at the same time defends the d5-pawn against the threat of ...♙b5+ followed by ...♙xd5.

**7...♙b5+**

Black has almost no moves. Interposing ...h5 and h4 doesn't change the situation, and this check is the only other possibility.

**8 ♙b3!**

White must prevent ...♙c4.

**8...h5 9 h4 ♙b8**

Oddly enough, the queen has no good square and must return to b8. If Black gives up his queen for a pawn or two, the result is either stalemate (after 9...♙xb4+) or a loss (after 9...♙xa5? 10 bxa5 ♙xa5 11 e5, for example).

**10 ♙a4 ♙b5+ 11 ♙b3**

Black cannot make progress.

**59) L. Katsnelson**

=1st Pr., *Molodoi Leninet*s (Kurgan), 1986

White is struggling in this very natural position. Black's king is actively supporting his advanced passed pawn, and White's knight is far away from the action. Black's immediate threat is 1...♙e5+.

**1 ♙d7+**

White must dislodge Black's king from its excellent square. After 1 ♙g6? ♙e5+ followed by ...g2 Black wins easily.

**1...♙h4**

Now the threats are 2...g2 3 ♙f2 ♙c2+, or 2...♙c2 first.

**2 ♙b4!**

The knight must move off the vulnerable second rank, and this is the only possibility. 2 ♖f3? loses to 2...♞c2 followed by ...g2.

2...♞c3+ 3 ♖e2

3 ♖d2? loses to 3...♞b3 followed by ...g2, while 3 ♖d3? ♞xd3+ is also a win for Black.

3...♞c4!

The most awkward move, gaining c2 for a rook check. After 3...♞c7 4 ♖c6 or 3...♞b3 4 ♖c2 ♞b2 5 ♖f5 ♖g5 6 ♖h7 ♖g4 7 ♖e4 ♖f4 8 ♖d3 White reaches a draw far more comfortably.

4 ♖d3!

Controlling c1 to prevent a back-rank mate later. 4 ♖d5? g2 5 ♖f2 ♞c2+ 6 ♖g1 ♖g3 shows what happens if White does not take this precaution.

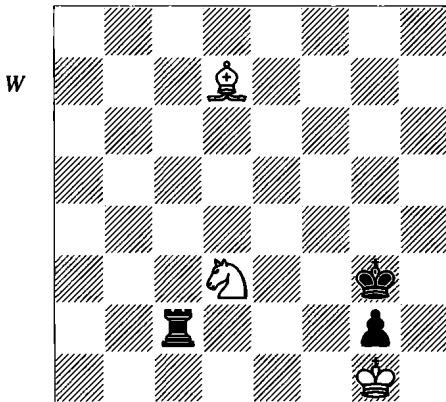
4...♞c2+

The immediate 4...g2 is met by 5 ♖e1!.

5 ♖f1 g2+

5...♞d2 6 ♖b5! (6 ♖f5? g2+ 7 ♖g1 ♖g3 mates in a few moves) 6...g2+ 7 ♖g1 ♖g3 8 ♖e1! leads to a draw as in the main line.

6 ♖g1 ♖g3 (D)



It hardly seems possible that White can draw this position as his knight is tied down to the defence of c1, and there seems little to prevent Black from finding some route for his rook to reach the back rank.

7 ♖b5!

Remarkably, this enables White to hang on. 7 ♖a4? loses to 7...♞c4! (7...♞a2? 8 ♖d1! ♞d2 9 ♖e1! draws) 8 ♖d1 (8 ♖b5 and 8 ♖d7 also lose to 8...♞h4 9 ♖f2 ♞f4) 8...♞h4 9 ♖f2 ♞f4 and mate cannot be postponed for long.

7...♞a2

White cannot cover a1, so the rook has indeed found a way to the back rank. 7...♞d2 8 ♖e1 is the same.

8 ♖e1!

The surprising defence which saves the day.

8...♞a1

Otherwise White draws by 9 ♖xg2.

9 ♖f1! ♞xe1

9...gxf1 ♖+ 10 ♖xf1 is a theoretical draw but after the text-move it is stalemate.

## 60) V. Kaliagin

1st Special Pr., Olimpiev-60 Jubilee Tny, 1997

Both sides have dangerous passed pawns, but the more immediate danger is posed by Black's, since there is clearly no way to prevent it from promoting. Therefore White must put all his efforts into forcing his own pawn to the eighth.

1 ♖h4+

1 ♖a6? is the wrong move-order as Black draws after 1...♖e7! 2 ♖c7 d1 ♖3 ♖h4+ ♖d6.

1...♖e8 2 ♖a6!

With this move White ensures that he will promote his own pawn.

2...d1 ♖3 ♖c7+ ♖f8 4 e7+ ♖g7

Black avoids White promoting with check.

5 e8 ♖

White certainly has sufficient material to win, but Black has the first check and this enables him to regain one of the minor pieces.

5...♖h1+

Other checks are not effective; e.g., 5...♖b1+ 6 ♖c8 or 5...♖b3+ 6 ♖b5.

6 ♖b6!!

This subtle move is the key to the study. White is already looking ahead to the zugzwang position at move 10, and for that he needs his king on b5. However, the route for the king to reach b5 must be chosen carefully, since 6 ♖a6 ♖a1+ 7 ♖b5? (7 ♖b6? ♖d4+ 8 ♖c6 ♖c4+ is similar) allows Black to draw by 7...♖b2+ 8 ♖a5 ♖c3+ 9 ♖b6 ♖b4+ 10 ♖c6 ♖c4+ and it is either perpetual check or White has to move his king out of contact with the b5-square, in which case Black can safely take the bishop. It follows that White should play 7 ♖b7 in this line, repeating the position.

6...♖xh4

Here Black has no choice but to take the bishop, because if he continues checking, the

white king slips away and he keeps his two extra pieces: 6...♖g1+ (or 6...♗b1+ 7 ♗b5 ♗g6+ 8 ♖a7 ♗g1+ 9 ♗b6 ♗a1+ 10 ♖b8) 7 ♖a5! ♗a1+ (7...♗c5+ 8 ♖b5 and 7...♗a7+ 8 ♖a6 are also winning for White) 8 ♗a4! ♗c3+ (8...♗e5+ 9 ♖b5) 9 ♖b6 ♗e3+ 10 ♖b7 ♗f3+ 11 ♗c6 ♗b3+ 12 ♗b5 ♗f3+ 13 ♗d5.

♗+♖ vs ♗ is normally a draw, but in this particular position White has a win thanks to his active pieces and the poor position of the black queen.

7 ♖e6+ ♖h7

Forced, since 7...♖f6 8 ♗d8+ and 7...♖h6 8 ♗h8+ cost Black his queen straight away.

8 ♗f7+

8 ♖f8+ only wastes time, as after 8...♖g7 White can only win by repeating the position with 9 ♖e6+.

8...♖h6 9 ♗g7+ ♖h5 10 ♖b5!

10 ♗f7+ ♖h6 repeats, while 10 ♖a5? ♗e1+ and 10 ♖c5? ♗f2+ throw the win away altogether.

The text-move gives rise to the position White has been aiming for. He places his king so as to avoid any queen checks, and puts Black in zugzwang. The result is that Black cannot avoid mate or immediate loss of the queen. The position after 10 ♖b5! is in fact reciprocal zugzwang; if White were to play, it would be a draw. This final zugzwang position is certainly not unique to this study and goes back to a Rinck composition of 1917: w♖d3, ♗c4, ♖e6; b♖b8, ♗e8, 1st Pr., *L'Eco degli Scacchi*, with the solution 1 ♗c7+ ♖a8 2 ♗a5+ ♖b7 3 ♖c5+ ♖b8 4 ♗b6+ ♖c8 5 ♗b7+ ♖d8 6 ♖d2!. However, the attractive introductory play and careful choice of king square make Kaliagin's version stand out.

## 61) V. Yakimchik

2nd Pr., *Shakhmaty v SSSR*, 1960

White is a piece up but he has only one pawn left and his king is offside. Accurate play is required to secure the win.

1 ♖c5!

Covering b3 and at the same time preventing 1...♖d3. 1 d4? b3 2 ♖c1 ♖d3 3 ♖a3 b2 and 1 ♖a4? ♖d3 2 ♖g5 f5 3 ♖f6 f4 4 ♖e4 f3 5 ♖h4+ f2 6 ♖b3 ♖e2 both lead to a draw since White must give up a piece.

1...b3!

Since the b-pawn is doomed in any case, Black sacrifices it to gain the d3-square for his knight. 1...♖h3 2 ♖e3 b3 3 ♖xb3 f5 4 ♖c5 ♖e2 5 ♖e6 and 1...♖e2 2 ♖xb4 ♖h3 3 ♖e3 f5 4 ♖e6 are both winning for White because he has blockaded the f-pawn.

2 ♖xb3 ♖d3

The correct square for White's bishop is not obvious.

3 ♖g5!

The alternatives are:

1) 3 ♖g3+? ♖d1 4 ♖b5 ♖c2 5 ♖c4 f5 draws because White's king and knight are effectively paralysed, so eventually White will have to give up his bishop for the pawn.

2) 3 ♖e3? f5 is even more clear-cut as Black gains time when he plays ...f4.

3) 3 ♖h6? is wrong for reasons that will become apparent later.

3...f5

Black must not delay with his counterplay since White is threatening ♖b5-c4.

4 ♖b5 f4 5 ♖c4 f3

Black is prepared to sacrifice his knight to further the advance of his pawn. After 5...♖e2 6 ♖c3 followed by ♖d4+ White wins easily.

6 ♖xd3 f2

6...♖d1 is met by 7 ♖e3!, but not 7 ♖h4? f2 8 ♖xf2 stalemate.

After the text-move, the same stalemate possibility arises following 7 ♖h4? ♖d1 8 ♖xf2, but this time White has something better.

7 ♖c2!

Now ♖h4 is a threat, so Black must promote.

7...f1 ♗ 8 ♖h4+

This move would not have been available had White played 3 ♖h6?.

8...♖e2 9 ♖d4#

A beautiful and unexpected finish.

## 62) V. Kozirev

1st Pr., *Shakhmaty v SSSR*, 1977

White must lose a piece since both knight and bishop are under attack, so he chooses to give up the piece in a way which allows the d-pawn to advance.

1 ♖c3+!

1 ♖g3? allows 1...g5+ 2 ♖h5 (2 ♖h3 ♖xf2+ favours Black) 2...♖f6+, picking up White's last pawn.

**1...♖xc3 2 d6**

White will promote with check, so a race is hopeless for Black, who must therefore try to use his knight to stop the d-pawn.

**2...g5+!**

After 2...♖e4 3 d7 g5+ 4 ♖h3! ♖xf2+ 5 ♖g2 White wins easily.

**3 ♖h3**

The only square, since both 3 ♖xg5? ♖e4+ and 3 ♖g4? ♖e4 4 d7 ♖f6+ cost White his d-pawn.

**3...♖d5**

The knight makes it just in time to prevent promotion.

**4 d7**

After 4 ♖g4? ♖b4 5 d7 ♖c6 Black draws easily since White's king takes several moves to dislodge the knight from c6.

**4...♖f4+ 5 ♖g4**

White's king must head for f5 to attack the knight on e6, and must not waste time on the way.

**5...♖e6 6 ♖b6**

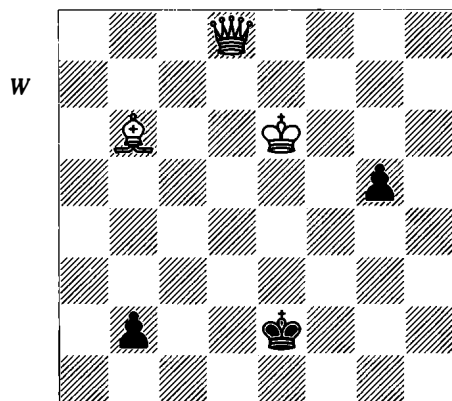
6 ♖f5? ♖d8 7 ♖b6 ♖b7 is too slow for White; for example, 8 ♖e5 b4 9 ♖d5 b3 10 ♖c6 b2 11 ♖xb7 b1♗ 12 d8♗+ with a draw. The text-move is better, preventing the knight from moving to d8. Indeed, it seems as though Black will lose within a few moves.

**6...b4**

Black can do nothing about the threat of ♖f5, so he pushes his pawn as quickly as possible.

**7 ♖f5 b3 8 ♖xe6 b2 9 d8♗+**

White cannot play his moves in the other order due to 9 ♖e3? b1♗ 10 d8♗+ ♖c2!.

**9...♖e2! (D)**

This is the point of Black's defence. White has no check, nor can he cover the b1-square. Although the promotion of the b-pawn is unavoidable, White has a spare tempo to improve his position ready for the coming ♗+♕ vs ♗ struggle. Which move should he choose?

**10 ♖e3!**

Controlling the squares d2 and f2, and so enabling White to chase the enemy king towards his own king. After other moves White can give plenty of checks, but cannot win; for example, 10 ♗d4? b1♗ 11 ♗f2+ ♖d1 12 ♗f1+ ♖c2 13 ♗f5+ ♖c1 14 ♖e3+ ♖b2 15 ♖d4+ ♖c1 16 ♗f1+ ♖c2 17 ♗e2+ ♖b3 18 ♗b5+ ♖c2 19 ♗c4+ ♖d1 and White is not making progress.

**10...b1♗**

10...♖xe3 loses to 11 ♗b6+.

**11 ♗d2+ ♖f3 12 ♗f2+ ♖g4**

12...♖e4 loses the queen to 13 ♗f5+.

**13 ♗g2+**

13 ♗e2+? ♖h3 14 ♗f3+ ♖h2 leads nowhere.

**13...♖h4 14 ♖f6!**

This surprising quiet move is the only route to victory. White threatens mate in two by 15 ♖f2+ or 15 ♖xg5+. Neither 14 ♖xg5+? ♖h5 nor 14 ♗xg5+? ♖h3 is sufficient to win.

**14...♗a1+**

The only way to meet the immediate threats.

**15 ♖f7**

Black has no more checks and White still threatens mate in two by 16 ♖f2+.

**15...♗c3**

15...♗a3 is met the same way.

**16 ♗xg5+**

Now that Black's queen is on the third rank, this capture leads to success, because White can set up a discovered attack.

**16...♖h3 17 ♗f5+ ♖g3**

17...♖g2 18 ♗f2+ ♖h3 transposes.

**18 ♗f2+ ♖h3**

18...♖g4 allows a quick mate by 19 ♗g2+ ♖f5 (19...♖h4 20 ♖f2+ ♖h5 21 ♗g6#) 20 ♗g6+ ♖e5 21 ♗e6#.

**19 ♗f3+**

A bishop check will win Black's queen.

**63) E. Pogosiants**

1st Pr., *Shakhmatnaya Moskva*, 1961

White is a piece up, but he has to cope with Black's dangerous g3-pawn.

**1 ♖f1**

The most natural move, but one can already see the outlines of a possible stalemate.

**1...♙b5!**

Black must do something special, or else White will consolidate his material advantage and win with his extra piece. 1...♙d7 is the only real alternative, intending ...♙h3, but then White wins by 2 ♖g5 (threatening 3 ♖g6):

1) 2...♙f5 3 ♖g2 ♙d3 (trying to retain control of g6; 3...♙d7 4 ♖g6 ♙c8 5 ♖f6 ♙d7 6 ♖f4 ♖g4 7 ♖e5 wins for White) 4 ♖e6 ♙c2 5 ♖f4 ♙b1 6 ♖d5 (6 ♖g6+? ♙xg6 7 ♖xg6 is stalemate) 6...♙d3 7 ♖e3 (threatening 8 ♖f4) 7...♙e4 8 ♖g7 ♙c6 9 ♖f6 ♙h5 10 ♖f5 and White wins the g3-pawn.

2) 2...g2 (Black attempts a tactical solution, but it doesn't work) 3 ♙xg2 ♖g3 4 ♙f1 ♙c6 5 ♙e2 ♙d5 (5...♖f2 6 ♙d1 ♖e3 7 ♖h5 is similar) 6 ♖g6 ♖f4 7 ♖h5 ♙c6 8 ♙d1 ♙d5 9 ♖h4 ♙c6 10 ♖h3+, followed by ♖g3, and White consolidates.

The text-move is an attempt to liberate the g-pawn by tactical means.

**2 ♙g2!**

The only move.

**2...♙f1!**

Black is persistent with his bishop offers and now aims for stalemate. Quiet play presents no real challenge for White; for example, 2...♙e2 3 ♖d2 (3 ♖g7? ♙xf3 4 ♙xf3 ♖h3 draws) 3...♙c4 4 ♖f1 ♙d3 5 ♖e3 winning as in the note to Black's first move.

**3 ♙xf1**

Forced, but how can White avoid the stalemate after Black's reply?

**3...g2 4 ♖g3!**

This is the solution. White simultaneously defends the attacked bishop and prepares a mating net.

**4...g1♚**

After 4...♖xg3 5 ♙xg2 White wins easily.

**5 ♖f5#****64) M. Liburkin**

3rd Hon. Men., *Shakhmaty v SSSR*, 1949

Black's two advanced passed pawns are a potent force, and White is struggling to draw despite his extra piece.

**1 ♖g3+**

1 ♖b2? fails to 1...c1♚+ 2 ♖xc1 h1♚, when the knight is pinned.

**1...♖h4**

If Black does not attack the knight, then White stops the pawns with 2 ♖b2.

**2 ♖b2**

Now White appears to have everything under control because 2...♖xg3 3 ♙c6 c1♚+ 4 ♖xc1 ♙f5 5 ♖d2 is a simple draw. However, Black can improve on this line by occupying the long diagonal himself.

**2...c1♚+! 3 ♖xc1 ♙e4!**

Suddenly it looks serious for White because Black can promote his own pawn in two moves, while it takes White three. Since it is White to move, this would mean that both sides promote together, except for one tiny detail – Black promotes with check.

**4 ♖h1!**

This doesn't seem to alter the situation much. Black takes the knight, and it still takes him two moves to promote (with check). 4 ♙f5? loses to 4...♙xf5 5 ♖h1 ♖h3 6 ♖d1 ♖g2 7 ♖e2 ♖xh1 8 ♖f1 ♙d7 9 ♖f2 ♙b5, when Black's king will escape from the corner.

**4...♙xh1**

It may look hopeless, but now White reveals the point of his play.

**5 ♙h3! ♙c6**

Other bishop moves are met the same way, while if Black plays 5...♖xh3, the result is a drawn ♚+♙ vs ♚ ending.

**6 ♙g2!**

Deflecting the bishop to a square on which it will block in the queen on h1.

**6...♙xg2 7 d7 h1♚+ 8 ♖d2!**

Remarkably, Black has no checks and no way to cover the promotion square. It does Black no good to try to win White's queen by 8...♙f3, because White promotes with check. There is a connection between this study and Troitsky's No. 43, although the final positions are somewhat different.

**65) A. Kuriatnikov**

2nd Pr., Sarychev Memorial Tny, *Shakhmaty* (Baku), 1988

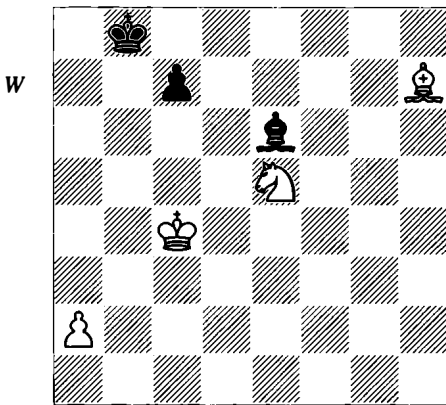
Material is equal, but the black knight is so badly placed on a3 that White can win it straight away. Losing the knight for nothing would leave

Black in a hopeless situation, but he has a cunning defence.

1 ♖b4 ♘c4! 2 ♜xc4 ♙c8

Now Black is threatening both 3...♙xg4 and 3...♙e6+ followed by 4...♙xa2. White cannot counter these threats by 3 ♘e3? ♙e6+ 4 ♘d5 because then 4...c6 wins the knight. If Black wins the a-pawn then the material balance would indicate a draw, but in this particular position White can initiate an attack against the black king.

3 ♘e5! ♙e6+ (D)



4 ♜b5!!

A superb move. Everything depends on a position of reciprocal zugzwang which arises in the main line after White's eighth move. If White plays 4 ♜c5?, then Black replies 4...♙xa2 5 ♘c6+ ♜c8 6 ♙f5+ ♜b7 and the reciprocal zugzwang arises with White to play. There is no way he can maintain his bind; for example, 7 ♙c2 (7 ♜b5 ♙d5 and 7 ♙g4 ♙b1 are no improvement) 7...♜c8 and there is nothing better than to return to f5.

4...♙xa2

Now White must take immediate action since if Black can meet the immediate threats then a draw is inevitable.

5 ♘c6+ ♜b7

5...♜c8 6 ♙f5+ ♜b7 7 ♜c5 transposes to the main line, while 5...♙a8 drops the bishop immediately to 6 ♙e4.

6 ♙e4!

White is playing to transfer his bishop to f5 with gain of tempo. The immediate 6 ♙f5? ♙d5 causes Black no difficulty.

6...♜c8

Black's bishop is not safe from the discovered checks anywhere on the a2-g8 diagonal, so he has no choice.

7 ♙f5+ ♜b7

White's pieces are optimally placed so now is the best chance for a zugzwang.

8 ♜c5!

The key move, preventing Black's ...♙d5 defence. As we have noted before, this position is reciprocal zugzwang.

8...♙g8

The only possibility. Black cannot move his king, owing to the lines 8...♙a6 9 ♙c8# and 8...♙a8 9 ♙e4 winning the bishop. Therefore he has to move his bishop, but g8 is the only square where it is safe from an immediate fork. Unfortunately for Black, his bishop is not well placed on g8 because the knight fork on e7 prevents ...♜c8 even in the absence of White's bishop. Thus White can use his bishop to restrict Black's bishop even more.

9 ♙b1!

The squares a2 and g8 are the only ones for Black's bishop, as b3, e6 and f7 allow a knight fork. By covering a2, White's manoeuvres have left Black in an awkward zugzwang. He has no square for his bishop, so he must move his king.

9...♙a6

After 9...♙a8, 10 ♙e4 still wins the bishop, so this is forced. It is worth noting that the position after 9 ♙b1 is not a reciprocal zugzwang because if White were to play he would win by 1 ♙e4 ♙a6 2 ♘b4+ ♙a5 (2...♙a7 3 ♘c6+ ♙a6 4 ♙d3+ ♜b7 5 ♙b1 transfers the move to Black) 3 ♙c2 c6 4 ♘xc6+ ♙a6 5 ♙e4, when Black loses his bishop.

10 ♙e4!

Black has finally run out of moves and must lose his bishop.

10...♙b3

Or 10...♙f7 11 ♙d3+ ♜b7 12 ♘d8+.

11 ♙d3+ ♜b7 12 ♘a5+

White wins.

## 66) G. Kasparian

1st Pr., Soviet Armenia-30 Anniversary Tny, 1950

White is only a pawn down, but his material disadvantage is set to increase when Black rounds up the h8-knight. There is nothing White can

do to save the knight, so he has to try to draw the ensuing position a piece down.

**1 e5+**

The basic idea is to force Black's knight to retreat to g7, when his pieces will be blocking one another. Therefore White has to prevent Black from extracting his knight by some other route, and only the text-move achieves this. Other moves lose:

1) 1  $\text{♙d5?}$   $\text{♜f4!}$  2  $\text{♙c4}$  e6 3  $\text{♜g3}$   $\text{♙d6}$  followed by ... $\text{♜g7}$ .

2) 1  $\text{♜xh3?}$   $\text{♜f4+}$  2  $\text{♜g4}$  e5 with ... $\text{♙g7}$  to follow.

3) 1  $\text{♙c6?}$   $\text{♜g7}$  2  $\text{♜xh3}$   $\text{♜f4+}$  3  $\text{♜g4}$   $\text{♜d3}$  and Black wins the knight while keeping his own knight free.

**1...♜g7 2 ♜xh3**

2  $\text{♙f3?}$  loses to 2... $\text{♜f4}$  3  $\text{♜g3}$   $\text{♜e6}$  as even the tricky 4  $\text{♜f7}$   $\text{♜xf7}$  5  $\text{♙d5}$  fails to 5...h2 6  $\text{♜xh2}$   $\text{♙g7}$ .

**2...♜xh8**

This looks like a good opportunity for Black to extract his knight, but it fails for tactical reasons: 2... $\text{♜f4+}$  3  $\text{♜g4}$   $\text{♜e6}$  (3... $\text{♜d3}$  4  $\text{♜g6!}$ , or 3... $\text{♜e2}$  4  $\text{♜g5}$   $\text{♜xh8}$  5  $\text{♜g6}$  followed by  $\text{♜f7}$  and White wins the e-pawn) 4  $\text{♜f7!}$   $\text{♜xf7}$  5  $\text{♙d5}$  followed by  $\text{♜f5}$  and White draws.

**3 ♜g4**

Now the knight is forced to g7.

**3...♜g7**

Black threatens to disentangle by ... $\text{♜g8-f7}$ , so White must use his king aggressively.

**4 ♜g5 ♜e6+!**

This is the most natural attempt to escape, but it is worth looking at the alternatives:

1) 4... $\text{♜g8}$  5  $\text{♜g6}$  e6 6  $\text{♜f6}$   $\text{♙b4}$  7  $\text{♙a6}$  (7  $\text{♙c8}$   $\text{♜f8}$  8  $\text{♙xe6?}$  loses to 8... $\text{♙e7+}$ ) 7... $\text{♜f8}$  8  $\text{♙c4}$   $\text{♙e7+}$  (White is not threatening to take the e-pawn, but Black cannot make any progress) 9  $\text{♜g6}$   $\text{♙h4}$  10  $\text{♙a2}$  with a positional draw. Black's king is tied to his knight, and his knight to the e-pawn. If Black attacks the e5-pawn with his bishop, White plays  $\text{♜f6}$ .

2) 4... $\text{♜h7}$  5  $\text{♙e4+}$   $\text{♜g8}$  6  $\text{♜g6}$  e6 (alternatively, 6... $\text{♜e8}$  7  $\text{♙d5+}$   $\text{♜h8}$  8  $\text{♜f7}$   $\text{♜c7}$  9  $\text{♙e4}$ ) 7  $\text{♜f6}$  draws as in line '1'.

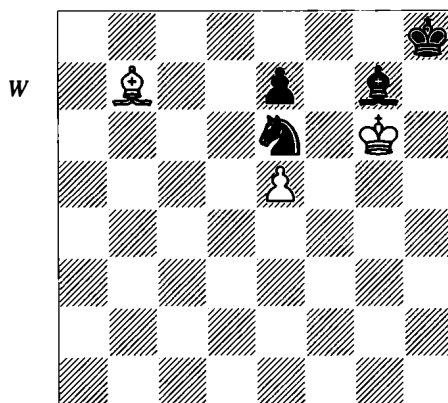
**5 ♜g6**

Threatening 6  $\text{♜f7}$ .

**5...♙g7! (D)**

5... $\text{♜d8}$  6  $\text{♙d5}$   $\text{♙g7}$  (6...e6 7  $\text{♙xe6}$   $\text{♜xe6}$  8  $\text{♜f7}$  draws) 7 e6 leads to essentially the same

position as in the main line after White's eighth move.



After the text-move, White cannot play 6  $\text{♜f7?}$  due to 6... $\text{♜d8+}$ , so he would like to move his bishop somewhere in order to threaten  $\text{♜f7}$ . This would force ... $\text{♜d8}$ , when the knight can be imprisoned by e6 followed by  $\text{♙d5}$ .

**6 ♙h1!!**

The only safe square for the bishop. Other squares allow Black to escape the bind:

1) 6  $\text{♙a8?}$   $\text{♜c7}$  7  $\text{♙b7}$   $\text{♜g8}$  followed by ... $\text{♜f8}$ .

2) 6  $\text{♙c6?}$   $\text{♜d8}$  and Black wins the e5-pawn.

3) 6  $\text{♙e4?}$   $\text{♜c5}$ .

4) 6  $\text{♙g2?}$   $\text{♜f4+}$ .

5) 6  $\text{♙c8?}$   $\text{♜d8!}$  7 e6  $\text{♜g8}$  followed by ... $\text{♜c6}$  and the knight is out of its cage.

**6...♜d8**

The only move to counter  $\text{♜f7}$ .

**7 e6!**

Forced, since 7  $\text{♜f5?}$  loses to 7...e6+.

**7...♙b2**

Now White must choose his square with care.

**8 ♙d5!**

The only move for the bishop, as otherwise Black can safely take on e6; e.g., 8  $\text{♙a8?}$   $\text{♜xe6}$  9  $\text{♜f7}$   $\text{♜c7}$  or 8  $\text{♙e4?}$   $\text{♜xe6}$  9  $\text{♜f7}$   $\text{♜g5+}$ . Note that 8  $\text{♜f5?}$  also loses, since after 8... $\text{♜h7}$  9  $\text{♙d5}$   $\text{♜h6}$  10  $\text{♙f3}$   $\text{♙c3}$  White is in zugzwang and must allow the black king to h5. Then Black can play his king to the queenside via h4, g3, f2, etc., eventually ending up on d6.

**8...♙a3**

8... $\text{♙c1}$  9  $\text{♙h1!}$  is again a draw. White always has two safe squares for bishop: d5 and h1.

9 ♖h6 ♙c1+

9...♗g8 10 ♗g6 ♗f8 11 ♗h7 does not help Black. While his king is on f8, White can oscillate with his king between h7 and g6.

10 ♗g6 ♙d2 11 ♙h1!

Black cannot make progress.

### 67) V. Korolkov

1st Pr., *Lelo* (Georgia), 1951

The material situation is such that White must do more than simply win Black's rook in return for the passed pawn. Thus 1 ♙b2? is answered by 1...♙xf6, for example.

1 f7 ♙a6+

Forced, as Black loses immediately in the case of 1...♙f6 2 ♙b2 and 1...♙g8 2 fxg8 ♖+ ♗xg8 3 ♗e7+.

2 ♙a3!

An attractive move, although forced since 2 ♗b1? ♙xf5+ and 2 ♗b2? ♙f6 offer White no winning chances at all.

2...♙xa3+ 3 ♗b2 ♙a2+!

If 3...♙b3+, then 4 ♗a2 stops the checks.

After the text-move, it is clear that White cannot take the rook, but it is less obvious how he escapes from the barrage of checks.

4 ♗c1!

Moving to the kingside is correct. The alternative is to march up the board, but this proves ineffective: 4 ♗c3? ♙c2+! 5 ♗b4 (5 ♗d4 ♙d2+ and 6...♙d8 draws) 5...♙b2+ 6 ♗c5 ♙c2+ 7 ♗d6 (7 ♗b6 ♙b2+ is similar – White's king cannot advance to the seventh rank) 7...♙d2+ 8 ♗e7 ♙d7+ followed by ...♙xf7(+) with a draw.

4...♙a1+

4...♙c2+ loses at once to 5 ♗d1.

5 ♗d2

After 5 ♗b2? Black does not have to repeat the position (which would give White a second chance to find the right line) but can force a draw by 5...♙b1+! 6 ♗c3 ♙b3+! 7 ♗d4 (or 7 ♗d2 ♙d3+) 7...♙d3+.

5...♙a2+ 6 ♗e3

The correct plan. It is wrong to advance via g3 and h4: 6 ♗e1 ♙a1+ 7 ♗f2 ♙a2+ 8 ♗g3 ♙a3+ 9 ♗h4? (9 ♗f4 still transposes to the main line) 9...♙h3+! 10 ♗g5 ♙g3+ 11 ♗h6 ♙h3+ with a draw.

6...♙a3+ 7 ♗f4 ♙a4+ 8 ♗g5

8 ♗g3? ♙g4+ followed by ...♙g8 draws.

8...♙g4+ 9 ♗h6!

Again accuracy is required as the alternatives only draw; for example, 9 ♗xg4? ♙xf5+ 10 ♗xf5 ♗g7 11 ♗e6 ♗f8 12 ♗f6 stalemate, 9 ♗h5? ♙g8 10 ♗e7 ♙f8 11 ♗g6+ ♗g7 stopping the pawn, or 9 ♗f6? ♙g8 10 ♗e7 ♙d8 and Black escapes.

9...♙g8

Forced, as 9...♙g6+ 10 ♗xg6 ♙xf5+ 11 ♗h6 mates.

10 ♗e7

Now Black must counter the threats of 11 fxg8 ♖# and 11 ♗g6+.

10...♙e6

The only move, but it allows a neat finish.

11 fxg8 ♖+! ♙xg8 12 ♗g6#

### 68) F. Lazard

2nd Pr., *L'Italia Scacchistica*, 1947

This position looks far from promising. Black has the massive material advantage of ♖+5♗ vs ♙+♗, and in addition White's king is trapped on the back rank, ready to be mated by the black queen. The only ray of hope is that Black's king is also rather vulnerable; indeed, were the knight to disappear, White would be able to mate by ♙e1#.

1 ♗e4+

The only chance since Black mates quickly after other moves.

1...♗h4

Not 1...dxe4? 2 ♙e1#. After the text-move, however, it is hard to find a continuation for White since both his pieces are hanging and 2 ♙e1+? g3 leads to nothing.

2 ♗g3!!

A remarkable move, threatening mate in one.

2...♖f8

Black tries to avoid taking the knight, but sooner or later he is forced to make the capture. 2...fxg3 3 ♙b6 is a draw as in the main line, while 2...♗xg3? allows 3 ♙e1#.

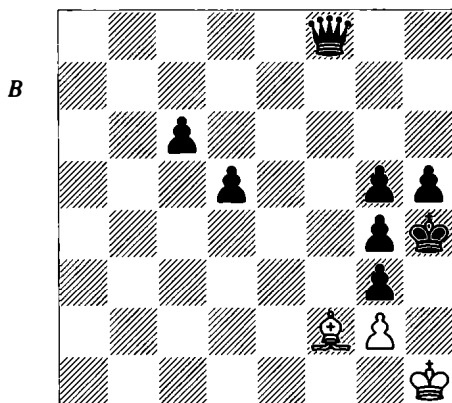
3 ♙e1!

White must act at once as Black was threatening to win by playing ...f3.

3...fxg3

The only defence to the threatened mate in one, but now Black is threatening mate in one himself.

4 ♙f2!! (D)



The point of White's play: the bishop occupies the g1-a7 diagonal, which ensures the draw in this position.

4... ♖f3

4... ♖xf2 and 4... gxf2 5 g3+ lead to immediate stalemate, so Black tries another tack.

5 ♖c5

White ignores the queen and calmly plays his bishop up and down the g1-a7 diagonal. Remarkably, there is nothing Black can do. If he checks on the first rank then White plays ♖g1, and Black then has to unpin the bishop to avoid stalemating White. If Black pushes the c- or d-pawn, White just takes (if the bishop is pinned, then he is stalemated!). You should play around with the pieces a bit to convince yourself that there is really nothing Black can do.

5... ♖f1+ 6 ♖g1 ♖f2

The last chance, trying to put White in zugzwang. 6... ♖xg1+ 7 ♖xg1 is also drawn.

7 ♖xf2 gxf2 8 g3+

Again White will be stalemated.

## 69) V. and M. Platov

1st Pr., *Rigaer Tageblatt*, 1909

Black's a-pawn is on the verge of promotion, so the first move is forced.

1 ♖f6

Threatening 2 ♖f3, so Black has no option.

1... d4

Now it's a choice between 2 ♖f3 and 2 ♖e2. Which is correct?

2 ♖e2!

2 ♖f3? a1 ♖ 3 ♖xd4+ ♖xd4 4 ♖xd4 ♖xd4 5 ♖f4 ♖xd3 6 ♖g5 ♖e4 7 ♖h6 ♖f5 8 ♖xh7 ♖f6 only leads to a draw.

2... a1 ♖

2... ♖xe2 3 ♖xd4 ♖xd3 is a win for White because the bishop controls the h-pawn's queening square. After the text-move, however, White appears to have nothing better than 3 ♖xd4+, but we already know from the analysis of 2 ♖f3? that this leads to a draw. Something extra is necessary.

3 ♖c1!!

This spectacular move is the key to the study. Ignoring the possibility of winning Black's queen, White plays for the threat of 4 ♖g5#.

3... h6

There is no real defence since after 3... ♖d2 4 ♖b3+ or 3... ♖a5 4 ♖xd4+ followed by ♖b3+ Black loses his queen for at most one minor piece.

4 ♖e5

Not 4 ♖g7? ♖a6 and Black wins, but after the text-move Black must give up his queen to prevent ♖f4#, when White wins on material.

## 70) N. Kralin

1st Pr., 41st WCCC, St Petersburg 1998

White has an extra piece, but the win is far from simple because of Black's dangerous f-pawn. White's first task is to halt this pawn.

1 ♖d2+ ♖e6 2 ♖e2 ♖c2! 3 f7!

White's bishop is short of squares; for example, 3 ♖b2? ♖e3 4 ♖xf2 ♖d1+, 3 ♖c3? ♖e3 4 ♖xf2 ♖d1+ and 3 ♖e5? ♖e3 4 ♖xf2 ♖g4+ all cost White his bishop. Therefore White sacrifices his f-pawn in order to give the bishop more space.

3... ♖xf7 4 ♖h8

Incredibly, this is the only safe square for the bishop.

4... ♖g8

Now White appears to have reached the end of the road, since all the available squares on the long diagonal lose a piece.

5 ♖b2!

This method of giving up the bishop is the only way to win. White went to h8 first in order to draw Black's king to g8; as we shall see, the extra tempo proves vital. 5 ♖f6? ♖e3 6 ♖xf2 ♖g4+ is a draw.

5... ♖e3 6 ♖xf2 ♖d1+ 7 ♖e2 ♖xb2 8 ♖b6!

This is the point. Black's knight is trapped on b2 and can be rounded up by the white king.

8...♖f7

Black races to attack the g2-pawn...

9 ♖d2 ♖f6 10 ♖c2 ♖e5 11 ♖xb2 ♖f4 12 ♜d5+ ♖g3 13 ♜e3

...but is one tempo too slow to save the game.

### 71) G. Zakhodiakin

1st Pr., *Shakhmatny Listok*, 1930

The solution is only a few moves deep, but is far from simple. If this position arose in a game, one might well consider resigning since it is obvious that there is nothing to be done to prevent the promotion of Black's f-pawn. As it happens, this statement is true, but it tells only part of the story.

1 g7+!

White is aiming for a particular position and his moves make little sense unless one has seen the final destination. The first step is to deflect the knight to g7.

1...♜xg7

1...♖g8 2 ♜g4 ♜xg7 3 ♜xf2 ♖xf8 is a clear draw, so Black must accept.

2 ♜f7+

White wants to transfer his knight to h6, and this check must come right away because after 2 ♜c5? f1♚ Black's queen controls f7.

2...♖g8

If Black can take one of the minor pieces with impunity then he will undoubtedly win, so White's reply is forced.

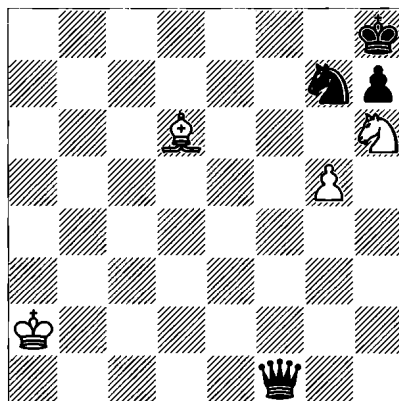
3 ♜c5! f1♚ 4 ♜h6+ ♖h8

White doesn't seem to have achieved very much. He is a queen for bishop down and although Black's king is currently stuck in the corner there is no perpetual check. It still looks like resignation is imminent, but now comes the hidden resource.

5 ♜d6!! (D)

Yes, that's it. White plays this innocuous-looking bishop move and declares the game a draw. Why? First of all, Black can't move his king. Secondly, if he moves his knight then White replies ♜e5+, forcing the knight back again. Even if Black's queen is covering e5, White can still play ♜e5+ because of the knight fork on f7. White only has to take care not to allow a situation in which Black can take the bishop on e5 with check, but it is easy to see that White's king has enough squares to avoid

B



this. Finally, we come to Black's queen, which has considerable freedom of movement (f7 must be covered to avoid an immediate perpetual). Black's problem is that the queen can achieve little by itself; the bishop and g5-pawn are indirectly protected by the fork on f7, so there is little to do other than check White's king round and round. Even if by some means Black managed to stalemate the white king (and I do not think this can be forced) White would simply play ♜e5 and Black would not have improved his position at all. Thus White's claim of a draw is fully justified.

### 72) P. Joitsa

1st Pr., *Revista Romana de Sah*, 1989

White starts an elaborate and lengthy plan to reach a paradoxical drawing position. However, the fact that his moves only make sense once you have seen the target position means that this is a very tricky study to solve. The first step is to force Black's pieces to block the a6- and b6-squares, and this requires the sacrifice of both white pawns.

1 a6!

It is wrong to check on e7 too early, since after 1 ♜e7+? ♖a4 2 a6 bxa6 3 b6 ♜xb6 4 ♜f4 h2 5 ♜e2 Black has 5...♜d5! 6 ♜g3 ♜xe7 with a winning knight ending. The same line refutes a premature ♜e7+ at any point over the next few moves.

1...bxa6

Black must capture, or else White promotes on b8.

2 b6!

2 bxa6? h2 3 a7 ♜b6 is hopeless for White.

**2...♟xb6**

The second pawn disappears. The alternatives are:

1) 2...♞d6? 3 ♙e7 and White wins.

2) 2...hxc2 3 b7 g1 ♖ 4 b8 ♖ ♗g6+ 5 ♜c3 ♗xf6+ 6 ♜xc4 with an easily drawn ♖ vs ♗+♙ position.

3) 2...♞a5 3 ♞f4 h2 4 ♞e2 h1 ♖ 5 ♙e7+ ♜a2 6 ♞c1+ and Black has to surrender his queen to avoid mate.

**3 ♞f4!**

White's knight must head for e2, because he must be ready to check on either c1 or c3, depending on where the black king moves after a later ♙e7+. 3 ♙e5? hxc2 4 ♙d4 ♞d5 is an easy win for Black, while 3 ♞e3? h2 4 ♞d1 h1 ♖ 5 ♙e7+ is bad because White does not have the option of a check at c1, and so Black wins by 5...♜a2 6 ♞c3+ ♜a1.

**3...h2 4 ♞e2**

4 ♙e7+? is still too soon: Black wins after 4...♜a4 5 ♞e2 ♞d5!.

**4...h1 ♖**

If Black is playing to win he must promote, or else White will stop the pawn by ♞g3; for example, 4...♞d5 5 ♙b2+ ♜b4 6 ♞g3 draws.

**5 ♙e7+**

White has achieved quite a lot while Black was promoting his h-pawn, but even so a draw does not seem especially likely.

**5...♜a4**

After 5...♜a2, 6 ♞c1+ wins the black queen.

**6 ♞c3+ ♜a5 7 ♜b3!**

A surprising situation has arisen. White is threatening mate on b4 and as if by chance the e4- and h4-squares are guarded, so Black cannot cover b4 with his queen. Since there are no checks, the only option is to move the knight. Incidentally, we now see why it was necessary to block the a6- and b6-squares at the start of the study.

**7...♞d7 8 ♙d8+**

White simply repeats.

**8...♞b6 9 ♙e7**

Black cannot make progress, so it is a draw.

too poorly coordinated to fight against the advance of the b4-pawn. In particular, Black's king is offside and the a2-bishop would have to emerge via b1, which is rather slow. Therefore Black must play to win the b3-pawn.

**1 ♜d5!**

Gaining time to defend the b3-pawn by ♜c4. 1 ♜e5? loses the vital pawn straight away due to 1...♞g5.

**1...♞d2!**

After 1...♞f6+ 2 ♜c4, for example, White would defend b3 and Black would have the awkward task of combating the b4-pawn. The continuation might be 2...♜f7 (2...♙b1 3 ♙d4! ♜f7 4 ♙xf6 ♜xf6 5 b5 ♜e7 6 b6 ♜d6 7 ♜b5 ♙d3+ 8 ♜a5 ♙f1 9 b4 ♙e2 10 b5 ♙f1 11 ♞c6 is winning for White) 3 ♙d4 ♞e8 4 ♞a6 ♙b1 (or 4...♞d6+ 5 ♜d5 ♞b5 6 ♞c5 ♙b1 7 ♙e5 ♞a7 8 ♜c4) 5 ♞c5 ♜e7 6 ♙e5 ♙g6 7 b5 ♞d6+ 8 ♙xd6+ (8 ♜b4 should also win) 8...♜xd6 9 ♜b4 ♙f7 10 ♞a6! ♙d5 11 ♜a4 followed by b4, ♜a5 and b6, and White wins.

**2 ♜d4!**

White cannot save his b3-pawn, so he must play to win one of Black's minor pieces. In fact, Black cannot avoid the loss of a piece, so White might appear to have an easy ride to victory. However, Black has a subtle defence which White must continually bear in mind during the subsequent play. The basic idea behind this defence is to give up the knight in order to transfer the bishop to b5, taking the b3-pawn *en route*. The result might be a positional draw, because White's knight is imprisoned and White cannot force an entry for his king using only his king and bishop.

**2...♞xb3+**

The immediate 2...♙xb3 3 ♜c3 ♙a4 4 ♜xd2 ♙b5 fails because Black's king is too far away and so White's king can reach c5. 2...♙b1 avoids an immediate disaster but again Black faces a hopeless struggle against the b-pawns: 3 ♞a6 ♜f7 4 ♙c7 ♜e7 (4...♞xb3+ 5 ♜c3) 5 ♙f4 ♞f3+ 6 ♜c5 ♙c2 7 b5 ♜d8 8 b4 ♙e4 9 ♜b6 ♜c8 10 ♞c5 ♙d5 11 ♞a6 ♙c4 12 ♞e4 ♜d7 13 ♞d6 ♙e2 14 ♜b7 and White wins.

**3 ♜c3**

3 ♜d3? ♙b1+ 4 ♜c3 ♞c1 5 ♜b2 ♞d3+ draws at once.

The text-move threatens 4 ♜b2, so Black must move his knight.

**73) A. Gurvich**

1st Pr., *Shakhmaty v SSSR*, 1952

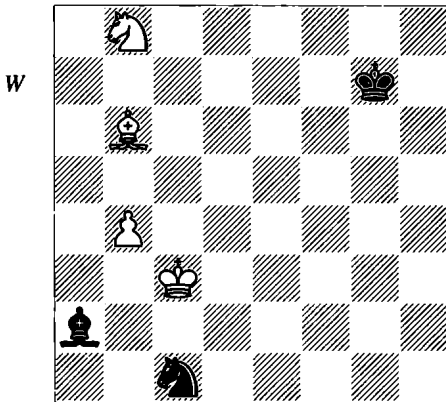
If White were to keep both b-pawns, then he would stand to win because Black's pieces are

3...♖c1! (D)

3...♖a1 also requires accurate handling:

1) 4 ♖b2? ♗c4 5 ♖xa1 ♗b5 is the positional draw Black is aiming for. White cannot make progress; e.g., 6 ♖b2 ♖f6 7 ♖c3 ♗e5 8 ♗c7+ ♖d5 9 ♖d2 ♗e4 and Black's king and bishop cooperate to prevent White's king from crossing the f1-a6 diagonal. Note that Black can never be forced into zugzwang because his king always has two squares which prevent White's king from penetrating (here e4 and f3, for example).

2) 4 ♖c6! ♗f7 5 ♖d4 followed by ♖b2 and White wins the knight in perfect safety.



The text-move is more awkward, as 4 ♖b2? fails to 4...♖d3+.

4 ♖d2! ♖b3+

After 4...♗c4 5 ♖xc1 ♗b5 6 ♖d2 ♖f6 7 ♖e3 ♗e5 Black is one tempo too late and White wins; e.g., 8 ♗c5 ♖d5 9 ♖f4 (intending ♖f5-f6-e7-d8-c7) 9...♗e6 10 ♖e4 and White's king will reach c5.

5 ♖c2

White edges closer and now threatens to play 6 ♖b2.

5...♖a1+!

Apparently very strong, since now 6 ♖b2? ♗c4! transposes into the draw given in line '1' of the note to Black's third move.

6 ♖c1!!

Threatening 7 ♗d4+. White wins because Black has no good square for his king.

6...♖f7

After 6...♗c4 7 ♗d4+ ♖g6 8 ♗xa1 ♗b5 9 ♖d2 ♖f5 10 ♖e3 White wins since his king reaches c5, while 6...♖g6 loses as in the main

line. Other king moves fail because White can then simply take the knight with his king; for example, 6...♖h6 (6...♖f8 is the same) 7 ♖b2 ♗c4 8 ♖xa1 ♗b5 9 ♖b2 ♖g5 10 ♖c3.

7 ♖b2!

Now this move wins, because Black's king is badly placed on f7 (or g6).

7...♗c4

The only chance is to head for the familiar positional draw.

8 ♖c6!

This is the key point. Thanks to the position of Black's king, White threatens ♖e5+ and thus Black has no time to extract his knight.

8...♗d5 9 ♖d4

White wins the knight and the game.

## 74) G. Kasparian

1st Pr., 'Friendship' International Match, 1962

White is already a pawn up and although his knight is hanging, he can immediately gain a second pawn.

1 ♖f6+

1 ♖g6? ♖e8 offers White no winning prospects since Black's pawn is too strong.

1...♖f7 2 ♖xg4

Once again, there is no real choice, since after 2 ♗xg7? g3 the pawn promotes, while 2 ♖e4? ♗e3+ costs White his bishop.

After the text-move, White has a decisive material advantage so it is up to Black to play actively with the aim of exploiting White's slightly clumsy arrangement of pieces.

2...♖e6+

The only chance, because Black must prevent ♗xg7, which would liquidate into a technically won ending.

3 ♖f5!

It looks right to centralize the king, and indeed 3 ♖h5? leads to a draw after 3...♗e1:

1) 4 ♖e5+ ♖f6 5 ♖d7+ ♖e7 6 ♖b6 ♖c5 7 b4 ♖e4 8 c4 (8 ♖d5+ ♖e6 9 c4 ♖d6 10 ♖f4+ ♖d7 11 c5 ♗xb4 draws) 8...♖d6 9 b5 (or 9 c5 ♖b5 10 ♖d5+ ♖d7 11 ♖g4 and White cannot usefully improve his position; e.g., 11...♖c6 12 ♖e7+ ♖d7 with a repetition) 9...♗a5 10 ♖d5+ ♖d7 11 ♖e3 ♗d2 and Black wins a pawn.

2) 4 c4 ♖c5 5 ♖e5+ ♖e6 6 ♖f3 ♗c3 7 ♗d2 ♗xd2 8 ♖xd2 ♖e5 (Black's active king enables him to draw) 9 b4 ♖d3 10 b5 ♖d4 11 b6

(11 ♖b3+ ♜xc4 12 b6 ♜e5 13 b7 ♜d7 is also drawn) 11...♖b4 12 b7 ♖a6 and Black's king marches back to win the b7-pawn.

**3...♙e1**

Black hopes to force c4 and then win a pawn by ...♜d4+.

**4 ♜e5+**

The only way to avoid immediate loss of a pawn.

**4...♙e7 5 ♜c6+ ♜d6!**

After 5...♜d7 6 c4 White can keep his extra material. For example:

1) 6...♙c3 7 ♜b8+ ♜d6 (7...♙e7 8 b4 ♜d6 9 ♖a6 also wins for White) 8 ♙e3 ♙d4 9 ♙c1 ♙a7 10 ♙a3+ ♙c5 11 b4 ♙a7 12 b5+ ♙c5 13 ♙xc5+ ♜xc5 14 ♖a6 followed by ♙e4 and White wins.

2) 6...♜d6 7 ♙e3 ♙c3 8 ♜b8 transposes to line '1'.

3) 6...♜c5 7 ♜e5+ ♜c8 8 ♜f3 ♙a5 9 ♜d4 ♙c3 10 ♜e2 ♙b4 11 ♙f8 liquidates to an easily won endgame.

**6 c4**

White takes the chance to remove his pawn from attack. 6 ♜d4? ♜xd4+ 7 cxd4 ♜d5 and 6 ♖a7? ♙xc3 7 ♜b5+ ♜c6 8 ♜xc3 ♜d4+ followed by ...♜xb3 are clear draws.

**6...♙c3!**

The best defence as, by shutting out ♜d4, Black threatens 7...♜c5. Instead, 6...♙f2 7 b4 ♙e1 8 b5 and 6...♜c5 7 ♜d4 are easy wins for White.

**7 ♜a7!**

The study is nearing its climax. This move not only prepares to meet ...♜c5 with ♙f8+, but it also threatens to win a piece by 8 ♜b5+. But what about the fork on d4?

**7...♜d4+**

The only chance, since otherwise White consolidates by ♙e3.

**8 ♜e4 ♜xb3**

The b3-pawn is gone, but White still has the fork on b5.

**9 ♜b5+ ♜c5**

The bishop is lost, so Black must prepare to eliminate White's last pawn.

**10 ♙f8+!**

The final point. If the king retreats, then White can safely take the bishop.

**10...♜xc4 11 ♖a3#**

A beautiful finish.

## 75) V. Bron

1st Pr., *Shakhmaty v SSSR*, 1950

White is just one pawn up, and bearing in mind that all the pawns are on the same side and his h-pawn is under attack, it is clear that White has to act quickly to maintain winning chances.

**1 h5!**

This breakthrough is the only chance, even though it costs White his g5-pawn.

**1...♜xg5+**

1...♙g7 loses to 2 h6+ ♜h7 3 ♜f6 ♜h4 4 ♜e2 ♙c6 5 ♜f4 ♙e8 6 ♙c2, when Black is in zugzwang; e.g., 6...♜f5 7 ♜xg6 and wins.

**2 ♜f6 ♜e4+!**

Black is trying to eliminate White's last pawn. Both 2...♜f3 3 hxg6+ ♜h6 4 g7 and 2...♜h6 3 hxg6 ♙c6 4 g7 ♜h7+ 5 ♙xh7 ♜xh7 6 ♜f7 ♙e8+ 7 ♜f8 result in the promotion of White's pawn.

**3 ♜xe4 gxh5**

Black has succeeded in his ambition, but now White develops a dangerous attack against Black's king.

**4 ♜g5+ ♜h8!**

The most resilient defence. After 4...♜g8 (4...♜h6 5 ♜f7#) 5 ♙a2+ ♜h8 (5...♜f8 6 ♙f7 mates at once) 6 ♜f7 Black has no defence to the threat of 7 ♜f8 followed by 8 ♜f7+ and 9 ♙b1+.

**5 ♙a2!**

5 ♜f7? ♙d5+ 6 ♜f8 h4 is a draw, as it ignores the critical factor – control of the a2-g8 diagonal. The b1-h7 diagonal is also important, but it takes Black three moves to bring his bishop to this diagonal, so White can afford to leave it. The text-move threatens ♜f7-f8 followed by ♜f7+, as in the analysis of 4...♜g8. Black can only counter this by transferring his bishop to the b1-h7 diagonal.

**5...♙b7 6 ♜f7 ♙a6**

6...♙c8 7 ♜f8 ♙f5 leads to the same conclusion.

**7 ♜f8 ♙d3 8 ♙g8!**

White must not delay; if Black is given a spare tempo to play ...h4, then the position is a draw (indeed, the position is drawn if Black's h-pawn is removed).

**8...♙g6**

The only way to meet the threat of 9 ♜f7#.

**9 ♙h7!**

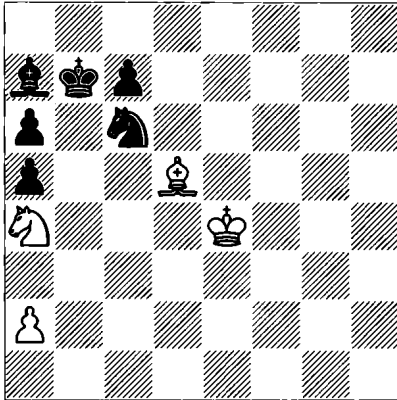
This is the decisive idea; Black's pawn takes away a crucial square from the bishop.

9...♙xh7 10 ♜f7#

## 76) G. Kasparian

2nd Pr., *Shakhmaty v SSSR*, 1948

In order to understand this very complex study we will examine a preliminary position which is critical for the solution.



This is the key position. At first sight White wins trivially whoever is to move because Black is paralysed by the pin and White can win the knight by playing ♜f5-e6-d7. However, Black has a defence based on ...♙b8 and ...♞a7. If White then plays ♙xc6 it is stalemate, while otherwise the knight is unpinned and is free to move away. In fact, the diagram position is reciprocal zugzwang. Assume first that **Black is to move**. Then White wins because Black's bishop must make up its mind whether it is going to b8:

1...♙b8

After 1...♙g1 Black is too slow to re-establish his stalemate defence and White wins by 2 ♜f5 ♙a7 3 ♞e6 ♙b8 4 ♜d7 ♞a7 5 ♞xc6.

2 ♜c5+ ♞a7

After 2...♞b6 3 ♜d7+ ♞b5 4 a4+ White wins both minor pieces.

3 ♙xc6 ♞b6 4 ♜d5

and White emerges with a clear extra piece.

On the other hand if **White is to move** then the position is a draw:

1 ♜f5

Or:

1) 1 ♜d3 ♙g1 is a draw because Black just waits until White's king goes to e2 or e4 before returning to a7 to threaten the stalemate defence with ...♙b8. If White then plays his king to the f-file, Black continues with ...♙b8, while if the king backtracks to the d-file, Black plays ...♙g1.

2) 1 a3 exposes the a-pawn and allows Black to draw by 1...♙g1 2 ♜f5 ♙e3 3 ♞e6 ♙c1 since even though he loses his knight, White's last pawn is eliminated.

The text-move only draws because now the king is too far away from d5.

1...♙b8 2 ♜c5+

Or else ...♞a7.

2...♞a7! 3 ♙xc6 ♞b6 4 ♜d7+ ♞xc6 5 ♜xb8+ ♞b5

and Black wins the a-pawn.

Having established this key reciprocal zugzwang, we can tackle Kasparian's study.

1 c6!

White is a pawn down in a position with opposite-coloured bishops, so to have a chance of winning he must attack immediately.

1...♜e5!

The best defence, attacking the c6-pawn. The alternatives are:

1) 1...♜f6 2 ♙h3+ ♞b8 3 ♜c5 ♜e8 (or else 4 ♜xa6+, followed by ♙c8 and ♙b7#) 4 ♜xa6+ ♞a8 5 ♙d7 ♜d6 6 ♜xc7+ ♞b8 7 ♜a6+ ♞a8 8 ♙g4 followed by ♙f3 and wins.

2) 1...♜b6 2 ♙h3+ ♞b8 3 ♜c5 ♙g3 (if Black does not defend c7, White wins as in line '1') 4 ♜xa6+ ♞a8 5 a4 followed by a5 winning a piece as the knight must stay on b6 to prevent ♙c8-b7#.

2 ♙h3+

In order to continue the attack, White is prepared to give up his c6-pawn.

2...♞b8 3 ♜c5! ♜xc6

The only chance. White wins a piece after 3...♞a8 4 ♙c8, while 3...♙d8 4 ♜xa6+ ♞a8 5 ♙e6! puts Black in zugzwang; for example, 5...♜xc6 6 ♙d5 ♞b7 7 ♜b4 or 5...♙f6 6 ♜xc7+ ♞b8 7 ♜a6+ ♞a8 8 ♙d5.

4 ♜d7+ ♞b7

After 4...♞c8 5 ♜e5+ ♞b7 6 ♙g2 or 4...♞a8 5 ♙g2 ♞b7 6 ♜e5 Black loses at once.

5 ♙g2

Threatening 6 ♜e5.

**5...♠g3**

Up to this point the play has been more or less forced, but now White has to decide how to increase the pressure. The obvious plan is to attack the pinned knight with his king. Such an attack can only come from b5 or d7, but Black can cover b5 with his pawns, so the target square for White's king must be d7. Currently this square is blocked by the knight, so first White has to transfer the knight to a4 via c5. At the moment this is impossible because 6 ♖c5+? ♜b6 7 ♖a4+ ♜b5 leads nowhere, but White's next move covers b5 and so ensures that the knight transfer can take place.

**6 ♜c4**

At first sight there is little Black can do to prevent White's plan of ♖c5-a4, ♠d5 and then king to d7 winning the knight. However, Black has a defensive plan based on stalemate. This plan involves ...a5, ...a6, ...♠f2-a7-b8 and finally ...♜a7. By this time White's knight will be on a4, so if at the end of all this White plays ♠xc6 then Black will be stalemated. It takes Black several moves to set up this plan and he has to start straight away or he will have no chance.

**6...a5!**

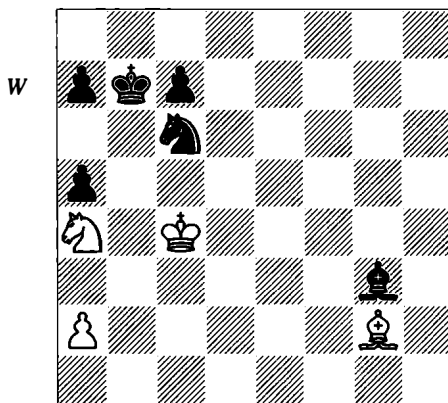
6...♠h2 is too slow: 7 ♖c5+ ♜b6 8 ♖a4+ ♜b7 9 ♠d5 a5 10 ♜d3 a6 11 ♜e4 ♠g1 12 ♜f5 ♠a7 13 ♜e6 ♠b8 14 ♜d7 ♜a7 and White is just in time to take the knight with his king, thus avoiding the stalemate.

**7 ♖c5+**

White should not delay this knight transfer. It is only possible when b5 is covered by the white king, so 7 ♜d3? is clearly a mistake. The only other constructive move is 7 ♠d5?, but then 7...a6 8 ♖c5+ ♜b6 9 ♖a4+ ♜b7 10 ♜d3 ♠f2 is a draw, because after 11 ♜e4 ♠a7 we reach the key reciprocal zugzwang with White to play.

**7...♜b6 8 ♖a4+ ♜b7 (D)**

Now that the knight is on a4, there is no possibility of ♖e5, so Black's bishop is free to move and he can proceed with his stalemate plan. White's next move is critical. His plan involves ♠d5 and playing the king to d7, but should he start with 9 ♜d3 or 9 ♠d5? At first sight it makes little difference, but in fact only one move wins. If one proceeds by counting, then it becomes clear that White lacks one tempo to reach a winning position: he plays



♠d5, ♜d3 and ♜e4 and in the meantime Black plays ...a6, ...♠f2 and ...♠a7. The result is that the reciprocal zugzwang arrives with White to play. Therefore White must find a way to gain a tempo. The key is to play the king to f3 rather than e4. If White can play ♜f3 without Black being able to reply ...♠b8, then White wins. The reason is that if Black meets ♜f3 with ...♠a7, then ♜e4 puts Black in immediate zugzwang. If Black meets ♜f3 with some other bishop move (except ...♠b8), then White plays ♜f4. Black still can't play ...♠a7 because of ♜e4, so White gets another free move, which he uses to play ♜f5. Now White's king is close enough to d7 that he can simply win the knight. By keeping his king in contact with e4 without actually occupying it, White effectively nullifies Black's defence. Thus, time is the critical factor, but White is apparently a tempo short. It takes White four moves to play ♠d5 and ♜d3-e2-f3, exactly the four tempi Black needs to bury his bishop on b8. That is why move-order is important; White must use the move ♜e2 to cover f2, and thus force Black to spend an extra tempo transferring his bishop to the g1-a7 diagonal.

**9 ♜d3!**

After 9 ♠d5? a6 10 ♜d3 ♠f2 11 ♜e2 (11 ♜e4 ♠a7 is the reciprocal zugzwang with White to play) 11...♠a7 Black is in time to meet ♜f3 with ...♠b8.

**9...♠f2**

After 9...a6, 10 ♜e2 delays the transfer of the bishop and gains the needed tempo. 10 ♜e3 is also good, and actually wins one move more quickly since 10...♠h2 11 ♠d5 ♠g1+ can be met by the immediate 12 ♜f4.

10 ♖e2!

10 ♗d5? would undo all the good work and allow a draw by the familiar 10...a6 11 ♖e4 ♗a7!.

10...♗g1

Black has to lose a tempo because a7 is not yet free.

11 ♗d5!

Now is the time for this move.

11...a6 12 ♖f3

Just in time to get in touch with the e4-square and thus prevent ...♗a7.

12...♗d4 13 ♖f4!

13 ♖e4? ♗a7 draws.

13...♗a7

Black has to try this, since otherwise he just loses the knight; e.g., 13...♗g1 14 ♖f5 ♗a7 15 ♖e6 ♗b8 16 ♖d7 ♖a7 17 ♖xc6.

14 ♖e4!

White finally reaches the key reciprocal zugzwang with Black to move. Not 14 ♖f5? ♗b8! with a draw.

14...♗b8

Or 14...♗g1 15 ♖f5.

15 ♖c5+ ♖b6

Or 15...♖a7 16 ♗xc6 ♖b6 17 ♖d5 and White wins.

16 ♖d7+ ♖b5 17 a4+ ♖xa4 18 ♗xc6+

White finally wins.

## 77) G. Kasparian

1st Pr., USSR Chess Section Tny, 1957

White is the exchange and a pawn down, so he must make the most of his initiative.

1 ♗e6+ ♖b7 2 ♖d8+ ♖a8

2...♖a7 3 ♖c6+ costs Black a rook.

3 ♗d5+ c6 4 ♖xc6

The only chance, as 4 ♗xc6+? ♖a7 5 b6+ ♗xb6 is a clear draw while 4 bxc6?? ♗d4+ even wins for Black.

The text-move threatens both the rook and mate by 5 ♖e7+ ♖a7 6 ♖c8#; Black's only defence is to remove the b5-pawn.

4...♗b1+!

This turns out to be more awkward than the immediate capture on b5, for reasons which become clear later.

5 ♖c2

White must attack the rook, since otherwise Black has time to move his bishop and free his

king. After 5 ♖e2? ♗c7, for example, the position is a draw; e.g., 6 b6 ♗xb6 or 6 ♗xe4 ♗xb5 7 ♖d4+ ♗b7.

5...♗xb5 6 ♖d4+

6 ♖d8+? actually throws the win away, since after 6...♖a7 7 ♖c6+ Black need not repeat moves but can force a draw by 7...♖b7 8 ♖d4+ ♖a6 9 ♗c4 ♖a5 10 ♗xb5 (10 ♖xb5 ♖b4) 10...♗e5 11 c6 ♖b6 12 ♖c3 ♖c5.

6...♗b7 7 c6 ♗c7

White's next move is forced because Black is threatening to free himself by ...♖a7.

8 ♖b5

A peculiar position has arisen in which Black's king, rook and bishop are paralysed, so he is reduced to moving his kingside pawns. White cannot move his knight, as this would release Black's king, but he is free to move his king and bishop so long as he does not allow a rook check which would permit Black to free himself. White's task is to stop Black's mobile pawns while satisfying this condition. Now we can see why Black's rook check at move four was a good idea. If White's king were on d1 here then he would be nearer the black pawns and thus would have an easier job stopping them.

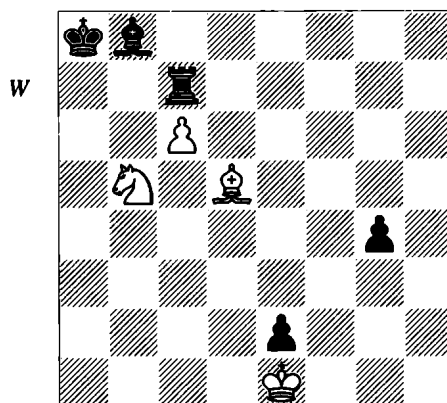
8...e3

After 8...g4, 9 ♗xe4 g3 10 ♗g2 finishes Black straight away, so this is forced.

9 ♖d1!

The only move; White must not allow a rook check on e7, because then Black could free himself by ...♗c7 and ...♖b8. Therefore White can only stop the e-pawn by playing his king to e1.

9...e2+ 10 ♖e1! g4 (D)



The key moment. It seems that White should have no trouble blocking the g-pawn by playing his bishop to g2, but in fact there is only one move to win.

**11 ♖e4!!**

Not 11 ♖g2? g3 (White is in zugzwang; whichever bishop move he plays, Black is able to sacrifice his g-pawn) 12 ♖d5 g2 13 ♖xg2 ♖a7!! (this move is the point of Black's defence) 14 c7+ ♖b7 and now:

1) 15 c8♖ is a draw because the ending of two same-coloured bishops + knight vs bishop is a draw if the lone bishop moves on opposite-coloured squares to the pair of bishops (if all three bishops move on same-coloured squares, then it is a win – see *Secrets of Pawnless Endings* {2nd edition}, pp. 325-6 for more details).

2) 15 c8♘ (of course, promoting to a queen or rook results in stalemate) 15...♖g3+! 16 ♗xe2 ♗b8 and Black escapes. Note that this defence depends on Black having a check on g3, which explains why White must ensure that the g-pawn is blocked on g3 and is not allowed to sacrifice itself on g2.

11 ♖h1? fails for simpler reasons: Black can reply 11...♖h7, threatening to take the bishop with check, followed by ...♖c7.

**11...g3 12 ♖g2!**

Successfully blocking the pawn. Now Black has to try his stalemate defence, but here it fails (note that he had to push the pawn to g3 for the stalemate defence to work, so he could not have tried it with the g-pawn further back).

**12...♖a7! 13 c7+ ♖b7 14 c8♘!**

The other three promotions lead to a draw as before.

**14...♖e5**

There is no check, so Black cannot relieve the pin.

**15 ♖cd6!**

White wins the rook and the game.

## 78) A. Nikolaev

4th Place, USSR vs Rest of the World Team Match, 1989

White's d-pawn is on the verge of promotion, but his knight is *en prise* with check.

**1 ♖d4+!**

This is the right way to rescue the knight. 1 ♖c3+? is wrong because after 1...♗a6 2 d8♗

♗c6+ Black picks up the undefended white knight.

**1...♗a6**

The only move to offer Black a chance. After 1...♗c5 2 ♖e6+ ♗c6 3 d8♗ ♗g8+ 4 ♖f8 ♗xb3 (otherwise White wins on material) 5 ♗c8+ ♗d6 (5...♗b5 6 ♖d7+ ♗b6 7 ♗b8+ ♗a6 8 ♖c8+ ♗a5 9 ♗a7+ ♗b5 10 ♖d7+ ♗c4 11 ♖e6+ ♖d5 12 ♖xd5+ ♗xd5 13 ♗f7+ wins Black's queen) 6 ♗b8+ ♗c6 7 ♖e4+ ♗c5 8 ♖d7+ White has a decisive attack.

**2 d8♗**

White is a piece and pawn up and all his pieces are protected, but Black has some awkward counterplay.

**2...♗g8+ 3 ♗e7!**

Not 3 ♗d7? ♗d5+ 4 ♗e7 (4 ♗c7 ♗b7+ repeats) 4...♗xd4! 5 ♖c8+ ♗b5 with an easy draw for Black.

**3...♖d5+**

Black seizes the opportunity to bring his knight into the attack with gain of time. Queen checks cause White little difficulty; for example, 3...♗g5+ (3...♗g7+ 4 ♗e6 is the same) 4 ♗d7 ♗g7+ 5 ♗e6 ♗h6+ 6 ♗f7 ♗h5+ 7 ♗g7 and White wins.

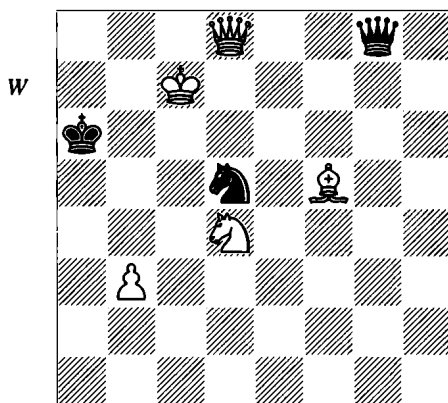
**4 ♗d7 ♖b6+**

After 4...♗g7+ 5 ♗d6 ♗xd4 6 ♗a8+ ♗b6 7 ♗c6+ ♗a7 8 ♗xd5 ♗f6+ 9 ♗c5 White wins on material.

**5 ♗c7**

The only way to make progress, but now it looks like a draw since Black can continue checking on b6 and d5.

**5...♖d5+ (D)**



**6 ♗xd5!!**

This amazing queen sacrifice is the key to White's play. 6 ♖c8 ♖b6+ 7 ♖c7 ♖d5+ repeats.

6... ♖xd5 7 ♖c8+

7 ♖d3+? ♖a7 8 ♖c6+ ♖a8 only draws.

7... ♖a5

Forced, as 7... ♖a7 loses to 8 ♖c6+ ♖a8 9 ♖b7#.

8 ♖c6+ ♖b5 9 ♖a6+!

Amazingly, White offers his bishop as well.

9... ♖c5

9... ♖xa6 10 ♖b4+ picks up the queen.

10 ♖b4#

A beautiful mid-board mate rounds off a magnificent study.

### 79) P. Perkonoja

1st Pr., Dunder Jubilee Tny, 1964

With equal material and opposite-coloured bishops, a purely static assessment would suggest a likely draw. However, White has a tactical manoeuvre that wins a piece.

1 ♖b6! cxb6

After 1... ♖f5+ 2 ♖d3 cxb6 3 e4+ ♖e6 4 exf5+ ♖xf5 5 ♖d6+ ♖e6 6 ♖xe8 ♖f7 7 ♖c5! (a useful desperado; White either wins the b6-pawn or shatters Black's pawn-structure) 7... bxc5 (7... ♖xe8 8 ♖xb6 is also hopeless for Black) 8 ♖d6+ ♖e6 9 ♖c4 a3 10 ♖c3 White takes the a-pawn with his king, coming back to support the e-pawn.

2 ♖xb6+ ♖e6!

Black's only hope is to block the e5-pawn to keep the long diagonal closed, and then push his a-pawn.

3 ♖xg7 a3

Despite White's extra piece, the win is still far away as the a-pawn poses a serious danger.

4 ♖a8!

White must aim for a check to displace the black king and allow White to open the long diagonal. 4 ♖a4? is the wrong choice, however, since 4... a2 5 ♖c5+ ♖f7 is a clear draw.

4... ♖f7!

The best defence, playing for a perpetual attack against the white bishop. 4... a2 loses to 5 ♖c7+ ♖f7 6 ♖xe8 ♖e6 (Black must block the e-pawn) 7 ♖c7+ ♖f7 8 ♖h8! ♖g8 9 e6 ♖xh8 10 e7 a1 ♖ 11 e8 ♖+, when White wins with his extra material.

5 ♖h8!

The only move. The bishop must stay on the long diagonal and 5 ♖f6? doesn't threaten to move the e-pawn.

5... ♖g8

If White is allowed to play e6 with impunity then his extra piece will win the game in the long run.

6 ♖f6 ♖f7 7 ♖c7

If White doesn't want to repeat moves, then he has to bring his knight into the game.

7... a2

After 7... ♖d7 8 e6+ ♖xf6 9 exd7 ♖e7 10 ♖e6 ♖xd7 11 ♖c5+ ♖d6 12 ♖b3 ♖d5 13 ♖d3 White wins on material.

8 ♖xe8

White again threatens e6+, so the reply is forced.

8... ♖e6 9 ♖g7+

It is essential to control f5. After 9 ♖c7+? ♖f5 the pawn promotes.

9... ♖f7

Black, for his part, must continue to keep the bishop under observation.

10 ♖h5

Defending the bishop and thus threatening e6+.

10... ♖e6 11 ♖f4+

The knight gradually manoeuvres round to the correct spot for the winning idea.

11... ♖f5

11... ♖f7 12 ♖h8 ♖g8 13 e6 ♖xh8 14 e7 is again a win on material for White.

12 ♖f3!

This is the point: with e6 and g6 both controlled by the knight, White can weave a mating-net.

12... a1 ♖ 13 e4#

An attractive final position.

### 80) Y. Afek

1st Pr., Israel Ring Tny, 1982

White is the exchange down, and in addition Black has a monster passed a-pawn. White does have an advanced f-pawn, but it does not seem likely that this will be enough to offset Black's advantages.

1 ♖e7!

There isn't another plausible move in view of Black's numerous threats of 1... ♖xc8, 1... ♖xg8

and 1...gxh4. Now, however, White threatens not only 2 ♖xa2, but also to set up a mating-net around the black king by 2 h5.

1...♗xg8

The most obvious and best move. 1...gxh4? is just wrong since after 2 fxg7 Black only risks losing. 1...♞c8 is possible, but after 2 h5! ♞xg8+ 3 ♖xg8+ ♗xg8 4 f7! White forces stalemate.

2 h5!!

It is more important to close the net around Black's king than to take the bishop. The alternatives are:

1) 2 fxg7? ♞c8! 3 ♖xg8+ (3 ♖xc8 a2 4 ♖e7 ♗e6! is also hopeless for White) 3...♗g6 4 h5+ ♗f7 5 ♗h7 a2 wins for Black (but not 5...♞xg8? 6 h6, when Black cannot avoid stalemating White).

2) 2 ♖xg8+? ♗g6 3 h5+ ♗f7 4 fxg7 ♞c8 transposes to line '1'.

2...♗e6

The only way to prevent the threatened mates on g8 and f5. Now, however, it might seem that White's fun is over, because 3 fxg7? ♞c8+ 4 ♖xc8 a2 and 3 f7? ♞c8+ 4 ♖xc8 ♗xf7 are easy wins for Black. However, White has the opportunity to play for stalemate.

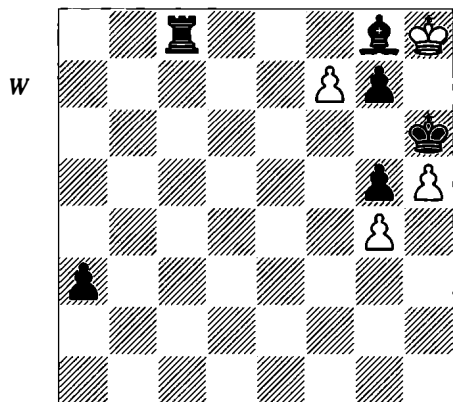
3 ♖g8+!

White offers his second minor piece on the same square. Black must accept.

3...♗xg8 4 f7!

Of course, Black can't take this pawn and White threatens to promote on f8 or g8, but what's wrong with the obvious reply...

4...♞c8! (D)



...aiming to give up the rook on g8 and win with the a-pawn? 5 f8♗? looks as if it might be

the answer, until one notices 5...♗e6! with an easy win. So how does White save himself?

5 f8♗!

This is the key move. White again threatens mate on g7, and this time moving the bishop from g8 results in immediate stalemate.

5...♞c7

The only other way to stop mate.

6 ♗xg7+ ♞xg7

Again with stalemate.

## 81) J. Rusinek

1st Pr., *Biuletyn Śląskiego Okręgowego Szachowego*, 1980

Although White is a rook down, this is more than compensated for by the passed c-pawn which is on the verge of promotion. However, the exposure of White's king is the most important factor of all – indeed, Black is threatening mate in one and White must deal with this before undertaking any other action.

1 ♖d2!

The only move, since 1 c8♗? ♗b3+ and 1 h5+? ♗xh5 2 c8♗ (2 ♖d2 ♞g1+ wins for Black after 3 ♗xh7 ♖f6# or 3 ♗f8 ♖d6 with an extra rook) 2...♗b3+ 3 ♗xh7 ♖g5+ 4 ♗g7 ♞f7+ 5 ♗g8 ♞c7+ are hopeless for White.

1...♞c1!

Setting up a concealed battery against the c8-square. Other moves:

1) 1...♖xd2 allows White to promote in safety by 2 h5+ ♗xh5 3 c8♗.

2) 1...♗b3+?! 2 ♖xb3 ♖d6 stops the pawn, but at too high a cost. White is no longer down on material and he still has his dangerous passed pawn. Only White has winning chances after 3 ♗e5 ♖c8 4 ♗f4, for example, intending to support the c-pawn with his king.

2 h5+!

2 c8♗? is still wrong due to 2...♗b3+ 3 ♖c4 ♗xc4+ 4 ♗f8 ♞f1+ 5 ♗e7 (5 ♗e8 ♖d6+) 5...♞f7+ 6 ♗d8 ♞f8+ and Black emerges with an extra piece. 2 ♖c4? ♖f6+ 3 ♗f8 ♗f5 4 ♖e5+ ♗h5 5 ♗xf6 ♞xc7 leaves Black with only a slight material advantage, but the poor position of White's king means that this should be a win for Black. It is worth bearing in mind that the ending of ♞+♗ vs ♗+♖ (without pawns) with opposite-coloured bishops is generally won (see *Secrets of Pawnless Endings*, 2nd edition).

2...♖xh5

2...♖h6?! 3 ♖g7+ ♖xh5 4 c8♞ ♖b3+ 5 ♖c4 favours White.

3 c8♞

Now that White's king has a little more air he can promote his pawn, although the struggle is still close.

3...♖b3+ 4 ♖c4!

This interference move is forced. 4 ♖xb3? is wrong and loses after 4...♞xc8+ 5 ♖xh7 ♞c7+ 6 ♖g8 ♖g6.

4...♖xc4+ 5 ♖xh7

The only move, as 5 ♖g7? ♞g1+ 6 ♖xh7 ♖g5+ 7 ♖g7 ♖h7+!! 8 ♖xh7 ♖d3+ leads to mate, while 5 ♖f8? ♞f1+ 6 ♖e7 ♞f7+ 7 ♖d8 ♞f8+ costs White his queen. The text-move may appear to be the end of the matter, but Black has a surprising tactical resource.

5...♖g8+!

A very nice move. Now 6 ♖xg8? ♞xc8+ wins for Black, while 6 ♞xg8? loses to 6...♞c7+ 7 ♖g7 (7 ♞g7 ♖f6#) 7...♖f6+ 8 ♖h8 ♖xg8 9 ♖xg8 ♖g6 10 ♖f8 ♞c8 11 e4 ♖e8 12 e5 ♞xe5 followed by ...♖e8. Fortunately for White, he has an equally surprising reply.

6 ♖g7! ♞xc8

An unexpected stalemate has appeared on the board.

## 82) V. Shupletsov

1st Pr., *Molodoi Lenins*, 1988

Black has an extra rook, but White has a dangerous collection of passed pawns.

1 ♖c7+

The first step is to remove the bishop from attack with gain of tempo. 1 ♖e7? also looks dangerous, but Black can defend by 1...♖c5+ 2 ♖xa4 ♖a7 3 d7 (or 3 ♖xb3 ♖xd6 4 ♖xd6 ♞xe6) 3...♞b8 4 d8♞ ♞xd8 5 ♖xd8 ♖d4 6 e7 ♖xe7 7 ♖xe7 ♖xa6, eliminating White's last pawn.

1...♖a7

The best square, since 1...♖a8 2 d7 ♞g8 3 e7 ♖c5+ 4 ♖xa4 ♖xe7 5 ♖xe7 is an easy win for White.

2 d7

The pawns start to march.

2...♞a8!

On most squares the rook is subject to attack, and a process of elimination leaves a8 as the

only reasonably safe spot. 2...♞g8 loses as in the analysis of 1...♖a8.

3 e7

3 d8♞? ♞xd8 4 ♖xd8 ♖c5+ 5 ♖xa4 ♖d4 draws, so it is best for White to push the other pawn.

3...♖c5+

Black must start to eliminate the pawns.

4 ♖xa4

4 ♖a2? ♖xe7 5 ♖xe7 ♞f8! is a draw, since White cannot do more than win the rook for the d-pawn, leaving the a6-pawn to be captured. However, the a4-square seems to be an unfortunate spot for the white king, as Black has a knight fork on c5.

4...♖xe7 5 ♖xe7

White threatens both 6 ♖xb3 and 6 ♖c8+, so Black must check.

5...♖c5+ 6 ♖a5!

6 ♖b5? ♖xa6! 7 ♖c8+ ♖b7 8 d8♞ ♖xc7+ followed by ...♞xc8 is a draw. The text-move threatens 7 ♖c6#, so Black has no time to take the d7-pawn. Is this the end for Black?

6...♖xa6!

No, since Black has this cunning defence. If now 7 ♖c8+? then 7...♖b7 8 d8♞ ♖xc7+ 9 ♖b4 ♞xc8 with a draw. Suddenly it seems that White is the one without a good move.

7 ♖b8+!

A real shock, offering the bishop on the only square covered by all three black pieces.

7...♖xb8

Forced, as 7...♞xb8 (note that if White had played 6 ♖b5?, this move would be check) loses to 8 ♖c8+! (8 ♖c6+? ♖b7 9 ♖xb8 ♖xb8 draws) 8...♖b7 9 d8♞ ♞xc8 10 ♞b6+.

8 d8♖!

A beautiful finish. 8 d8♞? fails as 8...♖c6+ 9 ♖xc6+ ♖b7+ is check and therefore wins the white queen.

8...♖d7 9 ♖ec6#

## 83) M. Liburkin

*Shakhmaty v SSSR*, 1939

I first saw this study when I was about 10 years old. I was captivated by the solution and even now, 36 years later, it still seems magical. White is well down on material, but Black's king and queen are awkwardly placed. Since White's knight is under attack, quick action is necessary.

1 ♖d2+

The only reasonable first move. Black has to jettison a pawn, but in compensation his pieces gain a bit more air.

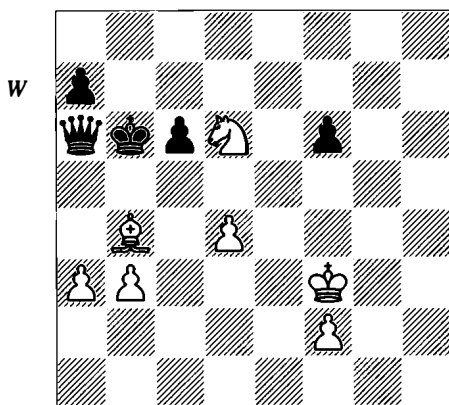
1...b4 2 ♖xb4+

2 axb4+? ♖b5 3 ♘d6+ ♖b6 4 ♘c4+ ♖c7 5 ♘f4+ ♘d7 leads to nothing.

2...♖b5 3 ♘d6+

White's knight escapes from the queen's attack with gain of tempo.

3...♖b6 (D)



The critical moment. Black's queen now has an open diagonal from a6 to f1, and after 4 ♘c4+? or 4 ♖c5+? Black's king just slips away via c7. A leap of the imagination is necessary to see how to make progress.

4 ♖a5+!!

This surprising bishop sacrifice is the key.

4...♖xa5

4...♗xa5 5 ♘c4+ leads to a king and pawn ending that is easily won for White.

5 ♘c4+ ♖b5

Suddenly White's idea becomes clear. The black king has no legal moves and any queen move results in the queen's immediate loss. If it were not for Black's pawn moves he could be put in immediate zugzwang. However, White has to take into account Black's plan to free his queen by playing ...c5 and ...f5, opening up the third rank.

6 ♖f4!

The only move. White's king must be ready to cover the squares f6, g6 and h6 and thus stop Black's queen escaping. 6 ♖g4? is wrong because Black has a check on c8.

6...c5

6...f5 7 ♖g5! f4 8 f3 leads to the same conclusion.

7 d5

Keeping control of c6 and e6.

7...f5 8 ♖g5 f4 9 f3

Black's pawn moves have run out and now he must lose his queen. The final position is actually a full-point reciprocal zugzwang.

## 84) G. Umnov

1st Pr., *Sinfonie Scacchistica*, 1982

White is a piece up, but Black's a2-pawn is on the verge of promotion. As one might expect, White's only hope is play against the cornered black king.

1 ♘c7+

White first transfers the knight to a6 so as to set up an attack along the long diagonal. 1 c5? ♘xc8 2 ♖xc8 a6 lifts the mating threat and leaves White dead lost.

1...♖b8 2 ♘a6+ ♖a8

White has the draw in hand, but how can he win? The attack along the long diagonal looks unlikely to succeed, since Black's knight is already in position to interpose on b7.

3 ♖e6! a1♗

Other moves put up less of a fight:

1) 3...♖b7 allows White to force mate by 4 ♘c5+ ♖b6 (4...♖c6 5 ♖d5+ ♖b6 6 ♘d7+ ♖a6 7 ♘b8+ ♖b6 8 c5#; 4...♖b8 5 ♘d7+ ♖a8 6 ♖d5+ ♘b7+ 7 ♖c7 a6 8 ♖b6 and mate next move) 5 ♘d7+ ♖b7 6 ♖d5+ ♖a6 7 ♘b8+ ♖b6 8 c5#.

2) 3...♘b7+ 4 ♖c8 ♘d6+ 5 ♖c7 ♘e8+ 6 ♖d7 ♖b7 7 ♖d5+ ♖b6 (7...♖xa6 8 ♖c6 ♘d6 9 cxb5+ ♘xb5 10 ♖c4 mates) 8 c5+ ♖xa6 9 ♖xa2 g3 (otherwise White wins easily by ♖d5 and ♖xe4, taking the knight at his leisure) 10 ♖c6 g2 11 ♖e6 followed by mate.

4 ♖d5+ ♘b7+ 5 ♖c8

5 ♖c7?? loses to 5...♗e5+.

5...♗xa6 6 c5

This is the position White has been aiming for: Black is effectively immobilized except for his g4-pawn.

6...g3

Now White must also take quick action. He cannot play 7 ♖xe4 due to 7...♗e6+, so he has to aim to make his own queen.

7 h6 gxh6

After 7...g2 8 hxg7 White wins as in the main line.

**8 gxh6 g2 9 h7 g1 10 h8**

The amount of material on the board has increased dramatically, but Black is on the defensive despite his extra queen. White threatens to give mate by moving his king.

**10... 11 g3**

Interposing on b8 is the only defence.

**11 d7+ b8**

Has Black beaten off the attack?

**12 c8!**

No! This elegant move gives rise to a full-point reciprocal zugzwang (although the fact that White to move loses plays no part in the study).

**12... xc8+**

There is nothing better.

**13 xc8**

White wins.

This study was originally published without the pawns on e3 and e4, but in this case White has an alternative win by 7 c7.

### 85) Y. Bazlov

1st Place, theme 1, 10th USSR Team Ch., 1978-9

Three pieces against three pawns should normally be an easy win, but here the pawn-mass is dangerously far advanced, while the white knights look somewhat out of play.

**1 a4**

Clearly the only move.

**1... e3!**

Black must push his pawns quickly, before White coordinates his forces. 1...f2 is wrong as the pawns are quickly blockaded by 2 d3 e3 3 d1 d4 4 b3, winning easily. 1...d4 2 d5 is also decisive.

**2 d1**

Again forced. White cannot play his moves in the other order since 2 f4+? e4 leaves White without a reasonable reply.

**2... e2!**

Although this leads to the loss of one of the black pawns, Black gains time to bring his king up the board to support the remaining two.

**3 f4+ e4 4 dxe2 e3!**

The only move, since after 4...fxe2 5 ex2 e3 6 d1 f2 7 b2 White wins easily, as he

also does in the case of 4...f2 5 d5+ e3 6 d3.

**5 d3**

White must control f1; for example, 5 d3? allows 5...f2 6 e2 d1 7 dxd1+ xe2 with an immediate draw.

**5... f2!**

Black actually benefits from having his pawn on f3 rather than f2 because he has the chance to play his king to e1 via f2. The text-move threatens to draw by either 6...xg3 or 6...e1.

**6 e5!**

6 d5? appears natural, but Black can draw by 6...e1 7 d3 (White cannot afford to lose his bishop since Black's f-pawn is so far advanced that the resulting 2d vs d ending would be an easy draw) 7...f2 8 d5 f1 9 d3+ xf3 10 exf3 f2.

**6... e1!**

This is the critical move, aiming to win the bishop. 6...xg3 loses to 7 dxf3 since Black's king cannot return to e1.

**7 e2!!**

A remarkable move, giving Black the chance to acquire two connected passed pawns on the seventh rank. White is threatening both 8 d3# and 8 dxf3+, so there isn't much choice.

**7... fxe2 8 d3+**

Two knights cannot win on their own, but the black pawns obstruct their king and enable White to weave a mating-net.

**8... d1 9 b1 e1 10 b2#**

### 86) P. Sobolevsky

Pr., USSR Ring Tny, *Shakhmaty v SSSR*, 1950/1

The advantage of one minor piece is usually not enough to win in the absence of pawns. There are, it is true, exceptions such as 2d vs d, but these do not apply to the current position. Therefore, White has to gain a second minor piece to be sure of victory.

**1 d8+!**

The first step is to rescue the g6-knight with gain of tempo. 1 d8? d6 and 1 d5+? ex5 2 ex5 d3 are both drawn, so this is the only reasonable choice.

**1... g8**

Black must continue attacking a piece.

**2 xg2!**

The correct capture. 2 ♖xh2? is bad since after 2... ♖e3 the threats of 3... ♖xh7 and 3... ♖g4+ will cost White a piece.

2... ♖f4

The only chance, since otherwise White plays ♖g5 and rescues all his pieces.

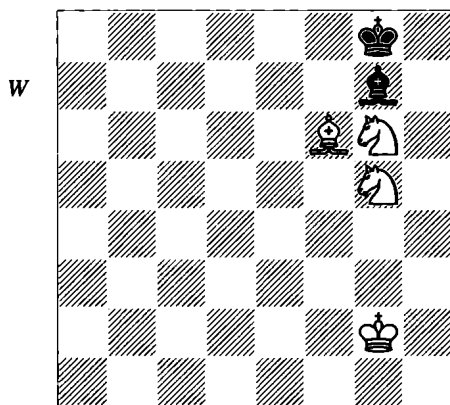
3 ♖g6!

This is apparently the end of the road for Black, since he must move his bishop, when White can move his h7-knight and all his pieces appear safe. However, Black has a cunning defence based on stalemate.

3... ♖h6!

Preventing 4 ♖hf8 and so forcing the knight to retreat to g5.

4 ♖g5 ♖g7! (D)



Now Black's plan is manifest. ♖+2♖ vs ♖ is a draw, so White's bishop is forced off the long diagonal.

5 ♖e7+!

Or:

1) 5 ♖d8? ♖f6! is the key idea: Black forks two of White's minor pieces, using stalemate to render his bishop immune to capture. After 6 ♖e7+ ♖f8 7 ♖h7+ ♖e8 White has run out of ideas – he must either lose a piece or allow his bishop to be exchanged.

2) 5 ♖e7? ♖f6 is even simpler since White doesn't even have a knight check.

The effect of the text-move is to reflect most of the position about the a1-h8 diagonal. It isn't clear yet what White hopes to achieve with this, but in a few moves his plans will be laid bare.

5... ♖h8

White must make use of the position of his king, which is the only element of asymmetry

in the position. The alternative 5... ♖f8 loses to 6 ♖e6+.

6 ♖f7+ ♖h7 7 ♖h4!

We saw this manoeuvre earlier, in the note to White's fifth move, where it failed. In the current modified situation it wins.

7... ♖f6!

Again Black plays for stalemate.

8 ♖g5+ ♖h6 9 ♖g8+ ♖h5

Just as before, but now White's king position is the dominant factor.

10 ♖xf6+! ♖xh4 11 ♖f3#

## 87) S. Kaminer

1st Pr., *Shakhmaty*, 1927

White has an extra piece, but for the moment the struggle is dominated by the two advanced passed pawns.

1 ♖f3+

White must take some action against the enemy pawn as Black was threatening to promote with check. 1 ♖b3? ♖xe6 2 ♖xe6+ ♖c3 draws at once.

1... ♖c3!

The best defence. 1... ♖d3 fails to 2 e7 ♖d7 (or 2... d1 ♖ 3 exf8 ♖ ♖h1+ 4 ♖h4 ♖d1+ 5 ♖f3 and White has a decisive material advantage) 3 ♖xd2 ♖xd2 (3... ♖f5 4 ♖b1+) 4 ♖g5 and the pawn promotes, while after 1... ♖c5 2 e7 ♖e6 3 ♖xd2 ♖c7 4 ♖e4+ ♖c6 5 ♖f6 the e-pawn costs Black another piece.

2 e7

2 ♖xd2? ♖xe6 is a draw.

2... ♖d7!

The best try, aiming for a fork on f6. After 2... d1 ♖ 3 exf8 ♖ White wins on material.

3 ♖xd2!

Eliminating the dangerous pawn, although Black now gets a chance to remove White's pawn in return. 3 ♖g5? d1 ♖ 4 e8 ♖ ♖xf3 is an easy draw.

3... ♖f5!

Not 3... ♖xd2 4 ♖g5, but after the text-move White must take immediate action as his e-pawn is under fire.

4 ♖e4+!

Other moves are not good enough: 4 e8 ♖? ♖f6+ 5 ♖g5 ♖xe8 6 ♖e4+ ♖b2 and 4 e8 ♖? ♖xd2 5 ♖e6 ♖f6+! 6 ♖xf6 ♖g7+ both lead to a draw.

4...♖d4

The only chance, since Black loses at once after 4...♖d3 5 ♖c5+ ♜xc5 6 ♙b1+ or 4...♖b2 5 ♙e6.

5 e8♜!

A neat touch. White's material advantage of bishop and knight is certainly enough to win, so Black must accept the offered knight.

5...♖xe4 6 ♙b1+ ♖e5

6...♖f4 loses the knight to 7 ♖g6+.

7 ♖g6+ ♖e6 8 ♙a2#

This very attractive mate is a surprising finish to an entertaining struggle.

### 88) A. Gurvich

1st Pr., *Izvestia*, 1928

White's material advantage is sufficient to win, but his forces lack coordination. The g2-bishop is attacked, the h2-knight is offside and the b4-pawn can be attacked by ...♙d2.

1 ♙h1!!

The only square, as all the other possibilities have some defect:

1) 1 ♙c6? ♙d2 2 ♖g4+ ♖f5! (not 2...♖f4? 3 ♖f6, however) and the b4-pawn is lost.

2) 1 ♙f3? ♙d2 2 ♖a7 ♙xb4 3 ♖c6+ ♖f4 draws.

3) 1 ♙f1? ♙d2 2 ♖a7 (or 2 ♖g4+ ♖f5) 2...♙xb4 3 ♖c6+ ♖f4 4 ♖xb4 ♖g3 traps the knight.

4) 1 ♙h3? ♙d2 2 ♖a7 (or 2 ♖g4+ ♖f4 3 ♖f6 ♙xb4 4 ♖d5+ ♖g3) 2...♙xb4 3 ♖c6+ ♖f4 4 ♖xb4 ♖g3 draws.

5) 1 ♖f3+? ♖xf3 2 ♙xf3 ♙d2 3 ♖a7 ♙xb4 4 ♖c6+ ♖f4 draws.

1...♙d2

Black must play to win the pawn, as otherwise White will consolidate his material advantage.

2 ♖a7

White sets up a knight fork if Black takes the pawn.

2...♙xb4

The only way to fight on, since otherwise White avoids material loss.

3 ♖c6+ ♖f4

Now this counterattack does not lead to Black immediately regaining the piece, but it is still a dangerous idea.

4 ♖xb4 ♖g3

Black gains time by chasing the white knight.

5 ♖f1+ ♖f2 6 ♖d2 ♖g2

This is the point of Black's defence. He traps the bishop in the corner and intends to round it up by ...♖g1. However, Black's king will be rather confined.

7 ♖d3+

The knights move in for the kill.

7...♖g1

7...♖g3 loses to 8 ♖f1+.

8 ♖f3+ ♖xh1 9 ♖f2#

A neat finish.

### 89) A. Gurvich

2nd Pr., British Chess Federation Tny, 1931

Material is equal, but White has a forced sequence leading to the capture of the f7-bishop.

1 ♖f3+ ♖e4

After 1...♖c4 2 ♖e5+ White wins the bishop for nothing.

2 ♖g5+ ♖e5

Black aims to regain the piece by playing against White's clumsily placed knights.

3 ♖xf7+ ♖e6

There is no easy way out for the knight.

4 ♖h8!

After 4 ♖d8+? ♖d7 or 4 ♖g5+? ♖e7 5 ♖c7 ♙e3+ Black regains the piece straight away so, contrary to appearances, the corner is the safest place.

4...♖d7

4...♖e7 is quite a troublesome continuation, as White's pieces are still in a tangle and it is not clear how he is going to rescue the knight from h8. However, by careful manoeuvring he can eventually extract the knight: 5 ♖c7+ ♖f6 (or 5...♖d6 6 ♖a6 ♙b6 7 ♖f7+ ♖e6 8 ♖g5+ ♖f5 9 ♖f3) 6 ♖c3! ♙a3 (6...♖e5 7 ♖f7+ ♖f6 8 ♖d8 ♙b6 9 ♖e8+ ♖f5 10 ♖c6 also wins for White) 7 ♖e8+ ♖e6 8 ♙a6 ♙c5 9 ♙d3 and now the knight comes out via g6.

The text-move aims to harass the e8-knight.

5 ♖f6+ ♖c7

Now Black has the twin threats of 6...♖xb7 and 6...♙d4.

6 ♙a6!

The only good square. Other moves allow Black to regain the piece in safety; for example, 6 ♙xd5? ♙d4 7 ♖e8+ ♖d8 or 6 ♙a8? ♙d4 7 ♖xd5+ ♖b8.

6...♔d4

Black must play to win one of the white knights.

7 ♖xd5+ ♜d6

7...♜c6 8 ♜g6 is the same.

After the text-move, White still has two knights under attack, but now he starts the decisive action.

8 ♜g6! ♜xd5 9 e4+!

Strong at move one, even better now!

9...♜xe4

Or 9...♜e6 10 ♔c8+.

10 ♔b7#

A spectacular finish.

## 90) F. Aitov

2nd Pr., *Shakhmaty/Sahs* (Riga), 1974

White is certainly not winning on material, but the confined position of Black's king gives him cause for hope.

1 ♜e3!

The only move. White takes aim at both c2 and c4, while covering the possible check on f1 which arises after 1...♚xa6.

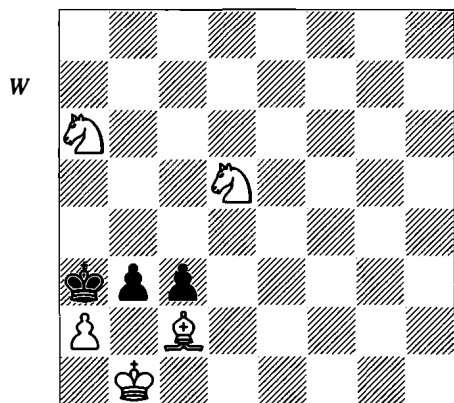
1...♚d5!

An incredible defensive idea. Other moves are less troublesome:

1) 1...♚xa6 2 ♔b3 ♚d3+ 3 ♜c2+ ♚xc2+ 4 ♔xc2 and White wins.

2) 1...♚b5 2 ♜c7! (2 ♔b3? ♚d3+ 3 ♜c2+ ♚xc2+ 4 ♔xc2 b3 is now a draw; for example, 5 ♜b4 bxa2+ 6 ♜xa2 stalemate) 2...♚e2 3 ♜b5+ ♚xb5 and now that White's knight has self-destructed there is no stalemate and he wins by 4 ♔b3 as in line '1'.

2 ♜xd5 b3! (D)



It scarcely seems credible that White can have trouble winning with three extra minor pieces, but it is amazingly hard to avoid stalemate.

3 ♜c1!

The only move to succeed. Both 3 ♜a1? b2+ and 3 ♔e4? bxa2+ 4 ♜a1 c2 allow Black to force a draw.

3...bxa2 4 ♜xc3

Forcing Black to promote.

4...a1♚+ 5 ♜b1+ ♜a2 6 ♜b4#

A short but entertaining study.

## 91) G. Kasparian

=1st Pr., *Tidskrift för Schack*, 1970

White has two minor pieces and a handful of pawns for the queen, but if he does not quickly press home his attack, then he is certainly not going to win, and may even lose. There is a seemingly dangerous battery pointing at Black's king, but at the moment there is no effective discovered check because the bishop is under attack.

1 e5+!

The best plan is to push the pawn to e6 with gain of tempo. 1 ♔a1? ♜f7 and 1 ♜g8? ♔xf5! 2 ♜xf5+ (or 2 exf5 ♚xb2) 2...♜xg6 are certainly not favourable for White.

1...♜f7 2 e6+ ♔xe6

Black's best chance is to play for stalemate. 2...♜e8 loses to 3 f6 exf6 4 ♜f5 (threatening 5 ♜g7+ or 5 ♔xf6) 4...♜d8 5 e7+ ♜d7 6 ♜g7, while 2...♜f6 3 ♜e5! ♔xe6 4 dxe6 transposes to the main line.

3 dxe6+

Not 3 ♜e5+? ♜e8!, when the black king escapes.

3...♜f6

After 3...♜e8 4 f6! exf6 5 ♜f5! ♜d8 6 e7+ ♜d7 7 ♜g7, White wins as before.

After the text-move, White's attack appears extremely dangerous since Black's king has no moves. However, it is precisely the confined position of Black's king which causes White trouble since it gives rise to stalemate possibilities; for example, 4 ♔a1? ♚b8+ 5 ♜h7 ♚g8+! 6 ♜h6 ♚h7+ 7 ♜xh7 stalemate. It looks better to lift the stalemate by moving the g6-knight, but the obvious 4 ♜f8?, threatening 5 ♜d7#, fails to 4...♚b8! 5 ♜g8 ♚g3+! 6 ♜g6 ♚b8+

forcing a draw since after 7 ♖h7 Black can safely take the bishop on b2.

4 ♖e5!

This is the startling move which achieves success. White again threatens mate on d7 and lifts the stalemate, but this time the knight cannot be pinned. However, the move looks mad because Black can win the knight with a fork.

4... ♗b8+

4... ♗xe5 5 ♖c6++ costs Black his queen, so this move is forced.

5 ♖h7 ♗xe5

Now what? Black is threatening to win by 6... ♗h2.

6 ♖a1!

The key idea. Black can only move his queen, but remarkably there is no safe square.

6... ♗d5

If Black attacks the bishop, White can always defend the bishop and attack the queen with the same knight move; e.g., 6... ♗a5 7 ♖b3+ or 6... ♗e1 7 ♖c2+. Since 6... ♗e4 loses to 7 ♖e2+ ♗xf5 8 ♖g3+, that only leaves the text-move.

7 ♖c6+

7 ♖c2+ also wins.

7... ♗xf5 8 ♖xe7+

Black loses his queen.

## 92) E. Pogosiants

1st Pr., *Shakhmatnaya Moskva*, 1965

The material difference is just one pawn, but what a pawn! If White could give up a bishop for the pawn, then all would be well, but this is not so easy.

1 ♖f3!

White prepares a check on f4, but the choice of square is important. 1 ♖g3? fails to 1... ♖d4 2 ♖a5+ (or 2 ♖f3 ♖g2+ 3 ♖xg2 c1 ♗) 2... ♖e2 3 ♖b5+ ♖e3, when White must lose material.

1... ♖g2+!

It is worth a piece to give the black king some air. 1... ♖e2+ is met by 2 ♖e4! (2 ♖g3? loses to 2... ♖d4 3 ♖a5+ ♖d3 4 ♖b5+ ♖e3) 2... ♖d3+ (2... ♖e1 3 ♖g3+ draws) 3 ♖f3 ♖e1 4 ♖g3+ ♖f1 (4... ♖d1 5 ♖a4) 5 ♖f4 followed by ♖a4, and White gives up a bishop for the pawn.

2 ♖xg2 ♖e3

Now White has to spend time preparing another check on the h6-c1 diagonal. 2... ♖d4 is easily countered by 3 ♖f3.

3 ♖g3

The only move, as 3 ♖d8? loses to 3... ♖f4.

3... ♖d2!

Thanks to Black's piece sacrifice, he has gained enough space to insert his bishop into the h6-c1 diagonal, nullifying White's intended skewer. 3... ♖e1+ 4 ♖g4 ♖d2 gives rise to fewer problems because White has the g3-square available for a bishop check: 5 ♖f4+ ♖e2 (or 5... ♖d3 6 ♖e4+) 6 ♖b5+ ♖e1 7 ♖g3+ ♖d1 8 ♖a4 pins the pawn and draws.

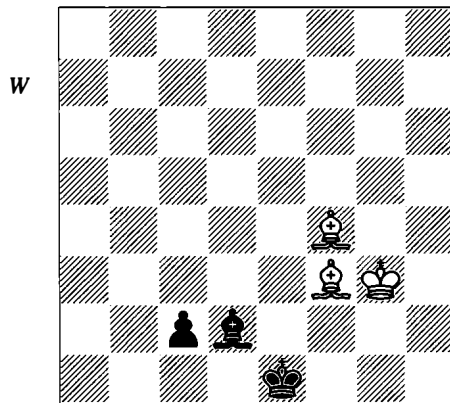
4 ♖f4+

4 ♖b6+? loses to 4... ♖d3 5 ♖b5+ ♖e4 6 ♖c6+ ♖e5 7 ♖c7+ ♖e6, so White has no choice but to play the only other available check.

4... ♖e2

After 4... ♖d3, 5 ♖e4+ draws.

5 ♖f3+ ♖e1 (D)



Now, however, it seems to be the end – no more checks and no way to prevent promotion.

6 ♖d6!!

An amazingly calm move – White does nothing to prevent Black from promoting. 6 ♖c7? loses to 6... c1 ♗ as the queen attacks White's bishop.

6... c1 ♗ 7 ♖g2!

Black is a queen for a bishop up, and it is his turn to move, but the position is a draw. The threat is mate on g3, so Black must move his bishop. If it goes to c3 or a5, White wins Black's queen by ♖g3+ followed by ♖f4+, hence the bishop must move the other way.

7... ♖g5 8 ♖b4+

The bishop is forced to return.

8... ♖d2 9 ♖d6!

Black cannot free himself.

**93) A. Avni**

1st Pr., Guanabara Anniversary Tny, 1981

The solution to this study is short but surprising. Material is equal, but the g1-bishop is under attack and the a2-bishop is caught in a cage from which there appears to be no escape. The question is whether Black can actually win the incarcerated bishop.

**1 ♖e3**

Necessary to prevent 1...♗c1+.

**1...♗e7**

Simply waiting proves the most awkward plan. The alternative is to try to play the knight to a better square, but once the knight has lost contact with c1, White can play ♖d2-b4. For example: 1...♗g3 2 ♖d2 ♗e4 (2...♗e2 3 ♖e3 repeats) 3 ♖b4 ♖g7 4 ♖a5 threatens 5 ♗b4, and there is nothing better for Black than to play the bishop back to f8.

**2 ♖b1!!**

A very surprising drawing move. The alternatives fail:

1) 2 ♖d2? ♖c5! (threatening ...♗d4+) 3 ♖c3 ♗xc3 4 bxc3 ♖d6 5 c4 b4 and White will have to surrender his bishop within a few moves.

2) 2 ♖h6? ♗d4+! (2...♖c5? doesn't win here since 3 ♖g7 is a good defence; indeed after 3...♗c1+ 4 ♗c2 ♗xa2? 5 b4+ White would even win) 3 ♗c3 b4+ (3...♗xa2 4 ♗xd4 b4 is also possible, transposing, but not 3...♗f5? 4 ♖e6! b4+ 5 ♗b3 ♗xh6 6 ♗c2, when White has set up a defensive fortress; for example, 6...♖d6 7 ♗c1 ♖e5 8 ♗c2 ♖xb2 9 ♗b3 ♖a3 10 ♗c2 ♖b2 11 ♗b3 ♖c3 12 ♗c2 ♖e5 13 ♗c1 and it is impossible to make progress) 4 ♗xd4 ♗xa2 5 b3 ♗xb3 6 ♖d2 ♖f6+ 7 ♗d3 ♖c3 8 ♖g5 ♗a2 9 ♖e7 b3 and Black wins.

**2...♗xb1 3 ♖c5!**

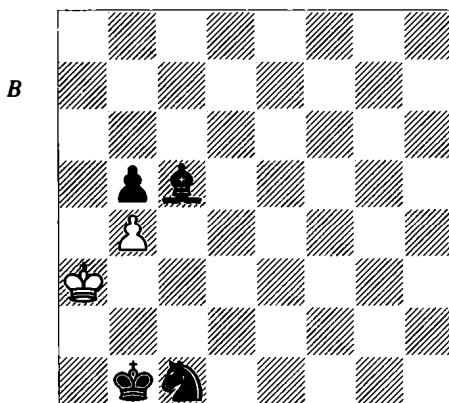
This move is the point. If Black takes the bishop then it is stalemate, while if the bishop moves away then White plays ♗b4 and eliminates Black's last pawn. But there is a third possibility...

**3...♗c1+**

...which looks strong, because 4 ♗b4 loses to 4...♗d3+.

**4 ♗a3!**

This is the final finesse. Black has nothing better than to take, because moving the bishop still allows ♗b4.

**4...♖xc5+ 5 b4 (D)**

An amazing drawn position has arisen. If the bishop moves it is stalemate, while after...

**5...♗d3 6 bxc5 ♗c2 7 c6 b4+ 8 ♗a4**

...White's pawn is just in time.

**94) K.A.L. Kubbel**1st Pr., *Shakhmaty*, 1925

Black is the exchange ahead, but this material advantage plays only a small part in the subsequent play. Of more importance are the dangerous h6- and c3-pawns, and the fact that Black's pawn can advance with check.

**1 ♖f2+**

White must be careful with his move-order. 1 h7? is wrong owing to 1...c2+ 2 ♗h4 (or 2 ♗g4 ♗f6+) 2...♗e7! 3 ♖d2 (otherwise Black will promote first) 3...♖xa2 followed by ...♖a8, when Black will win with his extra rook.

**1...♗h1**

1...♗f1? is a mistake due to 2 ♖c4#.

**2 h7**

Once again White must take care. He loses if he sacrifices on d5 prematurely: 2 ♖d5+? cxd5 3 h7 c2+ 4 ♖e3 (4 ♗h4 loses to 4...♗e7) 4...♖xe3+ 5 ♗f2 ♖f3+! (this opens the c1-h6 diagonal so that Black's queen can defend the knight) 6 ♗xf3 ♗h6 7 h8 ♖ c1 ♖ and Black wins with his material advantage. 2 ♖c5? is wrong due to 2...♖xa2 3 h7 ♖h2!.

**2...c2+**

A critical moment. The obvious king moves all lose; for example, 3 ♗g4? ♗f6+, 3 ♗f4? c1 ♖+ or 3 ♗h4? ♗e7; thus White has to come up with something special.

3 ♖e3!

This bishop sacrifice is the answer: White gains the f2-square for his king.

3... ♖xe3+ 4 ♖f2

Even though Black can no longer promote with check, 4 ♖f4? still loses to 4...c1 ♖ with a lethal discovered check to come.

4... ♖h3

4... ♖f3+ doesn't work here because White still has his bishop and therefore Black will not win on material.

After the text-move, White can still promote his pawn but at least the deadly check on h8 is prevented.

5 ♖d5+!

White's second bishop is also sacrificed. 5 hxc8 ♖ loses to 5... ♖h2+ 6 ♖f3 c1 ♖, when White has no checks and so Black's material advantage will be decisive.

5...cxd5 6 hxc8 ♖

Threatening mate on g2, so Black must check before promoting.

6... ♖h2+ 7 ♖f3 c1 ♖ 8 ♖g2+!

This is what White was aiming for with the preliminary sacrifice on d5. Black must accept.

8... ♖xg2

White's king is stalemated mid-board.

## 95) N. Kralin and O. Pervakov

1st Pr., 10th Birnov Memorial Tny, 1990

White is the exchange for a pawn down, so his only hope rests with the d-pawn. Black's pieces are badly placed to stop this pawn, and if White can win Black's rook for the pawn, he should have enough material to win.

1 d6

It takes Black two moves to transfer his rook to the d-file, by which time White is ready to promote and win the enemy rook. It follows that Black's only hope is to try to harass the white king.

1... ♖f2+

After 1... ♖e3 2 d7 ♖f2+ 3 ♖g3 ♖f3+ 4 ♖h4 ♖xf4+ 5 ♖g5 White wins easily.

2 ♖g3

White must defend the f4-pawn, as otherwise Black can give up his rook on d8 and eliminate White's last pawn with his king; e.g., 2 ♖h3? ♖d2 3 d7 ♖e4 and the f-pawn falls (4 ♖g3 ♖d3+).

2... ♖f3+

Now 2... ♖d2 is too slow, so Black must continue to play against White's king.

3 ♖g2

The only way to make progress. If the king goes to h4, Black can take the f-pawn and then give up the rook for the d-pawn.

3... ♖e4!

Attacking the f4-pawn and clearing a route to d3 for the rook. 3... ♖e3 4 d7 ♖f2+ 5 ♖g3 transposes into the note to Black's first move.

4 ♖d5+!

Blocking the d-file with gain of tempo. 4 d7? ♖d3 is only a draw.

4... ♖xf4 5 d7

5 ♖xf3? ♖xf3+ 6 ♖f2 ♖c6 is a draw, so White pushes his pawn.

5... ♖d3!

This is the key to Black's counterplay. He not only threatens the obvious 6... ♖xd5, but also sets up a possible perpetual by checking with the rook from the d-file (White cannot meet ... ♖d2+ with ♖h3, since then ... ♖g4+ mates).

6 ♖g5+!

6 d8 ♖? ♖d2+ draws, but this second bishop sacrifice is designed to disrupt Black's perpetual by covering d2.

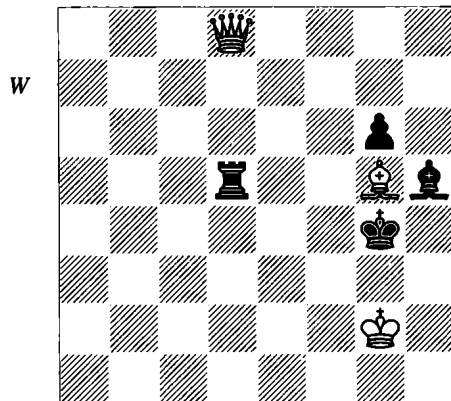
6... ♖g4!

Black is still not finished! 6... ♖xg5 allows White to promote with check, but the move played sets up a surprising stalemate defence.

7 d8 ♖

Now there is no choice.

7... ♖xd5 (D)



This is the point of Black's play. One bishop disappears, and White is about to lose the other

one. Then, with rook, bishop and pawn against queen, Black would have enough material to draw. Of course, taking the rook is stalemate.

**8 ♖a8!**

Attacking the rook and thereby preventing Black from taking the bishop with his king.

**8... ♖xg5**

Otherwise White wins on material.

**9 ♜e4#**

White has the last laugh. The immolation of Black's bishop, which was necessary to set up the stalemate, now proves Black's undoing.

## 96) L. Zoltan

1st Pr., *Magyar Sakkelet*, 1965

Black is the exchange up and both White's bishops are under attack, so quick action is necessary.

**1 g7**

The only move since 1 ♖xa8? ♜xa8+ 2 ♖xa8 ♖xh8 wins for Black – there is no saving Réti manoeuvre in this position; for example, 3 ♖b7 a5 4 ♖c6 a4 5 ♖d5 axb3 6 ♖e6 ♖g7.

Unfortunately, pushing the pawn to g7 permanently blocks in the bishop on h8 and thus increases White's effective material disadvantage.

**1... ♜e8**

White can meet 1... ♜d8 and 1... ♜c8 the same way.

**2 ♖xa8**

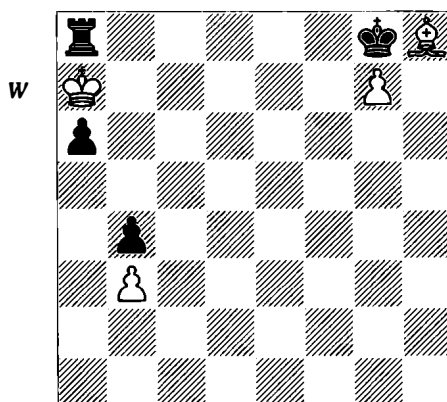
If White avoids the exchange of bishops, then Black will win with his material advantage, even in the absence of his king; for example, 2 ♖g6? ♜d8 3 ♖c2 a5 4 ♖b6 a4 5 bxa4 ♖d5 6 ♖d3 b3 7 a5 b2 8 a6 ♖a2 9 a7 b1 ♜+ 10 ♖xb1 ♖xb1, etc. However, the move played looks no better, as Black can simply take on a8 and then promote a pawn.

**2... ♜xa8+ (D)**

Indeed, 3 ♖xa8? a5 4 ♖a7 (after other king moves Black promotes with check) 4... a4 5 bxa4 b3 6 a5 b2 7 a6 b1 ♜ 8 ♖a8 ♜e4+ 9 ♖b8 ♜e5+ 10 ♖c8 ♜a5 11 ♖b7 ♜b5+ 12 ♖a7 ♜c6 is a clear win for Black. However, White has a miraculous resource.

**3 ♖b7!!**

A truly amazing move. It turns out that the position after 3 ♖xa8 a5 in the previous note is reciprocal zugzwang, and White only lost



because it was his turn to move. Therefore White must delay taking the rook by triangulating with his king.

**3... ♜a7+!**

Black persists. He can simply move the rook away, but this also fails to win: 3... ♜e8 4 ♖xa6 ♜e3 (4... ♜e5 5 ♖b6 ♜g5 6 ♖c6 ♖f7 7 ♖d6 also offers Black no winning chances) 5 ♖b5 ♜xb3 6 ♖a4 ♜b1 7 ♖b5 and Black cannot make progress; if he pushes the pawn to b2 White just follows with his king to b3 and Black loses the pawn. Equally, Black cannot bring his king into play; it cannot move further than f7 because g8 must be covered.

**4 ♖xa7**

White must not delay further. After 4 ♖b6? a5 5 ♖xa7 White is again in the losing line given in the note to Black's second move.

**4... a5 5 ♖a8!**

This is the point; White both clears the path for his pawn to advance to a7 and prevents Black from promoting with check.

**5... a4 6 bxa4 b3 7 a5 b2 8 a6 b1 ♜ 9 a7**

White is clearly better off than in the note to Black's second move (his pawn is on a7 rather than a6) but there are still difficulties to overcome. Black's only winning try is to play ... ♖f7 and stalemate White's king on a8, forcing White to give up his g-pawn.

**9... ♜e4+**

9... ♖f7 10 g8 ♜+ ♖xg8 11 ♖d4 ♖f7 12 ♖b6! is similar.

**10 ♖b8 ♜e8+ 11 ♖b7 ♜d7+ 12 ♖b8 ♜b5+ 13 ♖c8 ♜a6+ 14 ♖b8 ♜b6+ 15 ♖a8**

Now that Black's queen is optimally placed, he makes his bid to win.

**15... ♖f7 16 g8 ♜+ ♖xg8 17 ♖e5!**

The only move to draw since White must prevent ...♖c7; for example, 17 ♔d4? ♖c7 18 ♔e5 ♖c8+ 19 ♔b8 ♖c6#.

**17...♖f7 18 ♔c7!**

Again the only move. White must drive the queen away from b6, and any delay would be fatal: 18 ♔f4? loses to 18...♖e6 19 ♔c7 ♖c6+ 20 ♖b8 ♖d7.

**18...♖b5**

There is nothing better.

**19 ♔b6!**

The key idea. White must free his king from the corner before Black's own king approaches too closely.

**19...♖xb6**

After 19...♖e6 20 ♖b7 ♖d5+ 21 ♖b8 Black cannot make progress, while 19...♖c6+ 20 ♖b8 ♖xb6+ 21 ♖a8 leaves Black's king one square too far away to win.

After the text-move it is stalemate.

## 97) Y. Afek

1st Pr., *Mat* (Yugoslavia), 1982

In this battle of two bishops against two advanced passed pawns, White has to manoeuvre with extreme subtlety to secure victory.

**1 e3+!**

Other moves are inferior:

1) 1 ♔h4?? fails to 1...g1♗+ followed by 2...h1♖, when Black even wins.

2) 1 e4+? is wrong; after 1...♖g1 2 ♔h4 (2 ♔xb6+? is bad since after 2...♖h1 White cannot prevent promotion on g1) 2...h1♖ 3 ♔f2+ ♖h2 4 ♔g3+ Black can play 4...♖h3 because there is no mate on f5.

**1...♖g1**

Now White cannot prevent ...h1♖, but he can try to keep the queen bottled up in the lower-right corner.

**2 ♔h4! h1♖**

There is nothing better since 2...♖h1 3 ♔e4 g1♖ 4 ♖f4+ ♖g2 5 ♔g3 eliminates both the queen and the h2-pawn, after which White wins with his own h-pawn.

**3 ♔f2+**

In this position White can transfer his bishop to g3 with gain of tempo.

**3...♖h2 4 ♔g3+ ♖g1**

**4...♖h3 5 ♔f5#.**

**5 ♖g4**

White continues with the sealing-in of the enemy queen. Black's reply is forced, since it is the only move to avoid losing the queen for nothing.

**5...♖h2!**

Black offers his queen, but to accept the offer would doom White, as then the g-pawn would promote. Indeed, in view of Black's threat of 6...♖h1, releasing the g-pawn, White's reply is likewise forced.

**6 ♔e4!**

Now White threatens to take on h2 and then g2, so Black has no choice.

**6...♖h1**

The introductory play is over and we can assess the options for both sides. Black is really limited to one move in each situation. If the light-squared bishop is attacking g2 then he can only play ...♖f1, to which White must reply with a check on d3 or c4. If the light-squared bishop is on the diagonal from e2 to c4 then Black can only play ...♖h2, to which White must reply by playing his light-squared bishop to the long diagonal.

If we look at White's options, they are only slightly less restricted than Black's. His king and h-pawn are fixed, and the dark-squared bishop is unable to make a constructive move, since it must cover f2 (in fact, White can play ♔h4 but this is pointless as ...♖h2 forces it back again). Thus White's only mobile units are the light-squared bishop and, potentially, the e-pawn. This pawn is the key to the position because without it White cannot win. The general plan is to transfer the bishop from e4 to d5 with gain of tempo, whereupon the e-pawn can advance. However, this is easier said than done and the bishop has to go twice round the park before the required position is reached. In fact, it is probably easier to solve this study by a process of elimination than by aiming for a specific target position. In most situations, White has only one move that does not repeat an earlier position in the sequence, which makes his choice easy. Playing over the solution is somewhat confusing, as the impression that White is going round in circles becomes rather strong after a time.

**7 ♔d5**

This is the only move to make progress, since 7 ♔f3? fails to 7...♖f1. If the bishop

moves along the b1-h7 diagonal, Black just plays ...♖h2 and forces it back.

7...♖f1 8 ♖c4+ ♖g1 9 ♖e2

Again, the only constructive move, as 9 ♖d3 ♖h2 10 ♖e4 ♖h1 repeats an earlier position.

9...♖h2 10 ♖f3 ♖h1 11 ♖e4

The principle of elimination comes to our rescue once more. 11 ♖d5 repeats the position after move 7, and this is the only other candidate move.

11...♖f1 12 ♖d3+ ♖g1 13 ♖c4

By the same logic, since 13 ♖e2 repeats the position at move 9, we can settle on this move without further analysis.

13...♖h2 14 ♖d5 ♖h1 15 e4

As if by pure chance, we have finally arrived at a position in which White can push his e-pawn. This leads to a quick win after 15...♖f1 16 ♖c4+ ♖g1 17 e5 ♖h2 18 ♖d5 ♖h1 19 e6 or 15...♖h2 16 e5 ♖h1 17 e6.

## 98) V. Anufriev

2nd Pr., *Shakhmaty/Sahs* (Riga), 1979

White is a queen down for just four pawns, although both Black's minor pieces are *en prise*. Immediate action is essential.

1 ♖d6+

1 fxe3? ♖xc5 is hopeless for White, since he is too far behind on material to draw by taking just one minor piece.

1...♖d8

On the other hand, 1...♖c8 2 cxd7+ ♖xd7 3 fxe3 is a simple draw. In this case the extra pawns turn an awkward defence into a straightforward one.

2 c7+!

White plays for a direct attack based on trapping the enemy king on c8.

2...♖c8 3 c6

Now White threatens both 4 cxd7+ ♖xd7 5 ♖h3+ and simply 4 ♖h3. However, Black can take the f2-pawn with check.

3...♖xf2+ 4 ♖h2!

Of course 4 ♖g2? is out of the question because it prevents the bishop from moving to h3, but 4 ♖h1? is also wrong since it allows Black to win by 4...♖a8! 5 ♖g2 ♖xa4 6 cxd7+ ♖xd7.

4...♖g1+

Now none of the squares available to the king looks tempting. 5 ♖g2? and 5 ♖h3? block

the bishop, while 5 ♖g3? allows the queen to jump in with check; that only leaves the h1-square, but why should it be better now than last move?

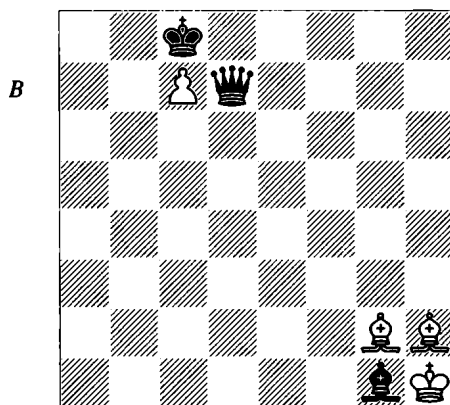
5 ♖h1! ♖a8 6 ♖g2 ♖xa4

Black's moves are forced.

7 cxd7+ ♖xd7

Just as with the black bishop on f2, it looks like the end of the road for White. He has only a bishop and a pawn for the queen, and his d6-bishop is *en prise*.

8 ♖h2! (D)



A remarkable drawing position. It is worth mentioning that ♖ vs 2♖ is usually a win, but there is one fortress position based on having the king on g2 and bishops on f3 and g3. This is called Lolli's position and while it cannot be reached from a general initial position, it can save the game if you have enough time to set it up. Here, for example, 9 ♖xg1 is not a threat because after 9...♖xc7 White is not able to reach Lolli's position. However, 9 ♖xg1 is a threat, because the additional pawn on c7 is a significant asset. Thus Black must move the bishop.

8...♖xh2

There is nothing better since 8...♖c5 is also met by 9 ♖h3.

9 ♖h3! ♖xh3

Stalemate.

## 99) M. Lavaud

1st Pr., *Phénix*, 1994

The ending 2♖+♖ vs ♖ (without pawns) is a win but in view of Black's threats of ...♖xf5 and ...♖f3+ it isn't easy to see how White can

achieve this material balance. It follows that he has to put his faith in his last pawn.

**1 f6!**

Now Black must play for the win of the h4-bishop, because otherwise the f-pawn will certainly cost Black at least his knight, when White will have the winning material balance mentioned above.

**1...d3+ 2 ex6 a6+!**

This move is the best defence. The obvious 2...d4 loses to 3 f7 a8 4 e4 (White's plan is to keep the knight trapped on h4 while he manoeuvres to win Black's rook in return for the f-pawn; the result will be a winning e+ vs d ending) 4...d8 5 d4 (with the simple plan of d6 followed by either d8, e7 or h7) 5...d6+ 6 e5 d8 7 d6 (the knight is in position and White only needs to advance his king) 7...f8 8 e6 xf7 9 xf7 d6 10 d4 (preventing Black's king from approaching) 10...c5 11 f6 d4 12 h1 followed by g5 and the knight is lost.

**3 e7 a7!!**

A brilliant defensive try, setting up a threat against the h7-bishop. 3...d4 4 f7 a8 5 e4 gives White an improved version of the note to Black's second move.

**4 f7!**

4 e4? is wrong because 4...b6+ 5 e6 d4 6 f7 xf7 7 xf7 is a draw; for example, 7...c5! 8 f6 d4 9 g5 e3.

**4...c6+!**

The best chance, since after 4...b6+ 5 e6 xf7 6 d8+ c7 7 d6 White wins easily.

**5 e6 xf7**

This is the point of Black's play. He eliminates the dangerous pawn and aims to reach a drawn e+ vs d position.

**6 e4+!**

6 xf7? d4 7 f6 d5 draws.

**6...c5**

The only move, because otherwise White wins by taking the rook; for example, 6...b5 7 xf7 d4 8 f6 c5 9 g5 d4 10 xh4 e3 11 g3.

**7 d8!**

White rescues the bishop which has been standing *en prise* for so many moves, and plays to win the knight. That would leave him with the winning material advantage of 2e+ vs a.

**7...f4**

The f8-square is out of bounds, so the only alternative is 7...e5 8 d3+! d4 (or 8...xd3 9 xf7 and White reaches the winning material balance of 2e vs d) 9 xe5 f8 10 g6 xd8 11 d6+ and White wins.

**8 d3+**

Black had to move to f4 to retain his knight, but he has walked into a knight fork.

**8...d4**

The counterattack against the e4-bishop is the only hope, but there is a surprising final finesse.

**9 b6+! xe4 10 d2#**

A beautiful study.

## 100) G. Kasparian

1st Place, 9th USSR Ch., 1970

White has enough material to draw, but his pieces are poorly placed. The d2-bishop is under attack, and Black also threatens to win a piece by ...g7.

**1 h6+**

The only way to avoid immediate material loss, since Black wins a piece after 1 e3? g7 2 xc5 xh7, 1 f4? g7 2 f3 xh7 or 1 g5? g7 2 f6 dxf6.

**1...f7**

White's pieces are not in immediate danger, but they lack any mobility.

**2 e5!**

It is tempting to push the f-pawn, but this loses: 2 f3? (after 2 f4? d7! White has no reasonable move; e.g., 3 g5 g7) 2...d3+ 3 e5 (3 g5 d6#) 3...h4! and White cannot avoid material loss; e.g.:

1) 4 d5 d7 5 d6 d6 and Black wins a piece.

2) 4 d6 h5 (the threat is simply ...b3-d4-f5) 5 f4 (5 e3 b7+ 6 c7 xh7 and 5 c6 d6 6 d6 d4 are also winning for Black) 5...b3 6 f5 (6 e2 d4) 6...xf5+ 7 xf5 xf5 8 e7 f6+ and Black picks up the bishop.

3) 4 f4 d7+ 5 d6 (5 d5 d8 6 xf8 xh7; 5 d4 h5 6 c4 d5) 5...d6! and again a piece falls.

The text-move threatens 3 d5, forcing the rook to a4 or b4, whereupon f3 wins a knight. Therefore Black has to start disentangling his knights.

2...♞d7+!

The best try. Other moves:

1) 2...♞b4 3 ♜e3 ♜g7 4 ♜xe4 ♞xe4 5 ♞e7 escapes.

2) 2...♞xf2 3 ♜d5 ♞c3 4 ♜d2 ♞h3 5 ♞h6+ ♜g7 6 ♜xc5 ♜xh7 and now the Ken Thompson six-man databases reveal that 7 ♞f7! is the only move to draw.

3 ♜d5

3 ♜f5? loses to 3...♞xf2 since then White cannot free his pieces; e.g., 4 ♜e3 (4 ♜g5 ♞c5+ is a win for Black, while 4 ♜g5 ♞e4+ transposes) 4...♞d1 5 ♜h6 (or 5 ♞h6+ ♜g7) 5...♞c3 6 ♜g5 ♞e4+ 7 ♜f5 ♞g3+ 8 ♜g5 ♞e5 threatens two different mates in one.

3...♞b6+ 4 ♜e5

Now the e4-knight is attacked.

4...♞xf2

After 4...♞c3 5 ♜e3 ♞d7+ 6 ♜d6 White frees his pieces without trouble, but removing the f2-pawn makes White's task more difficult, as he no longer has the safe square e3 for his dark-squared bishop. Indeed, it now seems that White is in serious trouble.

5 ♞f6!

This is a hard move to find, since White has no really tempting continuation. Everything leads to the loss of material and it is hard to see that only this move surrenders a piece in such a way as to preserve drawing chances. The alternatives are:

1) 5 ♜f5? ♞d7 transposes to the note to White's third move.

2) 5 ♜b1? (threatening 6 ♜a2 but this is easily countered) 5...♞a4 6 ♜c2 ♞b4 7 ♞f6 ♞b5+ and Black wins.

3) 5 ♜g5? ♞c5+ 6 ♜f4 ♞h3+ is also a win for Black.

4) 5 ♜f4? ♞d7+ 6 ♜f5 ♞c5+ is decisive.

5) 5 ♜d2? ♞g4+ 6 ♜d6 (or 6 ♜f5 ♜g7) 6...♜d4+ 7 ♜c6 ♞xd2 8 ♜xb6 ♞h2 and White is lost.

5...♞c6!

Skewering the knight and bishop, and thus winning a piece. 5...♞c5+ 6 ♜d6 ♞a5 7 ♜c6 causes White no difficulty.

6 ♜g8+!

The immediate 6 ♜e3? fails to 6...♞e6+ 7 ♜d4 ♞xf6, so first of all White has to rule out the check on e6.

6...♜g6

6...♜e7 7 ♜g5 is safe.

7 ♜e3 ♞xf6

So Black has won his piece and with his extra rook stands to win on material. However, just at the moment Black's pieces are awkwardly placed, with his rook having to defend both black knights; White can exploit this to generate counterplay. After 7...♞d3+, 8 ♜e4 defends.

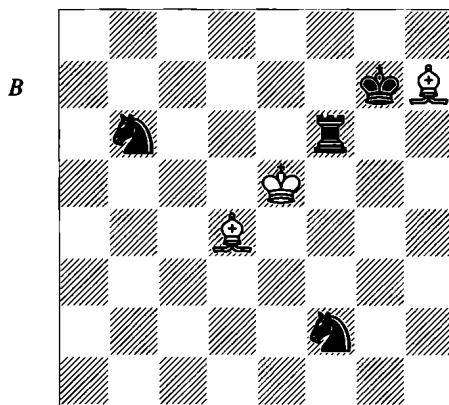
8 ♜h7+!

If Black wants to avoid a repetition, he must at some stage play his king to g7, which sets up a potential pin on the a1-h8 diagonal.

8...♜g7

The alternative is 8...♜f7 9 ♜g8+ ♜g7 10 ♜d4, but this is just a mirror-image of the position after White's ninth move in the main line.

9 ♜d4! (D)



White is not actually threatening to pin the rook, because Black's knights cover the only available squares for the white king, but the effect of this move is to paralyse the knights. Since 9...♜f7 10 ♜g8+ just repeats the position, Black can only move his rook.

9...♞h6!

The best chance, as other moves cause fewer problems:

1) 9...♞f3 10 ♜e4 ♞f8 11 ♜f5 ♞c4+ 12 ♜e6+ and White wins the f2-knight.

2) 9...♞f8 10 ♜f5 transposes to line '1'.

3) 9...♞c6 10 ♜f5! restricts the mobility of the f2-knight. White draws after 10...♞d1 (or 10...♞h1 11 ♜e4 forking rook and knight) 11 ♜e4 ♞f6 12 ♜c2 ♞f2 13 ♜b1 with total paralysis; e.g., 13...♜f7 14 ♜a2+ ♜g6 15 ♜b1+ ♜g7 16 ♜a2 and Black cannot free himself.

**10 ♖f5!**

The best square to confine the f2-knight. Not 10 ♖c2? ♘h3, when Black gradually untangles.

**10...♘h1**

10...♘d1 allows 11 ♖g4, trapping the knight.

**11 ♖e6!**

Now the other knight is under threat. Once again, it has few available squares.

**11...♘a8**

After 11...♘a4 12 ♖d7 ♖a6 13 ♖b5 ♖a5 14 ♖f4+ ♖h6 15 ♖c6 White traps the h1-knight, so the b6-knight must also move into the corner.

**12 ♖d5!**

Black's knights are temptingly lined up at opposite ends of the long diagonal, and not surprisingly White is only too happy to fork them.

**12...♘c7 13 ♖xh1 ♖xh1 14 ♖d6+**

Black loses a knight after all, with a clear draw.

**101) F. Simkhovich**

1st Pr., *Pravda*, 1927

White has only two minor pieces for a queen, and on top of this immediate material disadvantage his knight on a8 is trapped. It all looks pretty grim and the only bright spot is that his actively placed bishops are well situated to harass Black's king.

**1 ♖f7+**

1 ♘c7+? ♖xc7 2 ♖f7+ ♖xf7! 3 gxf7+ ♖xf7 looks very good for Black, who is not only a pawn up but also has widely separated passed pawns. Analysis shows that Black does indeed win, but the task is far from simple: 4 c4 (4 ♖d2 b4 is easier) 4...b4 (this seems to be the only winning move, even though it allows White a dangerous mass of passed pawns; after 4...bxc4 5 dxc4 ♖c5 6 ♖c2 ♖g6 7 ♖f4 ♖f6 8 ♖g3 g5 9 ♖d3 a3 10 ♖c3 g4 11 ♖b3 ♖f5 12 ♖a2 there seems to be no way for Black to make progress) and now:

1) 5 ♖e3 a3 6 ♖c2 (after 6 c5 b3 7 d6 ♖e6 8 d4 ♖xd6 9 cxd6 ♖xd6 10 ♖b1 ♖d5 followed by ...♖e4 Black wins) 6...a5 7 c5 a4 8 d4 b3+ 9 ♖b1 g6 10 ♖d2 a2+ 11 ♖a1 ♖g7 12 ♖c3 a3 13 d6 ♖f6 14 c6 ♖e6 15 d5+ ♖xd5 16 ♖xf6 ♖xd6 17 c7 ♖xc7 18 ♖e7 ♖c6 19 ♖xa3 g5 and Black wins.

2) 5 d4 ♖e7 6 ♖d2 a5 7 c5 g5 8 d6 ♖f6 9 ♖b1 (9 d7 ♖e6 10 c6 a3 11 ♖b1 ♖d6 wins for Black) 9...♖xd4 10 c6 ♖e6 11 c7 (11 d7 ♖f6) 11...♖d7 12 ♖xg5 ♖e5 13 ♖e7 b3 14 ♖f8 a3 15 c8 ♖+ ♖xc8 16 d7+ ♖xd7 17 ♖xa3 a4 and Black wins.

**1...♖d7 2 ♖e6+**

Now Black must go to a dark square, whereupon he gets chased by White's other bishop.

**2...♖d6 3 ♖f4+**

It's not perpetual check because the king can hide on a3.

**3...♖c5 4 ♖e3+**

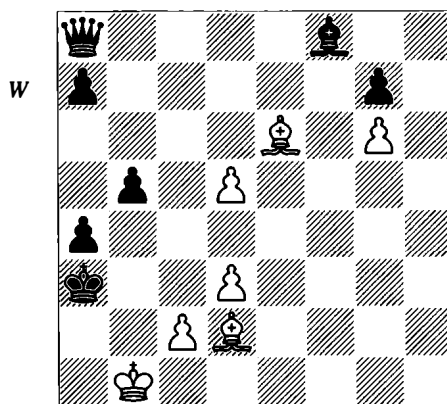
4 ♘c7? extracts the knight, but after 4...♖b6 Black's king has escaped and his material advantage can be put to good use.

**4...♖b4 5 ♖d2+ ♖a3**

Now Black has evaded the checks, whereupon White's original problems reassert themselves. In particular, what can he do about the trapped knight?

**6 ♖b1!**

As it turns out, nothing, but the move played threatens perpetual check starting with 7 ♖c1+. If Black then runs back to e7 and e8, White replies ♖f7+ and Black still cannot evade the checks. However, Black can counter White's idea by playing the move he intended in any case.

**6...♖xa8 (D)**

Now 7 ♖c1+? doesn't work due to 7...♖b4 8 ♖d2+ ♖c5 9 ♖e3+ ♖d6 10 ♖f4+ ♖e7 11 ♖g5+ ♖e8 12 ♖f7+ ♖d7 13 ♖e6+ ♖c7, when the king escapes. It is hard to see how White can set up another threat, so it appears that he has run out of resources.

**7 ♖a1!**

An incredible move. A queen for a bishop down, White is happy just to wait. Gradually, the point behind White's play becomes apparent. What can Black move? If the f8-bishop moves then it must block one of the squares on the a3-f8 diagonal, so then 8 ♖c1+ is a perpetual. A queen move to e8 again allows a perpetual, while 7... ♗d8 loses the queen if the black king runs away to e7. Since 7...b4? allows mate, that leaves just three moves Black can play: 7...a6, 7...a5 and 7... ♗b7.

**7... ♗b7 8 ♖b1!**

A second cheeky waiting move by White. Playing ... ♗b7 hasn't changed the situation a great deal. The squares b6, c7, e7 and b8 are out of bounds to the queen, as then 9 ♖c1+ forces a draw, which only leaves a6.

**8... ♗a6 9 ♖a1!**

Once again, White waits. Now the draw is clear, since Black's queen cannot move to a dark square without allowing ♖c1+, and so can never escape from the three light squares a6, b7 and a8. Playing ...a6 or ...a5 doesn't alter the situation. A remarkable position.

**102) V. Bron**

2nd Pr., FIDE Tny, 1964

Four minor pieces normally beat a queen, but only if they are initially well-coordinated. When they are scattered all around the board, as they are in the diagram, there is no hope of a win. Therefore White must do more than capture one pawn at the expense of allowing the other to promote.

**1 ♖a5+!**

1 ♖d8+? is completely wrong: after 1... ♖c8 2 ♖b6+ ♖xd8 3 ♖g5+ ♖c7 4 ♖f3+ Black need not content himself with an immediate draw by 4... ♖d8 but can continue 4... ♖b7 5 ♖f3+ ♖a7 6 ♖c8+ ♖a6 7 ♖e2+ ♖a5 8 ♖c2 g1 ♗9 ♖d2+ ♖a4 10 ♖xb2 ♗d4+ 11 ♖c2 ♗c5+ with a win, albeit lengthy and difficult, after he takes the knight. It is worth noting that the 50-move rule is normally suspended for the purpose of studies, since this rule exists in over-the-board play for purely practical reasons. In the above ♗ v 2 ♖ position the win does indeed take more than 50 moves against perfect defence, but in studies the result is not affected by the length of the win.

**1... ♖a6**

The only chance, as 1... ♖xa8 2 ♖f3+ ♖a7 3 ♖e3+ followed by ♖c2 and 1... ♖c8 2 ♖b6+ ♖d8 3 ♖c6# win for White.

**2 ♖c7+!**

Again White must choose the correct check. 2 ♖e2+? ♖xa5 3 ♖d2+ (3 ♖c7+ ♖b4 4 ♖d6+ ♖b3 also wins for Black) 3... ♖a4 4 ♖b6+ (4 ♖c2 g1 ♗5 ♖xb2 ♗d4+ 6 ♖c2 ♗e4+ is another ♗ vs 2 ♖ win) 4... ♖b3 5 ♖c4+ ♖a3 wins for Black.

**2... ♖xa5**

Forced, as Black must not allow ♖e3+ followed by ♖c2.

**3 ♖d2+ ♖a4 4 ♖e8+ ♖b3**

After 4... ♖a3 5 ♖b5+ ♖b3 6 ♖f7+ ♖a4 7 ♖c3+ ♖a3 8 ♖e3 White stops the pawns.

**5 ♖f7+ ♖a4**

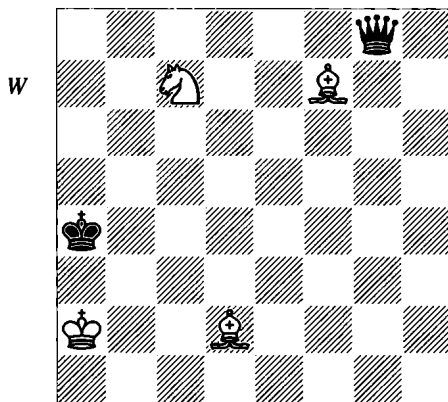
Now White has run out of checks, since 6 ♖e8+ would just repeat the position. However, in this particular situation White can allow Black to promote (even with check) because Black's king is trapped in a mating-net on the edge of the board.

**6 ♖c2!**

Threatening 7 ♖b3+ ♖a3 8 ♖b5#, so Black's reply is forced.

**6... b1 ♗+ 7 ♖xb1 g1 ♗+ 8 ♖a2**

The only square that does not allow a damaging queen check. Apparently it is all over, as White threatens mate on both b3 and e8, and the e3-square is controlled by the other bishop.

**8... ♗g8! (D)**

As so often, mate and stalemate are not far apart. It may be a handicap for Black's king to be so confined, but it does allow this defence.

After the text-move, White's bishop is attacked so it must move to a defended square.

**9 ♖d5!**

The correct choice. 9 ♖e6? ♜f7! forks e6 and c7, and so draws.

**9... ♜f7**

White had no direct threat, but Black was in (reciprocal) zugzwang. 9... ♜e6 was impossible due to 10 ♖xe6. Now, however, White's knight is attacked.

**10 ♖e6!**

Rather surprisingly, White gives up control of b5 and so gives the black king a taste of freedom. On the positive side, this move unpins the bishop (and so threatens 11 ♖c6#) while making it harder for Black to achieve stalemate.

**10... ♖b5**

Black's king makes a run for it, but he is soon recaptured. Attempts to control c6 with the queen fail; e.g., 10... ♜d7 11 ♖c5+ or 10... ♜e8 11 ♖b3+ ♖b5 12 ♖c7+.

**11 ♖d4+**

Attacking the queen again, so Black has to go back with his king to restore the stalemate.

**11... ♖a4**

With the knight on d4, however, White can win the queen right away.

**12 ♖b3+ ♜xb3+ 13 ♖xb3**

White wins.

### 103) K.A.L. Kubbel

1st Pr., *Magyar Sakkvilág*, 1929

White is a queen for bishop down, so he has to take speedy action. Although he has a forced sequence leading to the win of Black's queen, that is not the end of his problems.

**1 ♖d7+**

1 ♖f4+? ♖d4 is winning for Black.

**1... ♖d6**

Black must avoid an immediate knight fork since that would win his queen for only one minor piece.

**2 ♖f4+**

2 ♖c5+? ♖xd7 3 ♖g4+ ♜xg4 4 ♖f6+ ♖c6 5 ♖xg4 ♖xc5 leaves Black a clear two minor pieces up.

**2... ♖xd7**

Black must take, or else he again loses his queen.

**3 ♖g4+ ♖e8**

The best chance. 3... ♖d8 4 ♖c7+ ♖e8 5 ♖h5 ♜xh5 6 ♖f6+ ♖f7 7 ♖xh5 is safe for White as Black is only one minor piece up and the knight can escape via f4.

**4 ♖h5!**

Again White wins Black's queen, but this time the bishop on f4 obstructs the knight's escape route.

**4... ♜xh5**

Preliminary checks don't help Black; for example, 4... ♖c4+ 5 ♖b3 ♖a5+ 6 ♖a4 ♜xh5 7 ♖f6+ ♖f7 8 ♖xh5 ♖g6 9 ♖g3 and the knight escapes.

**5 ♖f6+ ♖f7 6 ♖xh5 ♖g6**

Now White has to come up with something special, since his knight is trapped.

**7 ♖g3!**

White sacrifices a piece in order to trap the black bishop.

**7... ♖xg3**

After 7... ♖c4+ 8 ♖b3 ♖a5+ 9 ♖a4 White defends, so Black may as well take.

**8 ♖f4+ ♖f5**

Or any other square.

**9 ♖d3**

The bishop is hemmed in by its own knights, and if it falls Black will be unable to win as he has only two knights left.

**9... ♖c4+**

Black tries to create an escape route.

**10 ♖b3**

White must attack the knight, or else Black just moves the bishop.

**10... ♖a5+**

Black's bishop has a little more air...

**11 ♖c2!**

...but not enough. The king and knight work together to cut off all the bishop's squares. Result: draw.

### 104) R. Réti

*Münchner Neueste Nachrichten*, 1928

Richard Réti was one of the world's leading players in the 1920s. He also composed end-game studies and although his output was quite small, many of his studies featured striking themes and are still frequently reproduced today. The solution to this study depends on the position of reciprocal zugzwang that arises after White's third move in the main line. The key

idea is that for White to win, his king must be on the opposite side of the d-file to Black's king. Then Black will be unable to prevent White's king from marching down the board to help in the fight against Black's pawn.

### 1 ♖d2!

1 ♖d3! d4 2 ♖d1 is equally good, but not 1 ♖d1? d4! 2 ♖d7 ♖d5, when the critical reciprocal zugzwang arises with White to play. The result is a draw after 3 ♖d2 (3 ♖c7 ♖c5! and 3 ♖e7 ♖e5! draw because moving to the same side of the pawn keeps the white king at bay) 3...♖c4 (now Black gains a tempo by attacking the rook with his king) 4 ♖e6 ♖c3 5 ♖d1 d3 6 ♖e5 d2 7 ♖e4 ♖c2 and White is too slow.

### 1...d4

Forced, as any other move allows ♖d6.

### 2 ♖d1!

Now White gains the opposition with his rook on the first rank, where it is far enough away to avoid being harassed by the black king.

### 2...♖d5 3 ♖d7!

3 ♖f6? is wrong, as after 3...♖e4 4 ♖g5 (4 ♖e6 d3) 4...d3 5 ♖e1 + ♖f3 Black draws. White must only execute a bypass when the kings are on the d-file.

After the text-move, the reciprocal zugzwang arises with Black to play.

### 3...♖c4

3...♖e4 4 ♖c6 is the same.

### 4 ♖e6 d3 5 ♖e5 ♖c3 6 ♖e4 d2 7 ♖e3

White wins the pawn and the game.

## 105) D. Gurgendze and V. Kalandadze

1st Pr., Neidze Jubilee Tny, 1998

White's first task is to switch his rook to a more effective position for fighting against the b4-pawn.

### 1 ♖h7+!

White gains time to accelerate his rook switch. Bringing the rook back along another file fails; for example, 1 ♖f7? b3 2 ♖f2 ♖g2 3 ♖f1 + ♖g1 4 ♖f2 ♖c1! 5 ♖b2 ♖c3 6 ♖d7 ♖g1 7 ♖d6 ♖f1 8 ♖d5 b5 9 ♖d4 b4 and White's king is cut off.

### 1...♖g1

1...♖g2 makes life easier for White because now Black's rook is denied access to g2. The drawing line runs 2 ♖c7 ♖f3 (2...b3 3 ♖h5 ♖f2 4 ♖b5 ♖g3 5 ♖xb6 ♖e2 6 ♖a5 ♖d2 7 ♖a4

♖c2 8 ♖a3 ♖c3 9 ♖b4 is the same draw as at move 10 in the main line) 3 ♖h4! (3 ♖h5? loses to 3...♖e4! 4 ♖b5 ♖d4 5 ♖xb4+ ♖c5 6 ♖b1 ♖g7+) 3...♖g4 4 ♖h3+ ♖g3 5 ♖h2 ♖g2 6 ♖h3+ and Black cannot make progress.

### 2 ♖h4

Now 2 ♖c7? loses to 2...b3 3 ♖h5 b2 4 ♖b5 ♖g2 5 ♖xb6 ♖f1, when Black's king is in time to protect the pawn.

### 2...b3 3 ♖b4 ♖g3

White has succeeded in halting the pawn, and now both sides will bring their kings into play.

### 4 ♖c7 ♖f2 5 ♖c6!!

A key moment as White must leave the b6-pawn on the board. 5 ♖xb6? ♖e2 6 ♖b5 ♖d2 7 ♖a4 ♖c2 8 ♖a3 ♖c3 reaches a reciprocal zugzwang with White to play; after 9 ♖b8 ♖c7 Black wins easily.

### 5...♖e2 6 ♖b5 ♖d2 7 ♖a4 b5+

Necessary, because 7...♖c2 8 ♖xb3 (8 ♖a3 also draws because after 8...♖c3 9 ♖b5! ♖c8 10 ♖xb3 ♖a8+ 11 ♖b4 Black has no check on b8) 8...♖xb3 is instant stalemate.

### 8 ♖a3

8 ♖xb5 ♖c2 9 ♖a3 transposes.

### 8...♖c2 9 ♖xb5 ♖c3 10 ♖b4

Now the reciprocal zugzwang arises with Black to play.

### 10...♖c8

10...♖h3 11 ♖b8 draws.

### 11 ♖c4+ ♖xc4

Stalemate.

## 106) J. Vančura

28 Rijen, 1924

Note that if the h7-pawn falls without Black suffering an immediate disaster, then the position will be a draw because Black's bishop is the 'right' colour for the h8-corner.

The ending ♖+h♖ vs light-squared bishop is generally drawn when the h-pawn has advanced beyond h4, but the diagram position is exceptional. The pawn has advanced so far that the balance has once again tipped in White's favour (it is worth pointing out that if the pawn starts on h5, then a position similar to the diagram cannot be forced). Indeed, White only has to get his rook to the back rank and the game will be over. Since the check on e4 is covered, this

task would seem to present few difficulties. However, a more detailed look reveals some unexpected problems. First of all, 1...♙e4+ is actually a threat because of stalemate. Thus 1 ♖a7? springs to mind, defending the h7-pawn and intending ♜d7-d8#, but Black has a clever defence: 1...♙e4+! 2 ♖h6 ♙b7! reaching a position of reciprocal zugzwang with White to play. He cannot make progress; e.g., 3 ♖a5 ♙e4! or 3 ♖g5 ♙e4. If rook moves do not work, then the idea of moving the king might seem appealing, lifting the stalemate long enough to improve the position of the white rook. However, 1 ♖h6? runs into 1...♙e4! 2 ♖a7 ♙b7! with the same draw as above. 1 ♖f6? is another idea, but after 1...♙f3 2 ♖a7 ♙e4 Black can simply take the h7-pawn. Finally, 1 ♖h5? fails to 1...♖xh7 since there is no check on h4. However, the king move idea is the correct one – it just needs to be implemented the right way. The key move, and the only one to win, is the astonishing...

**1 ♖g5!!**

The threat is simply to improve the position of White's rook by, for example, 2 ♜d4, and then to play ♖h6, with an inevitable back-rank mate to come.

**1...♙c6**

After most moves White implements his plan without difficulty. For example:

1) 1...♙d5 2 ♜d4 ♙c6 3 ♖h6 ♙e8 4 ♜d6 ♙d7 5 ♜f6.

2) 1...♙b7 2 ♜f4 (but not 2 ♖a7? ♙e4 3 ♖h6 ♙b7!) 2...♖g7 3 ♜f8.

3) 1...♙f3 2 ♜f4 followed by ♖h6.

4) 1...♙g2 2 ♜g4! ♙c6 (2...♙h3 3 ♜f4 followed by ♖h6; 2...♙f3 3 ♜f4 is the same) 3 ♖h6 (3 ♜c4 also wins, as in the main line) 3...♙d5 4 ♜d4.

After the text-move, White must attack the bishop, or else Black can take on h7.

**2 ♜c4!**

The correct method. 2 ♖a6? ♙e4 draws, while 2 ♖a7? ♙e4 3 ♖h6 ♙b7! should be familiar by now.

**2...♙b5 3 ♜c7!**

Defending the pawn in preparation for a deadly ♖h6.

**3...♙d3 4 ♖h6**

White wins; e.g., 4...♙f5 5 ♜f7.

In this study the whole content lay in White's first move.

## 107) Z. Birnov

2nd Pr., Trud, 1947

Both sides have passed pawns on the seventh rank, but Black is threatening to promote his with check.

**1 ♜g7+**

1 ♜g1? ♖b7 2 ♖a1 c1 ♚+ 3 ♜xc1 ♖xa7 is an easy draw, while 1 a8♙+?? ♖c6 2 ♜g1 ♙g5 even wins for Black, so the preliminary check is the only chance.

**1...♖b6**

Forced, in order to avoid a queen promotion with check.

**2 a8♙+!**

Once again, more or less forced.

**2...♖a6**

The only move to avoid mate in one; e.g., 2...♖c6 3 ♜c7# or 2...♖a5 3 ♖a7#.

**3 ♙c7+**

3 ♜g1? ♙g5 allows Black to draw, so again a check is best.

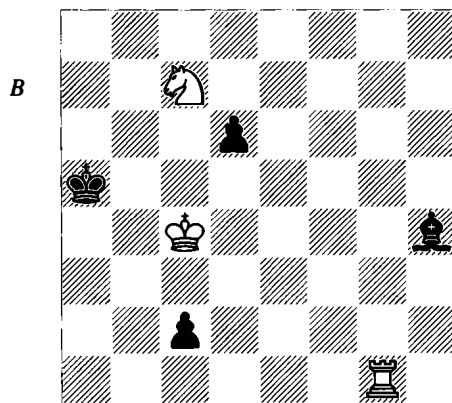
**3...♖a5**

The alternatives allow White an easy win. For example:

1) 3...♖b6 4 ♙d5+ followed by ♙b4+ wins the c-pawn.

2) 3...♖b7 4 ♙e6+ ♖c6 5 ♜g1 and now that the knight covers g5, White can safely round up the c-pawn.

**4 ♜g1 (D)**



At last White retreats his rook to prevent Black's promotion. Indeed, it might seem to be all over since after 4...♙g5 White can capture the bishop with check.

**4...♙g5!**

Black plays it in any case. The point becomes clear next move.

**5 ♖xg5+ d5+!**

In order to prevent promotion, White has to take this pawn with his rook, but then the rook is no longer able to return to the first rank.

**6 ♜xd5+ ♖a4**

If Black plays 6...♖b6, then 7 ♜b5+ stops the pawn; e.g., 7...♖a7 8 ♜a5+ or 7...♖xc7 8 ♜c5+.

After the text-move, it seems that Black has managed to escape with a draw. He still threatens to promote with check, and the white pieces are unable to cover the promotion square.

**7 ♜b5!**

The final point. Abandoning the fight to halt the pawn, White plays for mate instead.

**7...c1♖+**

There is nothing better.

**8 ♜c3+ ♖a3 9 ♜a5+ ♖b2 10 ♜a2#**

### 108) D. Gurgenzidze

1st Pr., *Shakhmaty v SSSR*, 1981

An ending of ♜+♜ vs ♜ does not seem fertile ground for spectacular play, but appearances can be deceptive. During the 1990s, the database for ♜+♜ vs ♜ became available to the public, greatly easing the task of finding unusual positions with this material. Gurgenzidze, however, had to work entirely by hand.

**1 g7**

The first move must be with the pawn in order to restrict Black's rook to the first rank. After other moves, Black is able to switch his rook behind the pawn and then he draws: 1 ♖b3? ♜h5 2 g7 ♜g5 3 ♖c4 ♖g2 4 ♖d4 ♖f3 5 ♜f7+ ♖g4 6 ♖e4 (this is a draw, but it requires accurate play by Black) 6...♖g3! 7 ♜f1 ♖g2 8 ♜f7 ♖g3! 9 ♜a7 ♖g4! 10 ♜a1 ♖h3! and White cannot make any progress.

**1...♜b8!**

Black seeks to prevent the march of the king to f7. Other moves lose more quickly.

**2 ♜b7!**

This rook sacrifice is the only move to win; for example, 2 ♜e7? ♖g2 costs White a vital tempo, while after 2 ♜f7? (threatening 3 ♜f8) 2...♜g8! 3 ♖b3 ♖g2 4 ♖c4 ♖g3 5 ♖d5 ♖g4 6 ♖e6 ♖g5 the f7-square is blocked, so Black has time to play ...♖g6.

**2...♜c8**

Black again plays to cut the king off.

**3 ♖b3 ♖g2 4 ♜c7!**

The same idea again.

**4...♜d8 5 ♖c4 ♖g3 6 ♜d7!**

The third rook sacrifice.

**6...♜e8 7 ♖d5 ♖g4**

If this position arose in a game, Black would probably try 7...♖h4 8 ♜e7 ♜xe7 9 g8♖ ♜e3, which is quite hard to win in practice (especially in a quickplay finish!) but the database assures us that White can mate in 23 moves with accurate play.

**8 ♜e7!**

The fourth and final rook sacrifice. Unlike 2 ♜f7?, White keeps the f7-square free for his king.

**8...♜g8 9 ♖e6 ♖g5 10 ♖f7**

White's pawn promotes.

Gurgenzidze produced a couple of other studies with this multiple rook sacrifice theme. One of the best is w♖c1, ♜e7, ♜f6, g6, h3; b♖g5, ♜f8, ♜a3, h4, h5; 1st Pr., *Shakhmaty v SSSR*, 1976, with the solution 1 g7 ♜c8+ 2 ♜c7! a2 3 ♖b2 ♜b8+ 4 ♜b7! a1♖+ 5 ♖xa1 ♜a8+ 6 ♜a7! ♜xa7+ 7 ♖b2 ♜xg7 8 fxg7 ♖h6 9 g8♜! and wins. This version adds a rook promotion at the cost of some extra material, and there are only three rook sacrifices instead of four. On balance, I prefer the later version given here.

### 109) N. Kopaev

2nd Pr., *Shakhmaty v SSSR*, 1951

Both sides have passed pawns on the seventh rank, and one might expect such a dynamic position to be resolved quickly. In fact, the win demands considerable subtlety. Note that White cannot promote, because Black promotes with check.

**1 ♜f5+!**

Knowledgeable readers may see in the diagram a potential Lasker manoeuvre, in which White gradually forces the black king up the board until it is on the same rank as Black's rook, whereupon a sideways pin secures the promotion of White's pawn. This idea normally only works when Black's rook, king and pawn are all on the same rank, so that White can pin the rook by taking the pawn. The Lasker manoeuvre is fundamental to this study, but before

it can be implemented, White has to force the black pieces onto the appropriate squares. The immediate attempt to execute a Lasker manoeuvre fails: 1 ♖h8? ♜d3 2 ♜c7 (2 ♖h5+ ♜a4 is no better) 2...♜c3+ 3 ♜d8 (the point of this move is to force Black's rook onto the second rank) 3...♜c2 4 ♜e7 ♜e2+ 5 ♜d6 ♜d2+ 6 ♜c7 ♜c2+ 7 ♜b7 ♜d2 8 ♖h5+ (a key moment; Black must choose the correct square) 8...♜a4! (8...♜b4? is wrong because the Lasker manoeuvre now works: 9 ♜c7 ♜c2+ 10 ♜b6 ♜d2 11 ♖h4+ ♜a3 12 ♜c6 ♜c2+ 13 ♜b5 ♜b2+ 14 ♜a5 ♜d2 15 ♖h3+ and 16 ♖xh2 wins) 9 ♜c7 ♜c2+ 10 ♜b6 ♜b2+! (this is Black's saving resource; to avoid the checks, White's king must go to a6, but then it is too far away to defend the d-pawn; note that after 10...♜d2? 11 ♖h4+ ♜a3 12 ♜c6 White wins in the same manner as after 8...♜b4?) 11 ♜a6 ♜d2 12 ♖h4+ ♜a3 with a draw since there is no way Black's king can be driven back to the second rank. We can conclude from this variation that the a4-square is crucial: if Black's king can occupy a4 then the Lasker plan is foiled, but if it has to move to b4 then the Lasker plan works.

**1...♜a4!**

The best defence, occupying the key square. After 1...♜b4 2 ♖h5 ♜d3 3 ♜c7 White wins as in the main line.

**2 ♜a5+!!**

In this precise position White has a tactical resource forcing Black's king away from the optimum square a4.

**2...♜b4**

Or:

1) 2...♜xa5 3 d8♖+ ♜b5 (3...♜a4 4 ♖h4+) 4 ♖d5+ ♜a4 (4...♜b4 5 ♖d2+) 5 ♖a2+ and White picks up the h-pawn.

2) 2...♜b3 3 ♖h5 ♜d3 4 ♜c7 and White wins as in the main line.

**3 ♖h5 ♜d3**

The next step is to force Black's rook to the second rank. White achieves this by playing his king in front of the pawn.

**4 ♜c7 ♜c3+ 5 ♜d8 ♜c2**

Black must defend his own pawn, or else White achieves an easily won ♖+♔ vs ♜ position.

**6 ♜e7**

Now White's king must return to the queen-side.

**6...♜e2+ 7 ♜d6 ♜d2+ 8 ♜c7 ♜c2+ 9 ♜b6 ♜d2**

Everything is in place and now the Lasker manoeuvre wins smoothly.

**10 ♖h4+ ♜a3 11 ♜c6**

Threatening 12 ♖xh2.

**11...♜c2+ 12 ♜b5 ♜b2+ 13 ♜a5 ♜d2 14 ♖h3+ ♜b2 15 ♖xh2**

White wins the resulting ♖ vs ♜ ending.

Emanuel Lasker's prototype position was ♖c8, ♜f7, ♔c7; ♖a6, ♜c2, ♔f2; *Deutsches Wochensach*, 1890, with the solution 1 ♜b8 ♜b2+ 2 ♜a8 ♜c2 3 ♜f6+ ♜a5 4 ♜b7 ♜b2+ 5 ♜a7 ♜c2 6 ♜f5+ ♜a4 7 ♜b7 ♜b2+ 8 ♜a6 ♜c2 9 ♜f4+ ♜a3 10 ♜b6 ♜b2+ 11 ♜a5 ♜c2 12 ♜f3+ and 13 ♖xf2.

## 110) V. Kalandadze

1st Pr., Krikheli Memorial Tny, 1989

There are some surprising finesses in the play arising from this natural position.

**1 ♜b7+**

Forced, since after 1 ♜f7? ♜a8+ 2 ♜g7 ♜a7 Black promotes the f-pawn.

**1...♜c2**

The king must move to the c-file as 1...♜a2 2 ♜f7 is an immediate draw since Black no longer has the ...♜a8+ and ...♜a7 manoeuvre (White can take the rook with check).

**2 ♜f7 ♜a8+**

This manoeuvre represents Black's only winning chance.

**3 ♜h7!**

3 ♜g7? loses because after 3...♜a7 4 c7 ♜xc7 5 ♜xc7+ ♜d2 6 ♜d7+ ♜e2 7 ♜e7+ ♜f3 8 ♜f7+ ♜g2 White has no check on g7.

**3...♜a7 4 c7 ♜xc7 5 ♜xc7+**

This check explains why it was necessary to drive Black's king onto the c-file.

**5...♜d2 6 ♜d7+**

6 ♜f7 ♜e2 7 ♜e7+ transposes to the main line.

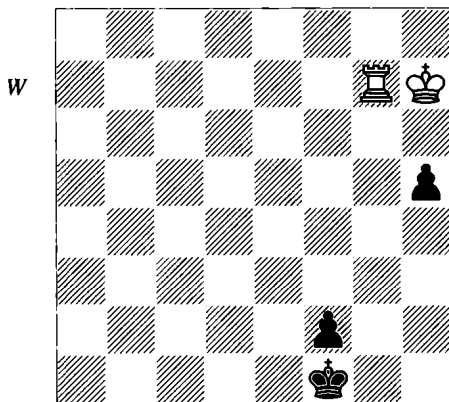
**6...♜e2 7 ♜e7+ ♜f3**

7...♜f1 is met by 8 ♜g8!!, just as in the main line.

**8 ♜f7+**

White must continue checking, since 8 ♜h6? h4! only helps Black; White loses after 9 ♜f7+ ♜g2 10 ♜g7+ ♜f1 followed by ...h3.

**8...♜g2 9 ♜g7+ ♜f1! (D)**



This is the only way to avoid the checks, but it presents White with a nasty problem. The threat is just to push the h-pawn and it is quite hard to see a defence; for example, 10 ♖g5? h4 11 ♖g6 (11 ♜h5 h3 12 ♜xh3 ♖g2 wins for Black) 11...h3 12 ♜h5 ♖e2 13 ♜e5+ ♔d3 14 ♜d5+ ♖e4 15 ♜f5 h2 and Black wins.

#### 10 ♖g8!!

A remarkable move. White clears the h-file to switch his rook behind the h-pawn while covering f7, g7 and h7 ready for a later perpetual check. It is this latter requirement which means that 10 ♖h8? would lose.

#### 10...h4

There is nothing else; if the king emerges, White just starts checking again.

#### 11 ♜h7 h3! 12 ♜xh3 ♖g2

Ensuring the promotion of the f-pawn, but White has everything prepared.

#### 13 ♜h7! f1♚ 14 ♜g7+

With perpetual check or win of the queen. There are some other studies featuring the ♖g8!! move (starting with Prokeš in 1939), but this one, with its natural introductory play, is the most elegant.

### 111) D. Gurgenidze

1st Pr., *Schach*, 1981

In this natural position, White, a piece down, must make the most of his passed pawn. It helps to know some basic rook and pawn ending theory when solving this study.

#### 1 ♜h7+

Forcing Black's king to block the g-file. The immediate 1 g7? ♜g1 lets Black off the hook.

#### 1...♖g3

Black's king must approach the white pawn, since after 1...♖g2 2 g7 ♖c6+ 3 ♖xc6 ♜a6+ 4 ♖d5 ♜g6 5 ♖xe4 the black king is too far away to prevent White from playing ♖f5, when the king marches up to support the pawn with a simple win.

#### 2 g7

Since 2...♜a8 3 ♜h8 and 2...♜d1+ 3 ♖c5 ♜d8 4 ♜h8 are both easy wins for White, Black appears to have run out of ideas. However, he has a tricky defence based on a bishop sacrifice.

#### 2...♖c6+!

A clever idea; Black intends to switch his rook behind the white pawn.

#### 3 ♖d6!!

It isn't easy to decide which king move to play, but in fact this is the only one to win. The alternatives are:

1) 3 ♖e5? is refuted easily, because after 3...♜a5+ 4 ♖f6 ♖d5 5 ♜h5 ♜a6+ the bishop controls the pawn's promotion square.

2) 3 ♖xc6? is harder to refute. The key line runs 3...♜a6+ 4 ♖d5 ♜g6 5 ♖xe4 ♜g5 with a position of reciprocal zugzwang which is quite well known to endgame theory (it's diagram 188 in my book *Secrets of Rook Endings*, for example). White cannot make progress; for example, 6 ♜h1 (after 6 ♖e3 ♜g4 7 ♖e2 ♜g6 White has nothing better than 8 ♖e3, while 6 ♖d4 ♖f4 followed by ...♜g6 and ...♖f5-f6 wins the pawn) 6...♖g2 7 ♜h7 ♖g3 repeats.

3) 3 ♖e6? is also wrong since 3...♖d7+! 4 ♖e7 (4 ♖xd7 ♜a8! 5 ♖e6 ♜g8 6 ♖f7 ♜xg7+ draws) 4...♖e6 5 ♖xe6 ♜a6+ 6 ♖f5 ♜a5+ 7 ♖xe4 ♜g5 leads to the same drawn position as in line '2'.

The text-move gives White the chance to triangulate with his king and thereby pass the move to Black on the way to the reciprocal zugzwang.

#### 3...♖d5!

3...♜a8 still loses to 4 ♜h8, so this move is forced.

#### 4 ♖xd5 ♜a5+ 5 ♖d4!

This is the point. 5 ♖xe4? ♜g5 is the draw we saw earlier.

#### 5...♜g5

5...♜a4+ 6 ♖e3 ♜a3+ 7 ♖xe4 ♜a4+ 8 ♖d5 ♜a5+ 9 ♖c6 ♜a6+ 10 ♖b7 ♜g6 11 ♖c7 ♖f4 12 ♖d7 is also winning for White.

#### 6 ♖xe4

Now it is Black to move in the reciprocal zugzwang.

6...♖g4

The only way Black can prevent either ♖f4 or ♖f5.

7 ♖h1

Followed by ♖g1+ and White wins.

## 112) A. Wotawa

*Deutsche Schachzeitung*, 1940

White is a rook down, but he has a passed pawn on the seventh rank. Although Black is not currently threatening to take it (because of ♖f1+), his rooks prevent it promoting because Black could capture the newly created piece with check. The point of this study lies entirely in the first move, so let's see it.

1 ♖g8!!

A spectacular and deep move. In order to appreciate why this is the only move to draw, one must first see the outline of White's drawing plan. The idea is to check with the rook from the sixth rank; in order to avoid the checks, Black's king will have to march up the board. White will then play his rook to the first rank, effectively pinning one black rook against the other. There is still no threat, but White will play to maintain the status quo. This plan draws provided White can achieve two things: he must be able to prevent Black's king from approaching the pawn, and he must be able to maintain his rook on the first rank. The first of these turns out to be easy, but the second is not so easy and this is where the key move ♖g8 plays its part. Let's look at some concrete variations:

1) 1 ♖e8? fails because Black has the chance to skewer White's king from the right: 1... ♖e2! 2 ♖e6+ ♖f2 (for the moment Black does not allow White to play his rook to the first rank) 3 ♖f6+ ♖g2 4 ♖g6+ and now the black king can safely leave the second rank by 4... ♖h3! because 5 ♖g1 ♖xg1 leads to a skewer on the eighth rank; if instead 5 ♖h6+ ♖g4 6 ♖g6+ ♖h5 7 ♖g7 ♖a7 then Black wins the pawn.

2) 1 ♖f1+? ♖e2 2 ♖c1 (White tries his drawing motif immediately, but it fails with the king on f8) 2... ♖d2! (the key move; c1, d1 and e1 are covered by Black's king, so the rook must move to the right of White's king, which allows Black a check on the first rank) 3 ♖g1 (after 3 ♖f1

♖xf1+ or 3 ♖h1 ♖xh1 White loses at once) 3... ♖f1+ 4 ♖e7 (4 ♖e8 ♖xg1) 4... ♖ae1+ 5 ♖d6 (5 ♖d7 ♖f7+! 6 ♖c6 ♖e6+ 7 ♖d5 ♖b6 and Black wins the pawn) 5... ♖f6+! and now:

2a) 6 ♖c5 ♖e5+ 7 ♖d4 (7 ♖c4 ♖b6) 7... ♖b5 and Black picks up the pawn.

2b) 6 ♖d7 ♖xg1 7 b8 ♖ ♖g7+ wins the white queen.

2c) 6 ♖d5 ♖b6 and Black wins.

3) 1 ♖d6+? (the idea is to start checking in the hope of being able to switch the rook to the first rank later, but this also fails) 1... ♖e2 2 ♖e6+ ♖f2 3 ♖f6+ ♖g3 4 ♖g6+ ♖h4 5 ♖g1 (once again, White's rook is too far to the right and so Black can check on f1; 5 ♖h6+ ♖g5 6 ♖h1 ♖xh1 also wins for Black) 5... ♖f1+ 6 ♖e7 ♖ae1+ and now:

3a) 7 ♖d7 ♖f7+ 8 ♖c6 (8 ♖d6 ♖f6+ transposes to line '3b') 8... ♖e6+ 9 ♖d5 ♖b6 and Black wins.

3b) 7 ♖d6 ♖f6+ 8 ♖d5 (8 ♖c7 ♖xg1 and 8 ♖c5 ♖e5+ win instantly for Black) 8... ♖e8 and the pawn cannot promote, although the win is still quite tricky. The basic plan is to play ... ♖b8, giving White the choice of defending the pawn along the b-file or along the seventh rank:

3b1) 9 ♖g7 ♖b6 10 ♖c5 ♖ee6 11 ♖c7 (11 ♖d5 loses to 11... ♖e1 followed by ... ♖eb1) 11... ♖b1 (threatening ... ♖eb6) 12 ♖c6 ♖e7 13 ♖b6 ♖xb7! wins for Black.

3b2) 9 ♖b1 ♖b8 10 ♖c5 ♖f7 (it is important to attack the b7-pawn immediately to prevent White from transferring his king to a6) 11 ♖c6 ♖g5 12 ♖b6 ♖e7! (now White is in zugzwang; his rook must retreat down the b-file, allowing Black's king to cross the sixth rank; 12... ♖g6? 13 ♖b5+ ♖g7 14 ♖a6 only draws) 13 ♖b1 ♖f6 14 ♖f1+ ♖g7 15 ♖g1+ ♖f8 16 ♖f1+ ♖e8 17 ♖b1 ♖d7 18 ♖e1+ (18 ♖h1 ♖bxb7!) 18... ♖d8 19 ♖b1 ♖c7+ and Black finally wins the pawn.

We saw in line '2' above how a white rook on c1 could be attacked by ... ♖d2 and forced to the right of White's king, allowing a check on f1. If the white king were on g8 instead of f8, White could meet ... ♖d2 by ♖f1, and ... ♖e2 by ♖c1, staying to the left of the white king. White's first move is designed to reach just this improved situation.

1... ♖e2

Black moves his king off the first rank and thereby threatens the b7-pawn. White must keep



There is nothing better; for example, 10...♖a6 11 ♖g7 h3 12 ♘g8 ♖a8+ 13 ♘f7 h2 (13...h4 14 ♖g4 ♘h5 15 ♖g8 ♖a7+ 16 ♘f6 ♖xh7 17 ♖g5+ is also perpetual check) 14 h8♖+ ♖xh8 15 ♖g6+ with perpetual check.

11 ♖g7 ♖xg7

Stalemate.

### 114) T. Gorgiev

1st Pr., *Československy Šach*, 1956

A well-presented study based on a simple idea is often more effective than one based on thickets of complex variations. In this position, if White does not act quickly then he is doomed because his forces do not form a compact group, which is a necessary (but not always sufficient) condition for a draw with ♖+♘ vs ♖.

1 f6!

If necessary, White is prepared to leave his rook to its fate, hoping for a draw with an f7-pawn against Black's queen. 1 ♘g7? fails to 1...♖e7+ 2 ♘g6 ♖e4 3 ♖a5 ♖c2 4 ♖b5 ♖g2+ (4...♖c6+? 5 f6 ♖xb5 6 f7 is a draw) 5 ♘f7 (5 ♘f6 ♖c6+) 5...♖c6 6 ♖a5 ♖c7+ and Black wins.

1...♖h3+

After 1...♖e8+ 2 ♘g7 and 1...♖e6 2 ♘g7 ♖xd5 3 f7 White draws more easily.

2 ♘g7!

2 ♘g8? loses, but to prove it is not easy: 2...♖g2+! (the only move to win; 2...♖g4+? 3 ♘f8 ♖c8+ 4 ♘g7 draws) 3 ♘h8 (playing for stalemate; 3 ♘f8 ♖xd5 4 f7 ♖d7 5 ♘g8 ♘g5 6 f8♖ ♘g6 wins for Black) 3...♖g6! (once again the only move) 4 ♖d4+ (after 4 ♖d6 ♘g5 or 4 ♖f5+ ♘xf5 5 f7 ♖f6+ 6 ♘g8 ♘g6 White loses more quickly) 4...♘e5! (another only move; 4...♘g5? 5 ♖g4+ ♘xg4 6 f7 and 4...♘f5? 5 f7! ♖xf7 6 ♖f4+ lead to draws) 5 ♖d5+ (a good try, but ultimately unavailing; 5 ♖e4+ ♘d6 6 ♖d4+ ♘e6 also wins for Black) 5...♘e6 (5...♘d5? 6 f7 is a draw) 6 ♖e5+ ♘f7 7 ♖e7+ ♘f8 8 ♖f7+ ♘e8 9 ♖e7+ ♘d8 (White's desperate attempts to force stalemate have ended and now he must lose his f-pawn) 10 ♖f7 ♖h6+ 11 ♘g8 ♖g5+ 12 ♘h7 (12 ♘f8 ♖g6) 12...♘e8 and the f-pawn falls, after which Black 'only' has to win ♖ vs ♖.

2...♖g2+

Trying to force the king to h8 as in the previous note.

3 ♘h6!!

Now White reveals why the king had to move to g7 and not g8. He again plays for stalemate, but this time with his king on h6. The alternatives lose as in the note to White's second move.

3...♖xd5

There is nothing better. Black can continue checking, but he cannot make progress.

4 f7

Black cannot take this pawn due to stalemate, while otherwise White can support the pawn with his king, which draws as Black's king is just too far away to win.

4...♖d8 5 ♘g7 ♖d7 6 ♘h8!

The last finesse; with the queen on d7 White must play for the stalemate with his king on h8. The alternatives 6 ♘g8? ♘g5 7 f8♖ ♘g6 and 6 ♘h6? ♖e7 7 ♘g7 ♘g5 8 ♘g8 ♘g6 win for Black.

6...♖xf7

This stalemates immediately, but 6...♘g5 7 f8♖ ♘g6 8 ♖g8+ also leads to a draw.

### 115) G. Kasparian

1st Pr., *Československy Šach*, 1953

This position is hard to judge on the material balance alone. White's advantages consist of his relatively advanced b-pawn and the inactive enemy knight, while Black can take some comfort in the out-of-play white king and vulnerable e-pawn. In any case, if Black can round up the e-pawn and give up a piece for the b-pawn then he will draw.

1 e5!

The most obvious and best move. 1 ♖c6? ♘d3! 2 ♘g7 ♖xc6 3 bxc6 ♘c5! 4 e5 ♘f4 5 ♘f6 ♘a6 6 e6 ♘e4 7 e7 ♘c7 draws, as does 1 ♖b8? ♖xb5 2 ♖xb5 ♘f4 3 e5 ♘f5 4 ♘g7 ♘d3, picking up the pawn.

1...♘d3

Black must activate his knight, because his bishop will never be able to cope with both pawns on its own.

2 ♖b8

White puts his faith in the b-pawn. Trying to push the e-pawn fails; e.g., 2 e6? ♘f4! 3 e7 ♖xb5 4 ♖xb5 ♘g6+ 5 ♘g7 ♘xe7 6 ♖c5 ♘f4 7 ♘f6 ♘g8+ 8 ♘g7 ♘e7 and Black just scrapes a draw.

2...♖d7!

After 2...♙f7 3 b6 ♖xe5 4 b7 ♜d7 5 ♚d8 White wins at once.

**3 b6!**

It is important to play White's moves in the correct order. After 3 ♚g8+? Black can use his king more actively by 3...♙f4! 4 b6 ♜c5, with an easy draw.

**3...♜xe5**

3...♜c5 4 b7 is hopeless for Black, so he has to take the pawn.

**4 ♚g8+!**

Not 4 b7? ♜f7+ 5 ♙h7 (or 5 ♙g7 ♜d6) 5...♙f5+ 6 ♙g7 ♜d6, when Black can eliminate the pawn.

**4...♙h4!**

Black must put his king on the same file as White's king, since 4...♙f4 5 b7 ♜c6 6 ♚c8 ♜b8 (this positional draw idea is Black's only chance) 7 ♚xb8 ♙c6 wins for White thanks to his rook check. Of the various squares available on the h-file, only h4 is viable; for example, 4...♙h3 5 b7 ♜c6 6 ♚c8 ♜b8 7 ♚xb8 ♙c6 8 ♙g7 ♙g4 9 ♙f6 and White wins easily.

**5 b7 ♜c6 6 ♙g7!**

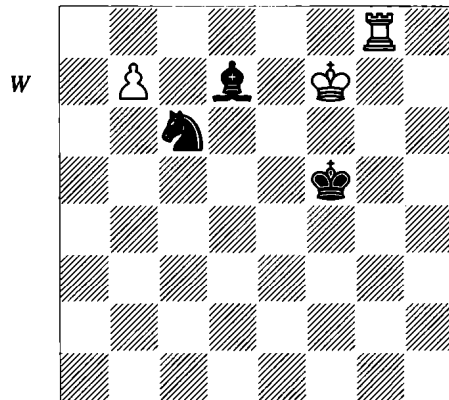
A subtle move. It is tempting to play 6 ♚c8? but this time the positional draw idea does work: 6...♜b8! 7 ♚xb8 ♙c6 8 ♙g7 ♙g5 (this is not reciprocal zugzwang because Black to play draws with ...♙d5!) 9 ♙f7 ♙f5 (however, this is a position of reciprocal zugzwang) 10 ♙e7 ♙e5 (and so is this) 11 ♙d8 ♙d6 12 ♙c8 ♙d7+ 13 ♙d8 ♙c6 and White cannot make progress. 6 ♚d8? ♜b8! is the same, so White must be more subtle and only play ♚c8 under favourable conditions. The correct plan is to activate the king, retaining the option of playing ♚c8 for a better moment.

**6...♙g5!**

The only move. Black must bear in mind that White can play ♚c8 at any time, and he has to be sure that he can meet this with ...♜b8 and ...♙c6. From the previous analysis it is clear that with the white king on g7, Black's king must be on g5 for this to be a draw.

**7 ♙f7+ ♙f5 (D)**

We are approaching the crux of the study. White cannot move his king any further at the moment, so he has to make a rook move. Over the next few moves the battle revolves around the position of reciprocal zugzwang ♙e7, ♚c8, ♜b7 vs ♙e5, ♜b8, ♙d7, which arises in the



main line after White's 10th move. Each player is trying to reach it with the other player to move.

**8 ♚f8!!**

Other moves fail:

1) 8 ♚c8? ♜b8 9 ♙e7 draws for two reasons. First of all, Black can play 9...♙e5 reaching the key reciprocal zugzwang with White to move. An even simpler line is 9...♙c6 10 ♚f8+ ♙e4! (10...♙e5? loses to 11 ♚xb8) 11 ♚xb8 ♙e5 and it is White to play in another reciprocal zugzwang.

2) 8 ♚h8? ♜b8 9 ♚c8 (9 ♙e7 ♙c6 draws) looks good, because after 9...♙e5? 10 ♙e7 Black is to move in the reciprocal zugzwang. However, Black need not be so obliging and can instead play 9...♙a4!! 10 ♚c5+ (10 ♙e7 ♙c6 11 ♚xb8 ♙e5) 10...♙e4 11 ♚c4+ ♙d5 12 ♚xa4 ♙c6 13 ♚b4 ♙c7 with a positional draw. Black keeps his king on c7 and moves only his knight, when White cannot make progress. Even if White manages to get his king to a5 it is still a draw – while the king is on a5, Black leaves his knight on b8 and plays ...♙c6-c7.

The position after the text-move is yet another reciprocal zugzwang. The point is that Black can't play the obvious move 8...♙e5 because 9 ♚c8 ♜b8 10 ♚xb8 ♙c6 11 ♙e7 puts Black in zugzwang. Therefore Black can't move his king. However, he also can't move his bishop because 8...♙e6+ loses to 9 ♙g7+ ♙g5 10 ♙f6. Therefore his reply is forced.

**8...♜b8**

This gives White the chance to move his king to e7 before playing ♚c8, and Black ends up in zugzwang.

**9 ♙e7+**

The reason why the rook is better on f8 than any other square is that normally Black would meet ♖e7 with ...♙c6, but here ♖e7 is check, so Black has no time for ...♙c6. 9 ♜c8? ♙a4!! draws as in the analysis of 8 ♜h8?.

9...♖e5 10 ♜c8!!

We have already mentioned that the position after 10 ♜c8 is reciprocal zugzwang, so this move shouldn't come as a surprise. However, to fill in the details we should look at 10 ♜h8? ♙a4!! 11 ♜c8 (11 ♜h5+ ♙d4 12 ♜h4+ ♖c5 13 ♜xa4 ♖c6 draws as in the analysis of 8 ♜h8?) 11...♙d7! to see why it is a draw with White to play. 12 ♜c5+ (12 ♜h8 ♙a4!) 12...♙d4 13 ♙d6 is the critical line. Now:

1) 13...♙h3? loses to 14 ♜c2! threatening ♜a2 followed by ♖c7 (but not 14 ♜c1? ♙g2! with a draw).

2) 13...♙g4! and the corresponding move ♜c3 is not available, so Black draws.

10...♙a4

After other moves White wins by taking on b8.

11 ♜c5+ ♙d4 12 ♙d6 ♙b3

12...♖e3 loses to 13 ♜c8 ♙d7 14 ♜d8.

13 ♜a5

White wins by playing ♜a8.

## 116) G. Kasparian

*Shakhmaty v SSSR*, 1946

This type of position has occurred many times in over-the-board play, and has usually been mishandled by one side or the other. Kasparian uncovered the secrets of such positions in the 1940s, and this brilliant endgame is so striking that once having seen it, I cannot imagine anyone forgetting the key principle that lies behind White's winning plan. Normally, the ending of rook and two connected passed pawns vs rook is an easy win, but what makes this position difficult is the passive position of White's rook. If White could transfer it to, say, b5, then the win would involve little more than playing the king over to support the pawns. Therefore Black has to play so as to tie White's rook down on h7. It is easy to see that White cannot move the rook away when Black's rook is on the h-file, attacking the h5-pawn, but White also cannot move his rook away when Black's rook is on the g-file. This is because Black meets 1 ♜a7 with

1...♜g5, when the rook has to go back to h7. When the black rook is on other files, White can activate his rook and win; thus Black's rook is confined to the g- and h-files.

White appears to have more freedom, at least as regards his king movements, and at first it seems simple to win by just playing the king to the kingside, dislodging the enemy rook. If Black's rook then moves along the file, White's king can advance, while if it moves along the rank then White's rook is free to be activated. However, it turns out that if White's king is on g2 then Black can simply play 1...♜a3, the point being that 2 ♜b7 ♜a5 3 h6 can be answered by 3...♜g5+, picking up the g-pawn. Similarly, when White's king is on h2, 1...♜a3 2 ♜b7 ♜a5 3 h6 ♜h5+ wins the h-pawn. It follows that in order to win, White must dislodge the black rook from g3 and h3 without playing his king onto the g- or h-file. The conclusion is that the position with ♖f2 vs ♜h3 is reciprocal zugzwang. Black to move cannot keep his rook on g3 or h3, while White to play cannot dislodge the rook without playing ♖g2, when Black can reply ...♜a3. As we shall see, this position of reciprocal zugzwang determines White's first move.

1 ♖a2!!

Amazingly, the only move to win. White ensures that the reciprocal zugzwang with ♖f2 vs ♜h3 arises with Black to move. 1 ♖b2? ♜h3! 2 ♖c2 ♜g3 3 ♙d2 ♜h3 4 ♖e2 ♜g3 5 ♖f2 ♜h3 is a draw:

1) 6 ♖f1 ♜f3+ 7 ♖e2 (or 7 ♖e1 ♜e3+ 8 ♖f2 ♜h3) 7...♜g3 and White is not making progress.

2) 6 ♖g2 ♜a3 and White cannot free his rook due to 7 ♜b7 ♜a5 8 h6 ♜g5+.

After 1 ♖b1? ♜b3+ Black keeps checking until White plays his king to the second rank, and then he chooses whether to play ...♜g3 or ...♜h3; for example, 2 ♖c1 ♜c3+ 3 ♙d2 ♜h3 4 ♖e2 ♜g3 5 ♖f2 ♜h3 or 2 ♖c2 ♜g3 3 ♙d2 ♜h3 4 ♖e2 ♜g3 5 ♖f2 ♜h3. The same argument shows that playing the king to the first rank at any other moment is also a draw.

These lines show that the position with ♖f2 vs ♜h3 is only one of a family of linked reciprocal zugzwangs: the positions with ♖a2/c2/e2 vs ♜g3 and ♖b2/d2 vs ♜h3 are also reciprocal zugzwang.

1...♜h3

1...♖f3 loses to 2 ♖a7.

2 ♖b2

2 h6? ♖g3 3 ♖g7+ ♖h8 4 ♖b2 ♖b3+ leads to a draw.

2...♖g3 3 ♖c2 ♖h3 4 ♖d2 ♖g3 5 ♖e2 ♖h3 6 ♖f2

Now Black must abandon the g3- and h3-squares.

6...♖a3

Both 6...♖f8 7 ♖f7+ ♖g8 8 ♖f5 and 6...♖h1 7 ♖g3 win for White.

7 ♖b7 ♖a5

Or 7...♖h3 8 ♖b5.

8 h6

White wins.

### 117) E. Zepler

3rd Pr., *Schweizerische Schachzeitung*, 1923

Black's pieces are well placed to attack the white pawns, so White must make use of his advanced pawns without delay.

1 d7

After 1 a6? ♖e6 2 ♖g3 ♖b1 3 ♖xg4 ♖d7 Black draws easily.

1...♖e7

Forced, as 1...♖d1 2 ♖c7 ♖e7 3 a6 ♖a1 4 a7 followed by ♖c8 wins the black rook.

2 ♖d6 ♖d8 3 a6

3 ♖d5? ♖a3 is similar to the main line, but with the pawn on a5 rather than a6. This difference gives Black a comfortable draw after 4 ♖f2 ♖f3+ 5 ♖e2 ♖f6.

3...♖a3

Forced, since 3...♖a2+ is met by 4 ♖g3 ♖a4 5 ♖h4 winning the g-pawn, because 5...♖b4 loses to 6 a7 ♖a4 7 ♖h6 ♖xa7 8 ♖h8+ ♖xd7 9 ♖h7+. After White has taken the g-pawn, he is free to march his king to the queenside to support the a-pawn.

After the text-move, White's problem is to transfer the move to Black, because if it were Black to move then ...g3 could be met by ♖h3, while rook moves along the file allow ♖g3. In either case Black would lose his g-pawn.

4 ♖f2!

It is not easy for White to lose a move; e.g., 4 ♖h2 ♖h3+ 5 ♖g1 ♖g3+ 6 ♖f1 ♖f3+ 7 ♖g2 ♖a3 and White has not made progress. 4 ♖f1? is even worse, because it actually throws the win away: 4...♖a2! 5 ♖g1 g3 (this position is

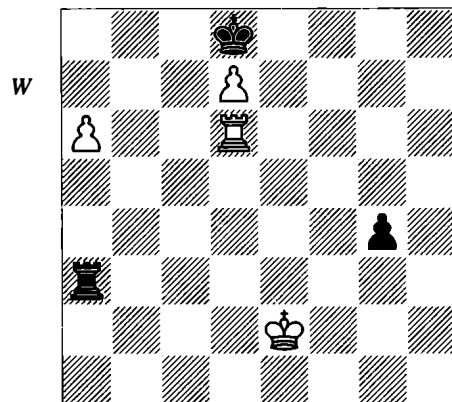
reciprocal zugzwang) 6 ♖f1 ♖f2+ 7 ♖e1 ♖a2 and White must return to f1.

It is apparent that White cannot achieve anything so long as his king stays on the f-, g- and h-files. The king must wander further afield if White is to have a chance of losing a tempo.

4...♖f3+ 5 ♖e2!

5 ♖e1? is a mistake because of 5...g3!.

5...♖a3 (D)



Now if White returns to the f-file, Black just checks on f3.

6 ♖e1!

This is the key move. 6 ♖d2? is wrong due to 6...g3!.

6...♖e3+

Other moves are no better:

1) 6...g3 7 ♖f1 ♖a2 8 ♖g1 is the reciprocal zugzwang mentioned in the analysis of 4 ♖f1?, but this time with Black to move.

2) 6...♖a2 7 ♖f1 transposes to the main line.

3) 6...♖a1 + 7 ♖f2 ♖a3 8 ♖g2 successfully transfers the move to Black.

7 ♖d2!

Moving to the f-file just allows a check on f3.

7...♖a3 8 ♖e2!

The triangle e2-e1-d2-e2 has provided the requisite tempo loss and now the king can return to g2 to cash in his reward.

8...♖a2+

After 8...g3 9 ♖f1 ♖a2 10 ♖g1 White wins in a similar way.

9 ♖f1

It is not too late to go wrong since 9 ♖e3? fails to 9...g3.

9...♖a1+ 10 ♖f2!

10 ♖g2?! ♖a3 would be back to square one.

**10...♖a3 11 ♜g2**

Repeating the position at move three, but with Black to play. Now White wins as explained earlier.

**11...♖a2+ 12 ♜g3 ♖a4 13 ♜h4 ♖c4**

Or else the g-pawn falls.

**14 a7 ♖a4 15 ♖h6 ♜xd7 16 ♖h8**

White wins the rook.

Many years later, Korolkov composed a version of this study (w♜g2, ♖d1, ♖a4, d4; b♜g8, ♖b3, ♖g4; Special Pr., *Shakhmaty v SSSR*, 1949). Korolkov's solution runs 1 d5 ♜f7 2 d6 ♜e8 3 d7+ ♜d8 4 a5 ♖b5 5 a6 ♖a5 6 ♖d6 ♖a3 transposing into Zepler's study. I originally intended to use Korolkov's version, as the introductory play is more interesting, but on detailed analysis I noticed that Black can draw by 4...♖a3! 5 ♖d5 ♖a1!; for example, 6 ♜g3 ♖g1+ 7 ♜f4 g3 8 ♜f3 g2 9 ♜f2 ♖e1 10 ♜xg2 ♖e6 followed by ...♖a6-a7 and ...♖xd7.

**118) A. Herbstman**

1st Pr., *Achalgazrda Komunisti*, 1954

White's f-pawn is destined to become a queen, if only White can deal with the counterplay provided by the a-pawn and Black's active rook. The move 1 ♜xa2 looks so obvious and natural that it is hard to imagine that there might be a better one, but that is indeed the case.

**1 ♜b2!!**

This is the key move, although at first it is hard to see why it is any better than taking the pawn. First let's see why 1 ♜xa2? fails. Black replies 1...f5!, threatening perpetual check with the rook on the squares a5, b5, c5 and d5. No problem, you might say, just play 2 ♖a7 and the perpetual is prevented. The difficulty is that Black continues 2...♖e5!, setting up a second perpetual check on e4, e3, e2 and e1. There is no way out of both perpetual checks, so the position is a draw.

**1...a1♖+**

Black tries to set up the same perpetual, but White's king is on a1 and not a2 and this makes a big difference. Other attempts to force a perpetual also fail:

1) 1...♖b5+ 2 ♜a1! wins for White.

2) 1...♖d2+ 2 ♜a1 ♖d1+ 3 ♜xa2 and Black is too slow to set up a perpetual because he hasn't played ...f5 yet.

3) 1...f5 2 ♖a7 (2 f8♖? a1♖+ 3 ♜xa1 ♖a5+ draws) 2...♖e5 3 ♖xa2 with a discovered check to come.

**2 ♜xa1 ♖a5+**

Black delays matters by giving a few checks before playing ...f5. The key idea may be seen in the line 2...f5 3 ♖a7! ♖e5 4 ♖a2+ and White makes use of the a2-square to disturb Black's king. Whichever way the king goes, Black loses control of either e1 or e3, but then there is no perpetual check and White can promote safely.

**3 ♜b2 ♖b5+**

3...♖a8 4 ♖e7 ♖f8 5 d7 and 3...f5 4 ♖a7! ♖xa7 5 f8♖ ♖a5 6 d7 (covering c5) are both hopeless for Black.

**4 ♜c3 ♖c5+ 5 ♜d4**

Threatening to slip out via e4.

**5...f5 6 ♖a7!**

The only way to stop the perpetual, but it is enough.

**6...♖d5+**

We already know that White's king must head for a1 in order to leave the a2-square free for a rook check.

**7 ♜c3 ♖c5+ 8 ♜b2 ♖b5+ 9 ♜a1 ♖e5 10 ♖a2+**

White wins.

**119) P. Benko**

1st Pr., *Magyar Sakkélet*, 1977

Which pawn should White push first?

**1 e7**

1 g7? ♖g3 (but not 1...♖d8? 2 ♖d6 ♖g8 3 ♖xd1 ♖xg7 4 ♖d7+, when White wins) 2 e7 ♜h5 3 ♖g6 is the tactical idea, called a Novotny interference, which forms the main theme of the study. Here, however, it doesn't work due to 3...♖xg6 (3...♜xg6? loses to 4 ♜f2) 4 e8♖ ♖f6+ 5 ♜e1 (or 5 ♜g1 ♜xe8 6 g8♖ ♖g6+) 5...♜xe8 6 g8♖ ♜d7! and White cannot exploit the slightly loose position of Black's pieces.

1 ♖c7+? ♜b6 2 e7 (2 g7 ♖g3 3 e7 ♜h5) 2...♖e3 3 g7 ♜xc7 4 g8♖ ♜e2+ 5 ♜f2 ♖xe7 also leads to a draw.

**1...♖e3**

There is a second important variation that requires accurate play by White: 1...♖f3+, and now:

1) 2 ♜g1 wastes time since after 2...♖g3+ 3 ♜f2 ♖f3+ White must go to e1 in order to win.

2) 2 ♖g2? throws the win away altogether:  
2... ♖e3 3 ♖d6 (or 3 g7 ♖f3+ 4 ♖f2 ♖xe7 5 g8 ♖xc6) 3... ♖c2 4 g7 ♖h7 and Black draws.

3) 2 ♖e1! ♖e3+ 3 ♖xd1 ♖xe7 and now White must find the right plan:

3a) 4 ♖f6? ♖e5! (the only move to draw; 4... ♖e3? 5 ♖d2 ♖g3 6 ♖e2 ♖b7 7 ♖f2 ♖g5 8 ♖f3 ♖c7 9 ♖f4 ♖g1 10 ♖f5 ♖d7 11 ♖f7+ ♖e8 12 ♖f6 and 4... ♖e4? 5 g7 ♖g4 6 ♖f7+ ♖b6 7 ♖e2 ♖c5 8 ♖f3 ♖g1 9 ♖e4 ♖d6 10 ♖f5 both win for White) 5 g7 ♖g5 6 ♖f7+ ♖b6 7 ♖e2 ♖c6 8 ♖f3 ♖d6 9 ♖f4 ♖e6 and Black is just in time to defend.

3b) 4 ♖d2? ♖e4! (4... ♖e5? 5 ♖c7+ ♖b6 6 ♖h7! ♖c6 7 g7 ♖g5 8 ♖e3 ♖d6 9 ♖f4 ♖g1 10 ♖f5 and the king can support the pawn) 5 ♖d3 ♖g4 6 ♖e3 ♖b7 7 ♖f6 ♖c7 8 ♖f3 ♖g1 9 ♖f4 ♖d7 draws.

3c) 4 ♖c5! (4 ♖c4 and 4 ♖c3 win as well, but more slowly) 4... ♖b6 5 ♖g5 (this is the idea: White forces Black's rook in front of the pawn and then defends the pawn by playing his king to h5) 5... ♖g7 6 ♖e2 ♖c6 7 ♖f3 ♖d6 8 ♖g4 ♖e7 9 ♖h5 ♖f8 (9... ♖f6 10 ♖h6) 10 ♖h6 ♖a7 11 ♖b5 ♖a8 12 ♖h7 ♖a7+ 13 ♖h8 and White wins.

2 g7

The second pawn advances. 2 ♖c7+? ♖b6 3 g7 ♖xc7 enables Black to draw in the same way as after 1 ♖c7+?.

2... ♖b3

The lines of action of Black's rook and bishop cross on e6, and the time seems ripe for White to play ♖e6, but there is a further subtlety.

3 ♖c7+!

The immediate 3 ♖e6? fails to 3... ♖xe6 (not 3... ♖xe6? losing to 4 ♖f2) 4 g8 ♖ ♖c4+! (after 4... ♖f6+? 5 ♖g1! ♖xg8 6 e8 ♖ White wins material) 5 ♖f2 ♖e2+ 6 ♖f3 ♖xg8 7 ♖xe2 ♖f7, when the pawn is stopped. The move played defends the e7-pawn with gain of tempo.

3... ♖a6 (D)

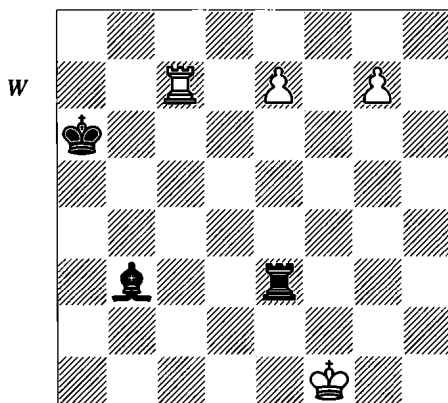
Instead, 3... ♖b6 4 ♖c3, 3... ♖b8 4 ♖c3 and 3... ♖a8 4 ♖c8+ are all hopeless for Black.

4 ♖f2!

This is the key move. Thanks to the preliminary check on c7, White is able to improve his king position before heading for the interference on e6.

4... ♖e4

4... ♖e5 is met the same way.



5 ♖c6+

With the king on f2, it is correct to play the Novotny on e6.

5... ♖a5

There is no better square for the king. After other moves White also wins with ♖e6.

6 ♖e6! ♖xe6 7 g8 ♖

Black no longer has a bishop check on c4 and so he is forced to win White's queen using the inferior check on f6.

7... ♖f6+ 8 ♖g1!

A subtle final finesse. It is clear that White cannot play his king to the e-file due to 8 ♖e3? ♖xg8 9 e8 ♖ ♖e6+ but it is less obvious why White cannot also win with 8 ♖g3?. The reason is that after 8... ♖xg8 9 e8 ♖ Black has 9... ♖f1!, indirectly defending his bishop. It might seem that with two loose black pieces White should be able to win material, but in fact the position is a draw; e.g., 10 ♖e5+ ♖b4 or 10 ♖g2 ♖c4. 8 ♖g2? is also wrong; e.g., 8... ♖xg8 9 e8 ♖ ♖d5+ (Black is saved by this check) 10 ♖g1 ♖b6.

8... ♖xg8 9 e8 ♖

Now White wins material; e.g., 9... ♖d5 10 ♖d8+.

## 120) J. Rusinek

1st Pr., Szachy, 1978

Two pieces down, White must make his passed pawns count.

1 a7 ♖a5

1... ♖xe5+ 2 ♖e4 ♖a5 (2... ♖h3?! is ingenious but White has the better of a draw after 3 ♖c1+ ♖h2 4 ♖c2+ ♖g2+ 5 ♖xg2+ ♖xg2 6 a8 ♖) 3 a8 ♖ leads to the drawn ending of ♖+♖ vs ♖.

2 e6!

White has a temporary initiative and must keep Black off balance.

2...♟xe6

Black may as well accept this sacrifice; for example, 2...♟a4 3 e7 ♞xa7 (3...♟a3 4 ♞c8) 4 ♞e4! ♟e8 5 ♞el+ ♟g2 6 ♞e2+ draws.

3 ♞e4

This is the main point of White's defence: he threatens both bishops, one directly and one indirectly via ♞el+ followed by ♞e2+.

3...♟c1+

Black does his best to rescue a bishop with gain of tempo.

4 ♟g3

Forced, as 4 ♟f3? loses to 4...♟d5.

4...♞a3+ 5 ♟f2

5 ♟h4? is not to be recommended due to 5...♞h3#.

5...♞a2+

5...♞f3+ is based on the neat idea that 6 ♟xf3? loses to 6...♟d5. However, White can circumvent this trap by 6 ♟e2, with an easy draw.

After the text-move, White has to take care with his choice of square.

6 ♟g3!

The only move, since after 6 ♟f1? ♟h3+ 7 ♟el ♟g2 or 6 ♟el? ♟d5 Black saves his bishops while retaining firm control over a8.

6...♞g2+

This move looks very awkward, because 7 ♟h4? runs into 7...♟g5+ 8 ♟h5 ♟f7#, while we already saw in the note to Black's fifth move that it can be dangerous for White to play his king to the long diagonal.

7 ♟f3 ♟d5

Without the rook on g2, this would win for Black, but here White can save the game.

8 a8♚! ♟xa8

White has forced an unexpected stalemate. The final position is reminiscent of Kubbel's No. 94.

## 121) N. Riabinin

1st Pr., *Kommunist* (Saratov), 1985

Black has the massive material advantage of three minor pieces, so White must exploit his passed a-pawn.

1 a7 ♞a5

Forced, as 1...♞h5+ 2 ♟xg2 is an easy draw.

2 ♞b8

All Black's pieces are under threat, and he must take care to avoid losing two minor pieces.

2...♟b7

The only way to restrict the immediate losses to one minor piece.

3 ♞xb7

Black's next problem is to rescue the knight. Since the fifth rank is out of bounds due to ♞b4+, and 3...♟e3 4 ♞b8 is an easy draw, Black's move is forced.

3...♟e1

Black has met the immediate threats and retained sufficient material advantage to win, so White must come up with something special. His main idea is to play ♞b8, but unfortunately Black has the reply ...♞h5+ and ...♟d4+, picking up the dangerous pawn.

4 ♞b4+!

4 ♞b8 ♞h5+ 5 ♟gl ♟d4+ 6 ♟fl ♟xa7 7 ♞a8 ♞a5 is the end of White's fun, as 8 ♟xel is answered by 8...♟f2+. However, the preliminary check on b4 improves the situation by setting up a fork on White's third rank later.

4...♟xa3 5 ♞b8

Black must play to win the pawn, otherwise he faces the loss of at least a minor piece.

5...♞h5+ 6 ♟gl ♟d4+ 7 ♟fl ♟xa7

Somehow, White has to use the lack of coordination between Black's pieces to force a draw.

8 ♞a8 ♞a5

The same idea as in the note to White's fourth move. The knight is invulnerable.

9 ♞c8!

However, in this case Black's king is on the third rank, so White can play to trap the knight on e1.

9...♞e5

The only way to avoid immediate capture of the knight.

10 ♞a8!

Back again. The immediate 10 ♞e8? fails to 10...♟d3.

10...♞e7

Since returning to a5 repeats, this is the only way to continue.

11 ♞e8!

White's play has been leading up to this; he skewers Black's rook and knight, so Black has the choice between losing his knight and...

11...♖xe8

...stalemate.

## 122) E. Janosi and P. Benko

1st Pr., Mugnos Memorial Tny, 1987

White is a pawn up in this rook and pawn ending, but Black's pieces are rather active, so in order to win, White must make use of his passed f-pawn.

1 f7

This blocks in the h7-rook, but it is the only winning try because 1 ♜b7+? ♜xa2 2 f7 c5 3 ♜g3 g5 is a dead draw since White cannot free his king.

1...♜a3!

The only troublesome defence, as 1...♜xa2? 2 ♜g3 ♜f5 (2...g5 3 ♜h2+ is the same) 3 ♜h2+ ♜b3 4 ♜f2 costs Black his rook, while after 1...♜f5? 2 a4 White wins by just pushing the a-pawn.

2 d4!

There are already some reciprocal zugzwang positions in the air. For example, 2 ♜g3? is wrong, as Black replies 2...♜f6! 3 d4 (3 ♜g4 is no better since 3...♜f5 threatens 4...♜xa2, forcing White's king to return to g3) 3...♜f5 with a position of reciprocal zugzwang. White to play must weaken his position; for example, 4 ♜g4 ♜xa2 draws as White no longer has the manoeuvre ♜h2+ followed by ♜f2 (for the Black-to-play analysis, see the following note).

2...♜b4

Black tries to keep his king on the same rank as White's d-pawn in order to prevent a rook check. 2...♜f5 (2...♜a4 loses immediately to 3 d5) 3 ♜g3! is the position of reciprocal zugzwang mentioned in the note to White's second move. Here Black is to play and so White wins:

1) 3...♜a4 4 d5 cxd5 5 ♜h4+ followed by ♜f4.

2) 3...♜b4 – see the note to Black's third move.

3) 3...♜xa2 4 ♜h2+ and 5 ♜f2.

4) 3...♜f6 4 ♜g4 and Black cannot meet the twin threats of 5 ♜g5 and 5 ♜h3+ (followed by ♜f3).

3 ♜g3!

3 d5? ♜c5 gets White nowhere since Black's king remains shielded from lateral checks.

3...g5

Or 3...♜f5, and now:

1) 4 a3+? ♜xa3.

2) 4 d5? is tempting but wrong: 4...♜c5! 5 dxc6 ♜xc6 6 a4 and then:

2a) 6...♜b6? is a mistake because after 7 ♜g4! Black is on the wrong end of a reciprocal zugzwang: 7...♜a6 8 a5 and Black has no moves since 8...♜xa5 9 ♜h5! is a neat win.

2b) 6...♜c5! (this waiting move is the key to Black's defence; he must wait until White plays ♜g4 before occupying b6) 7 ♜g4 (there is nothing better; 7 ♜h4 is answered by 7...♜b4) 7...♜b6 (now it is White who is in zugzwang) 8 a5+ ♜a6! drawing.

3) 4 ♜g4! (with the rook on f5, White wins by avoiding d5) 4...♜a4 (the only move since playing the king to a5 or b5 runs into 5 ♜h5!, while 4...♜a3 loses to 5 ♜h3+) 5 a3! (now Black's king must move off the only safe rank) 5...♜b5 (5...♜xa3 6 ♜h3+ ♜b4 7 ♜f3) 6 ♜h5! and wins.

4 d5!

The only way White can try to make progress.

4...♜c5

Forced, since 4...cxd5 loses to 5 ♜h4!.

5 dxc6 ♜xc6 6 a4

White must push the pawn straight away, or else Black draws by ...♜d6 and ...♜e7.

6...♜c5!

In this line too, Black plays a waiting game. Other moves lose quickly: 6...♜b6 7 ♜g7 ♜a6 8 a5 is zugzwang at once, while 6...♜d6 7 a5 ♜e7 8 a6 ♜a4 9 a7 ♜a5 (there is no defence) 10 f8♖+ ♜xf8 11 a8♖+ ♜xa8 12 ♜h8+ wins the rook.

7 ♜g7

The attack on the g5-pawn forces Black's king onto another rank.

7...♜b6 (D)

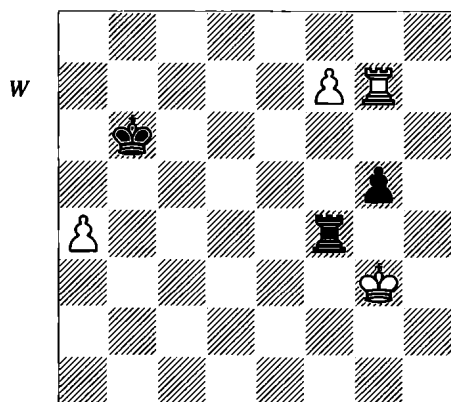
7...♜b4 loses to 8 a5.

After the text-move, it might seem that we again have a position of reciprocal zugzwang, with White running out of moves after 8 a5+? ♜a6. However, in this case White can win even with the move, as a subtle triangulation transfers the move to Black.

8 ♜g2!

The alternatives are:

1) 8 ♜h2? ♜f3 followed by ...g4 permits Black to draw.



2) 8 a5? ♖a6 really is a draw, since if the king moves away from g3, Black can safely take the a-pawn.

3) 8 ♖h3! wins by a very similar manoeuvre to that in the main line; for example:

3a) 8...♖h4+ 9 ♖g2 ♖g4+ (9...♖f4 10 ♖g3 transfers the move to Black) 10 ♖f3 ♖f4+ 11 ♖g3 and again Black is to play.

3b) 8...♖a6 9 ♖g2 ♖b6 (9...♖f5 loses to 10 ♖g3 ♖f4 11 a5, while 9...♖a5 transposes to the main line) 10 ♖g3 and again Black is to play.

8...♖a5

Black decides to counterattack. After 8...♖a6, White simply completes his triangulation by 9 ♖h3! ♖b6 10 ♖g3 ♖a6 11 a5, when Black has no moves. 8...♖g4+ 9 ♖f3 ♖f4+ 10 ♖g3 is the same.

9 ♖xg5+ ♖xa4 10 ♖g4!

A beautiful finish.

10...♖xg4+ 11 ♖f3 ♖g1 12 ♖f2

White promotes his pawn and wins the ending of ♖ vs ♖.

### 123) V. Korolkov and L. Mitrofanov

1st Pr., FIDE Tny, 1960

White is way down on material, but he has a strong a-pawn and is attacking Black's e3-rook.

1 a7

After other moves Black manages to consolidate a material advantage sufficient to win; e.g., 1 fxe3? ♖c4+ 2 ♖a5 ♖xe3 or 1 ♖d8+? ♖e6 2 ♖e8+ (2 fxe3 ♖h7) 2...♖f7 3 ♖xe3 ♖h5+ 4 ♖b4 ♖d5 5 ♖e2 ♖f5.

After the text-move, White threatens to promote with check, hence quick action is necessary.

1...♖a4+!

After 1...♖c4+ 2 ♖b4 ♖b3+ 3 ♖a4 ♖b5+ 4 ♖xb3 ♖c6 5 a8♗ Black's material advantage is not enough to win.

2 ♖xa4 ♖h4+ 3 g4!

Black's rook must be lured to g4 in order for White's drawing idea to function. 3 f4? ♖e4+ 4 ♖b5 ♖xa7 leads to an easy win for Black.

3...♖xg4+ 4 f4

After 4 ♖b5? ♖b3+ 5 ♖a5 ♖a3+ 6 ♖b6 ♖b4+ Black wins easily.

4...♖e4+

Now Black wins the a7-pawn and it seems to be all over.

5 ♖b5! ♖xa7

White doesn't seem to have much to show for his material disadvantage, but amazingly the draw is now completely clear.

6 ♖d8+

It's simply perpetual check.

6...♖e6 7 ♖e8+ ♖f5 8 ♖f8+ ♖g6 9 ♖g8+ ♖h5 10 ♖h8+ ♖g6 11 ♖g8+ ♖f5 12 ♖f8+ ♖e6 13 ♖e8+ ♖d5 14 ♖d8+

Black cannot escape without losing a whole rook. A remarkable situation.

### 124) A. Kakovin and A.P. Kuznetsov

3rd Pr., *Biulleten Tsentralnovo Shakhmatnovo Kluba SSSR*, 1969

If this position arose in a game, I think that most players would be quite happy with a draw as White. Black has bishop, knight and pawn for a rook, and White's rook is under attack.

1 ♖f3!

The only alternative is 1 c3+? ♖xc3 2 ♖f3+ ♖d2 3 ♖xf5, but after 3...d5! 4 ♖h3 c4 5 bxc4 dxc4 White certainly has no winning chances. The text-move threatens mate in one, and 1...c4 2 ♖xf5 cxb3 3 cxb3 gives White a win on material, so Black's reply is forced.

1...♖e3

However, this move looks very strong because if White takes the knight, he loses his rook to a pin.

2 ♖xe3!

But White takes it in any case!

2...♖d2 3 c3+! ♖d5

Not 3...♖xc3 4 ♖d3#.

After the text-move a critical moment occurs. A win for White looks completely out of

the question until one realizes that the black king is very confined.

**4 ♖g4!**

This subtle move is the key to success. After the more obvious 4 ♖f5? ♙xe3 5 h4 h5 it is White to move in a full-point reciprocal zugzwang. The text-move aims to triangulate with the king and thereby pass the move to Black.

**4...f5+**

Black isn't giving in so easily and strikes another blow in the battle for tempo. After 4...♙xe3 5 ♖f5 Black loses quickly since he will eventually be forced to move his bishop, allowing mate by e4#; one line is 5...h6 6 h3 h5 7 h4 c4 8 b4 c5 9 b5 and Black has run out of pawn moves. 4...h5+ 5 ♖f5 ♙xe3 6 h4 transposes to this line.

After the text-move, White faces a key decision, since there are three plausible squares for his king. Which one is correct?

**5 ♖g5!**

After 5 ♖xf5? ♙xe3 White will run out of tempi first, e.g. 6 h3 h6 7 h4 h5 and Black wins. However, the alternative 5 ♖f4? fails for a much more subtle reason. The possible replies are:

- 1) 5...♙xe3+? 6 ♖xf5 leads to mate.
- 2) 5...h6? 6 ♖xf5 ♙xe3 7 h3 is the same.
- 3) 5...c4? 6 ♖xf5! cxb3 6 ♔d3+ wins, as we shall see in the note to Black's fifth move.

4) 5...♙c1! is the correct move. Black removes his bishop from the vulnerable d2-square, where it is exposed to a rook check on d3 (as in line '3'). After 6 ♖g5 c4! 7 b4 (7 ♖xf5? is not possible when the bishop is on c1, because Black wins by 7...cxb3) 7...♙d2 White should take a draw by 8 ♖f4, because he only risks losing if he plays 8 ♖f6?! f4 9 ♔h3 ♖e4, intending ...d5-d4.

**5...♙c1**

5...h6+ 6 ♖xf5 ♙xe3 7 h3 wins as before, but 5...c4 is an important alternative, after which White can only win by accurate play: 6 ♖xf5! (6 b4? ♙c1 7 ♖f6 ♙d2 8 ♔h3 ♖e4 gives White no winning chances) 6...cxb3 7 ♔d3+ ♖c4 8 ♔xd2 d5 9 ♔d1! b2 (9...♖xc3 10 ♙c1+ ♙d2 11 ♔xc6 ♖xe2 12 ♔d6! b2 13 ♔b6 wins, as now the b-pawn can be captured with check) 10 ♖e5 ♖xc3 11 ♙d6 ♖c2 12 ♔g1 d4 13 ♖c5! d3 14 exd3 ♖xd3 15 ♖b4 ♖c2 16 ♔g2+ ♖c1 17 ♖c3 b1 ♖+ 18 ♖d3 ♖a3 19 ♔a2, followed by ♔c2+, with a simple technical win.

Therefore Black moves his bishop away from the inferior d2-square, but here he is too late since White is ready to unpin his rook and so Black never gets a chance to play ...b4.

**6 ♖f6!**

White again sidesteps the f5-pawn and does so with a move which unpins the rook and therefore forces its capture.

**6...♙xe3**

After 6...c4 7 bxc4+ ♖xc4 8 ♔d3 Black loses a pawn, which makes it impossible to save the game.

**7 ♖xf5**

White's king has toured f4-g4-g5-f6-f5 in its efforts to lose a tempo – not so much a triangle as a pentagon!

**7...c4**

Black will soon run out of tempi.

**8 b4 c5 9 b5 h6 10 h3 h5 11 h4**

It is mate next move.

## 125) T. Gorgiev

1st Pr., Szachy, 1956

Black has an extra rook, but this is more than outweighed by White's formidable mass of connected passed pawns.

**1 e7!**

1 d6? is a tempting move which is hard to refute:

1) 1...♔h5? is the defence given by the composer, but in fact it loses: 2 ♔g4+ ♖a3 (2...♖b5 3 e7 ♔xc5+ 4 ♖b2 ♔ac6 5 ♔gl and White wins) 3 ♔c4 ♔xc5 4 ♔xc5 ♔xd6 5 ♔xa5+ ♖b4 6 ♔e5 ♔d8 7 e7 ♔e8 8 ♖d2 ♖c4 9 ♖e3 with a winning ending since White can advance his king to support the e-pawn.

2) 1...♔c6! is the correct defence: 2 ♔g5! (2 ♔g4+ ♖b5 3 e7 ♔xc5+ 4 ♖b2 ♔h2+ draws) 2...♔e7!! (a remarkable idea; Black is determined to sacrifice a rook to break up White's mass of passed pawns) and now:

2a) 3 dxe7 ♔xe6 4 ♔g7 ♖b5 5 c6 ♔xc6+ draws (but not 5...♖xc6?? 6 ♔g6, when White wins).

2b) 3 ♔d5 ♔xe6 4 d7 ♔xc5+ 5 ♔xc5 ♔d6 drawing.

2c) 3 d7 ♔xc6 4 d8 ♔ (4 ♔g4+ ♖b5 5 d8 ♔ ♔e1+ is also drawn) 4...♔e1+ 5 ♖d2 ♔7e2+ 6 ♖c3 ♔c1+ 7 ♖d3 ♔d1+ 8 ♖xe2 ♔xd8 9 c6 ♔c8 10 ♔c5 ♖b4 and again Black draws.

1 ♖g5? is also inadequate due to 1...♞c7 2 ♜b2! (the best try for White) 2...♞xc5! 3 ♖g4+ ♜b5 4 a4+ ♜b6 5 e7 ♜c7! (Black can also scrape a draw by 5...♞c8 6 ♖g6+ ♜c5 7 ♞xa6 ♜xd5 8 ♞xa5+ ♜c6 9 ♞xa7 ♜b6 10 ♞d7 ♞e8 followed by ...♜c6 with a perpetual attack on White's rook) 6 e8♞ ♞b6+ 7 ♜a2 ♞c2+ with perpetual check.

**1...♞xe7!**

Black must sacrifice his rook since 1...♞xg6 loses at once to 2 e8♞+.

**2 ♞xa6 ♜b5**

Black hopes to eliminate another of White's pawns and so reach a drawn rook and pawn ending. 2...♞d7 3 ♞d6 and 2...♞e5 3 ♞d6 ♜b5 4 c6 ♜b6 5 ♞d7 allow White to keep two connected passed pawns, with a simple technical win in either case.

**3 d6!**

After 3 ♞c6? ♞e4 White can only keep both passed pawns at the cost of allowing Black a dangerous passed a-pawn; for example, 4 ♜c2 ♞d4! (4...♞c4+? loses to 5 ♜d3 ♞xc5 6 a4+ ♜b4 7 ♜d4) 5 a4+ ♞xa4 6 ♜d3 ♞al 7 ♞c8 ♞d1+ 8 ♜e4 ♜c4 9 d6 a4 and White's pawns cannot advance sufficiently quickly to win the game.

3 ♞e6? is easier to refute since Black can save the king and pawn ending after 3...♞d7 4 ♞d6 ♞xd6 5 cxd6 ♜b6; for example, 6 ♜b2 ♜b7 7 ♜b3 ♜c8 8 ♜a4 (8 ♜c4 ♜d7 9 ♜c5 a4 10 a3 a6 is also a draw) 8...♜d7 9 ♜xa5 ♜xd6 10 ♜a6 ♜xd5 11 ♜xa7 ♜c5 draws.

The text-move involves the loss of White's rook, but in compensation one of the pawns makes it through.

**3...♞d7**

3...♞h7 4 c6 and 3...♞e5 4 c6! ♞c5+ 5 ♜b2 ♞xc6 6 d7 win for White.

**4 c6!**

Now one of the pawns is sure to promote, but Black has an ingenious defence.

**4...♞xd6! 5 c7 ♞xa6 6 a4+**

Not, of course, 6 c8♞? ♞c6+ but the pawn check seems decisive.

**6...♜b6!**

The point of Black's play: if White promotes to a queen, Black is stalemated.

**7 c8♞!**

A neat finish. Black is the exchange and a pawn up, and it is his turn to move, but he is lost

since after his king moves White wins a whole rook. The bishop controls the a-pawn's promotion square, so this is sufficient to win.

## 126) Y. Merkin

4th Pr., 64 – *Shakhmatnoe Obozrene*, 1931

Perhaps we should not ask how Black's queen came to be on h8, but at least it provides an opportunity for some unusual tactics.

White is well down on material, but this is compensated for by the poorly placed queen. However, given the opportunity Black will free himself by ...h6, ...♜h7, etc., so White must not waste time.

**1 ♞h6!!**

This astonishing first move is the main point of the study. Other moves are just not energetic enough:

1) 1 exf6? gxf6 does not help.

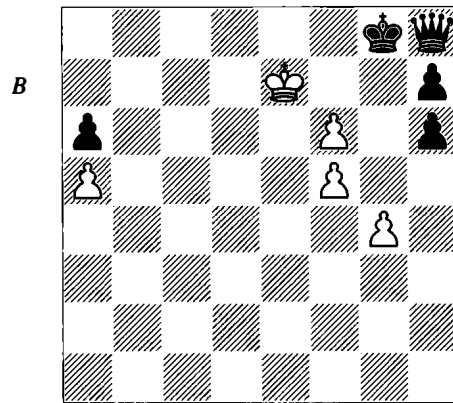
2) 1 ♞h1? fxe5 2 ♞bl h6 and Black wins.

3) 1 g5? fxe5 (threatening 2...g6) 2 f6 (2 ♞h1 h5 3 ♞d1 ♜h7 4 ♞d8 ♞xd8+ 5 ♜xd8 e4 6 f6 ♜g6 7 ♜e7 e3 8 f7 e2 9 f8♞ e1♞+ wins for Black) 2...gxf6 3 gxf6 h6 4 ♞f5 ♜h7 5 f7 ♞g7 favours Black.

**1...gxf6**

Relatively best. 1...g6 2 exf6 and 1...fxe5 2 ♞xa6 h5 3 ♞a8+ ♜h7 4 ♞xh8+ ♜xh8 5 a6 are easy wins for White.

**2 exf6 (D)**



This position is a good example of a full-point reciprocal zugzwang. White to play would lose after 1 f7+ ♜g7 2 f6+ ♜g6 3 f8♞ ♞xf8+ 4 ♜xf8 ♜xf6.

**2...h5**

After 2...♖xf6+ 3 ♜xf6 ♜f8 4 ♜e6 ♜e8 5 ♜d6 ♜f7 6 ♜c6 ♜f6 7 ♜b6 White wins comfortably.

### 3 gxf5!

The only move to win. Both 3 g5? h4 4 f7+ ♜g7 5 f6+ ♜g6 6 f8♖ ♖xf8+ 7 ♜xf8 h3 8 ♜g8 h2 9 f7 h1♖ 10 f8♖ ♖d5+ and 3 f7+? ♜g7 4 f6+ ♜g6 5 gxf5+ ♜f5 6 f8♖ ♖xf8+ 7 ♜xf8 ♜xf6 lead to a draw.

### 3...h6

Threatening ...♖h7+, so the reply is forced.

### 4 f7+ ♜h7!

If 4...♜g7, then 5 f6+ ♜h7 6 f8♖ wins. The text-move sets a trap.

### 5 f8♜+!

The final finesse; Black is given no time to extract his queen from the corner. If 5 f8♖?, then 5...♖e5+ 6 ♜d7 ♖c7+ draws.

### 5...♜g8

After 5...♜g7 6 f6+ ♜g8 7 f7+ ♜g7 8 ♜e6+ ♜h7 9 f8♖ White wins on material.

### 6 f6

Black is forced to surrender his queen.

### 6...♖xf6+ 7 ♜xf6 ♜xf8 8 ♜g6

White wins; e.g., 8...♜e7 9 ♜xh6 ♜f6 10 ♜h7 ♜f7 11 h6 ♜f8 12 ♜g6 ♜g8 13 ♜f6 ♜h7 14 ♜e6 ♜xh6 15 ♜d6 and Black is too slow.

## 127) L. Mitrofanov

1st Pr., Rustaveli 800th Anniversary Tny, Vecherny Tbilisi, 1967

Material is about equal in this highly unbalanced position, but of more importance are the various passed pawns and the precarious position of the black king.

### 1 b6+

Forcing Black's king onto the back rank so that White's g-pawn can promote with check. After 1 g7?, 1...♜c7+ prevents Black's king from being driven back.

### 1...♜a8

Black must be ready to interpose his bishop on b8 in response to g8♖+, so 1...♜b8 would be a mistake.

### 2 ♜e1!

A spectacular move designed to block the first rank. The immediate 2 g7? is wrong due to 2...h1♖ 3 g8♖+ ♜b8 4 ♜xe5 (after other moves Black has no trouble forcing perpetual check) 4...♖al+ 5 ♜b5 ♖b2+ 6 ♜c6 (6 ♜c5 ♖c3+

and 6 ♜c4 ♖c2+ 7 ♜d4 ♖d2+ are also drawn) 6...♖c3+ 7 ♜d7 ♖xe5 8 ♖xg2 ♖d6+ 9 ♜e8 ♖e5+ 10 ♜f7 ♖xh5+ and White's king is too exposed for a win.

### 2...♜xe1

2...♜c4+ does not help Black; for example, 3 ♜b5 and now:

1) 3...♜xb6 loses to 4 g7.

2) 3...♜e5 4 h6 ♜xel (4...♜a3+ 5 ♜c6) 5 g7 h1♖ 6 g8♖+ ♜b8 7 a7 and White wins easily.

3) 3...♜xel 4 g7 h1♖ 5 g8♖+ ♜b8 6 a7 ♖h2 (6...♜a3+ 7 ♜c6 ♖h2 8 axb8♖+ ♖xb8 9 b7+ ♜a7 10 ♖gl+ ♜a6 11 ♖b6#) 7 axb8♖+ ♖xb8 8 ♖xb8+ ♜xb8 9 ♜xc4 ♜f3 10 d6 ♜c8 11 h6 ♜g5 12 ♜b5 and White wins.

### 3 g7 h1♖

3...♜c4+ 4 ♜b5 transposes to the previous note.

### 4 g8♖+ ♜b8

Thanks to White's second move, the first rank is blocked and Black has no queen checks. Therefore White has time for a quiet move.

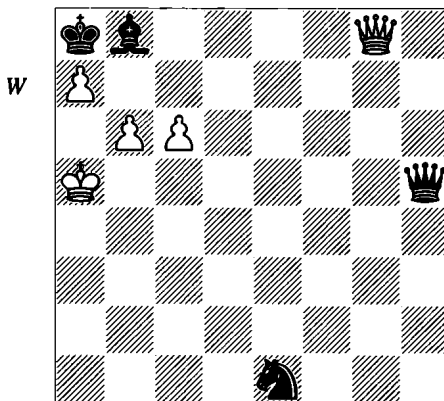
### 5 a7 ♜c6+!

The only way to play on, since 5...♜d7 6 ♖e6! forces mate in a few moves; e.g., 6...♜c5 7 axb8♖+ ♜xb8 8 ♖e8+ ♜b7 9 ♖c6+ or 6...♜e5 7 axb8♖+ ♜xb8 8 ♖xe5+ ♜a8 9 ♖e8+ ♜b7 10 ♖d7+.

### 6 dxc6

After 6 ♜b5? ♜xa7+ 7 bxa7 ♖fl+ 8 ♜a5 ♜xa7 Black defends, so White has to take the knight.

### 6...♖xh5+ (D)



Having cleared the fifth rank, Black has secured a queen check. Indeed, it now looks like

perpetual check, as 7 ♖a6? is met by 7...♗e2+. However, White has a final trump to play:

**7 ♗g5!!**

A remarkable move, allowing Black to take White's queen with check.

**7...♗xg5+ 8 ♖a6**

Now Black no longer has a convenient queen check and faces the threat of 9 b7#.

**8...♙xa7**

The only option is to remove one of the pawns.

**9 c7!**

An amazing position. Black is 13 points up on material and it is his turn to move, but he is lost. For example, 9...♗d5 10 c8♗+ ♙b8 11 b7+ or 9...♗a5+ 10 ♖xa5 ♖b7 (it is worth noting that without the e1-knight Black would be able to draw by 10...♙xb6+ 11 ♖xb6 forcing stalemate) 11 bxa7 and a pawn promotes.

## 128) A. Troitsky

=4th Pr., *Shakmatnoe Obozrene*, 1910

The battle of White's pieces against Black's advanced a-pawns turns out to be unexpectedly subtle.

**1 ♖c2+ ♖b3!**

1...♖b1 loses without a fight after 2 ♖e2 a1♗ 3 ♖c3+ ♗xc3+ 4 ♖xc3 a2 5 ♖b2+ ♖a1 6 ♖h2.

**2 ♖c1**

This looks very strong, since now 2...♖b2 loses to 3 ♖d2 a1♗ 4 ♖d3+ ♖a2 5 ♖b4+ ♖b2 6 ♖xa1 ♖xa1 7 ♖c1 a2 8 ♖c2#, but Black has a finesse that makes life more difficult for White.

**2...a1♗! 3 ♖xa1 ♖b2**

3...a2 4 ♖f1 gives Black nothing better than 4...♖b2, transposing.

**4 ♖f1!**

Only this square wins, for reasons which will become apparent only at the very end. Note that White cannot sacrifice his rook on a1 because his knight is too far away from the mating square b3; e.g., 4 ♖a2+? ♖xa2 5 ♖c2 ♖a1 and White is one tempo short.

**4...a2 5 ♖c4!**

After 5 ♖f2+ ♖b3 White can only win by repeating the position, while 5 ♖d2? a1♗ 6 ♖d3+ ♖a2 7 ♖b4+ ♖b2 is only a draw because Black no longer has the second a-pawn which led to his defeat after 2...♖b2.

The text-move clears d3 for a knight check. White is willing to let Black promote in order to coordinate his pieces for the attack.

**5...a1♗ 6 ♖d3+ ♖a2 7 ♖b4+ ♖b2**

With the knight optimally placed, it is time to use the rook.

**8 ♖f2+ ♖b1**

8...♖c1 9 ♖a2+ ♖b1 10 ♖b3 also wins for White.

**9 ♖b3**

Black must surrender his queen to avoid being mated. Note that Black cannot cover f1 by 9...♗a6 because the knight controls this square. This is the reason why White had to choose f1 at move four; had he played his rook to g1 or h1, Black would now be able to escape by playing 9...♗a7 or 9...♗a8 respectively.

## 129) Y. Bazlov

2nd Pr., Czechoslovakian Central Committee Tny, 1981

The material balance and position slightly resemble Troitsky's No. 128, but the play is completely different. White's first task is to deal with Black's threat of 1...a1♗.

**1 ♖d4**

More or less forced. The fork on b3 prevents immediate promotion, but Black has another pawn to push.

**1...b2**

White wins following 1...a5+ 2 ♖xb3 a1♗ 3 ♖f1+.

**2 ♖c3!**

Better than giving a pointless check by 2 ♖b3+? ♖d1 or 2 ♖f1+? ♖d2. With the text-move, White confines Black's king to the first rank and threatens mate in one.

**2...b1♖+**

The only move, but apparently a good one as the white king must move, relieving the back-rank mate.

**3 ♖d3!**

Also forced. Alternatives lead to a draw; for example, 3 ♖c4? ♖d2+! 4 ♖d3 a1♗ 5 ♖f1+ ♖xf1 6 ♖b3+ or 3 ♖b4? a5+! 4 ♖b5 (4 ♖c5 ♖d2) 4...♖d2 5 ♖c8+ ♖b2 6 ♖c2 ♖b3 and Black defends comfortably.

**3...a1♗**

3...♖d2 loses to 4 ♖c8+ ♖b2 5 ♖b8+ ♖c1 6 ♖e2+ ♖d1 7 ♖c3+, so Black must promote. As

3...a1 4 ♖f2 followed by ♖a2 costs Black a piece, it must be to a queen.

**4 ♖f1+!**

Surprisingly, White spurns the knight fork on b3. 4 ♖b3+? ♖b2 5 ♖xa1 ♖xa1 looks as though it might be a win, but Black can scrape a draw: 6 ♖c2 ♖a2! 7 ♖f2 (7 ♖a8 ♖a3+ 8 ♖c3 ♖b5+) 7...a5! 8 ♖h2 (8 ♖c1+ ♖a1 9 ♖b2 ♖c3) 8...a4! 9 ♖g2 ♖a3+! (this is possible now that the pawn denies the white king access to b3) 10 ♖c3+ ♖b1 11 ♖g5 ♖a2 and White cannot make progress.

**4...♖b2 5 ♖f2+ ♖d2**

Now that the white rook is more actively placed, 5...♖a3 6 ♖c2+ ♖b2 7 ♖xa1 ♖xa1 loses to 8 ♖c4! a5 9 ♖b3, so Black must jettison the knight.

**6 ♖xd2+ ♖b1**

The only square to avoid a knight fork. However, it now seems hard to make progress, since 7 ♖d1+? ♖a2! only leads to a draw.

**7 ♖e2!**

A surprising quiet move, which carries the deadly threat of 8 ♖c3+. The a6-pawn blocks what would otherwise be a saving check.

**7...♖a5**

7...♖a3+ 8 ♖c3+ leads to mate as in the main line.

**8 ♖c3+ ♖a1 9 ♖f2!**

Covering the check on f5 and placing Black in zugzwang. Not 9 ♖d1+? ♖b2 10 ♖b1+ ♖a3 11 ♖a1+ ♖b4 with a draw.

**9...♖a3**

The only way to retain control of a2, but now the queen is too close to the black king.

**10 ♖f1+ ♖b2 11 ♖b1#**

### 130) A. Manvelian

3rd Pr., *Shakhmaty v SSSR*, 1985

The essence of the struggle seems clear enough – White must prevent Black from promoting his a-pawn. However, appearances can be deceptive!

**1 ♖e2+**

The only move, for otherwise Black promotes straight away.

**1...♖b2**

1...♖c2 2 ♖d4+ ♖b2 (after 2...♖c1 White has no need to allow Black to return to the main line by 3 ♖e2+, since he can continue 3 ♖f4!,

cutting out any annoying knight checks and drawing comfortably) 3 ♖b3+ ♖c1 transposes to the main line.

**2 ♖b3+!**

Again forced.

**2...♖c2**

The only way to play for a win since after 2...♖xb3, 3 ♖c1+ eliminates the a-pawn.

**3 ♖d4+ ♖c1**

3...♖d2 4 ♖b8 is simple enough, but the text-move poses a real problem since Black wins after 4 ♖e2+? (White's only viable check) 4...♖d2.

However, all is not yet lost for White because after Black promotes, White has the tactical trick ♖c3+, with forks on b3 and e2 possible. While this is a potential saving idea, there are two problems White must deal with. The first is that in addition to ...a1 ♖, Black has the immediate threat of 4...♖d2+ forking the king and rook. The second is that even if White manages to play ♖c3+, Black still has the option of replying ...♖b2.

**4 ♖f5!!**

This astounding move is the way to solve both problems. White must move his king to deal with the threat of 4...♖d2+, but 4 ♖e5? a1 ♖ pins the knight, while 4 ♖d5? a1 ♖ 5 ♖c3+ allows Black to capture the rook with check. It is somewhat less clear why 4 ♖f4? fails, but the rather deep point is that after 4...a1 ♖ 5 ♖c3+ ♖b2 6 ♖c2+ ♖a3 7 ♖c3+ ♖a2 8 ♖c2+ ♖b2 9 ♖c1 (as in the main line), Black wins the rook by 9...♖d3+.

**4...a1 ♖**

Black has nothing better than to promote, since otherwise White just plays ♖b8 with an easy draw. If 4...♖d2, then 5 ♖a3.

**5 ♖c3+**

All three captures lead to the immediate loss of the queen, so Black must move his king.

**5...♖b2 6 ♖c2+**

The correct check. 6 ♖b3+? ♖a2 is hopeless for White.

**6...♖a3 7 ♖c3+**

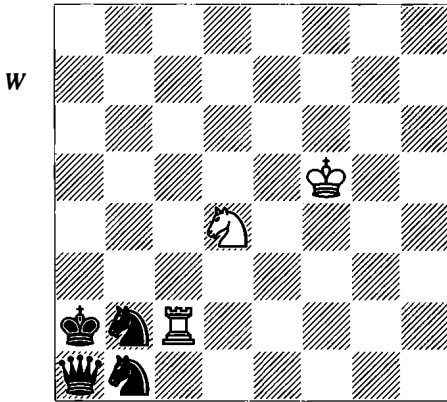
Having found a good idea, White isn't going to let it go. Black finds it surprisingly hard to evade the rook checks.

**7...♖a2**

After 7...♖a4 8 ♖c4+ the king has to return to a3.

**8 ♖c2+ ♜b2 (D)**

The only way to avoid the repetition, but it appears good enough as White has no more checks.

**9 ♖c1!**

A remarkable situation. Despite his huge material advantage, Black is unable to free himself. The b2-knight is the only piece that can move without immediate loss of the queen, but then White plays ♖c2+ and Black must either return to b2 or allow another repetition.

**9... ♜d3**

Or 9... ♖a3 10 ♜c2+.

**10 ♖c2+ ♖a3 11 ♖c3+ ♖a2**

After 11... ♖a4 the knight is now on d3 rather than d1, but it makes little difference since 12 ♖c4+ ♜b4 13 ♖xb4+ leads to the loss of the queen in any case.

**12 ♖c2+ ♜b2 13 ♖c1**

Black cannot make progress.

**131) P. Joitsa**

1st Pr., *Gambit* (Romania), 1994

The outlines of the battle are clear enough – White's material advantage is balanced against Black's passed pawns. However, as the struggle unfolds there are some surprising twists and turns.

**1 ♜c3!**

Other moves lose quickly: 1 ♖g6? a2 or 1 ♖d6+? ♖e5 2 ♜d1 ♖e3 3 ♜c3 g1 ♖ 4 ♖xg1 ♖xg1 with a hopeless position; e.g., 5 ♖g6 ♖d4 6 ♜a2 ♖d5 7 ♖f5 ♖c4 8 ♖e4 ♖b2 followed by ... ♖b3.

**1... ♖e3!**

This move causes maximum difficulty. In contrast, 1... ♖xc3 2 ♖c6+! ♖b2 (or 2... ♖b3 3 ♖xc1 a2 4 ♖g1) 3 ♖g6 allows White to draw comfortably.

**2 ♜d5+!**

A tricky move to find, because there are several plausible alternatives:

1) 2 ♜d1+? ♖f3 3 ♖g6 (3 ♖f6+ ♖f4) 3... a2 and Black wins.

2) 2 ♖e6+? ♖f3 3 ♜e2 (3 ♖g6 ♖e3) 3... ♖e3 4 ♖g6 ♖f2! and there is no defence to the threats of 5... a2 and 5... ♖xe2.

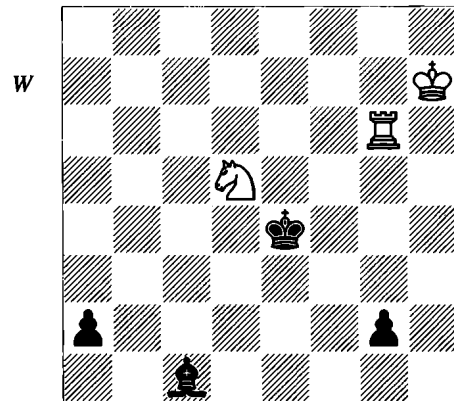
3) 2 ♖g6? ♖f3! (threatening 3... ♖e3) 3 ♜e2 (3 ♜b5 a2 4 ♜d4+ ♖f2 5 ♖f6+ ♖f4! 6 ♖xf4+ ♖e3 7 ♖g4 a1 ♖ 8 ♜c2+ ♖f3 and Black wins) 3... ♖e3 (White is a tempo up over line '2', but it is not enough to save the game) 4 ♖g8 (4 ♖g3+ loses to 4... ♖f2 5 ♖g6 ♖d2! followed by ... a2) 4... ♖f2! 5 ♖e6 a2 6 ♖a6 ♖xe2 7 ♖xa2+ ♖f1 8 ♖a1+ ♖e1 and the pawn promotes.

**2... ♖e4**

Or 2... ♖f3 3 ♖f6+! ♖e4 (not 3... ♖f4? 4 ♜xf4, when White wins) 4 ♜c3+ ♖e3 5 ♜d5+ (White keeps checking so long as Black's king stays on the e-file...) 5... ♖d4 (...but as soon as the king moves far enough away from the g-file, White switches his rook behind the pawn) 6 ♖g6 a2 7 ♜b4 and White is saved by the knight fork.

**3 ♖g6**

The only move, since 3 ♜c3+? ♖f3! 4 ♖g6 ♖e3 wins for Black (this position also arose in line '2' of the note to White's second move). However, after the text-move there seems to be nothing to prevent Black from pushing his a-pawn.

**3... a2 (D)**

With both pawns on the seventh rank, it looks as if White's resistance is at an end, but he has a remarkable resource. 3...♖f3 4 ♜f6+ transposes to the note to Black's second move.

**4 ♜xg2!**

White forces Black to promote. 4 ♘c3+? ♖f5! 5 ♘xa2 ♙g5! is hopeless for White.

**4...a1♖ 5 ♜a2!**

Here is the surprise. On an open board, the rook and knight combine perfectly to trap the black queen.

**5...♗d4 6 ♜a4! ♖xa4 7 ♘c3+**

White wins the queen.

### 132) M. Liburkin

=2nd Pr., 64 – *Shakhmatnoe Obozrene*, 1935

The material balance indicates a draw, but Black's minor pieces are clumsily placed and this gives White the opportunity to grab some material. In order to preserve drawing chances, Black must give up a piece in such a way as to incarcerate White's rook.

**1 ♜a2 ♙g1**

1...♘f1 loses at once to 2 ♖e1.

**2 ♙g2 ♖f3!**

Black cannot save the piece, so he goes on the attack.

**3 ♜xg1 ♖f2**

White's rook is severely restricted and has only one square to avoid immediate capture.

**4 ♜e1 e4**

Now the rook has no squares at all, and White faces the threat of ...e3 followed by ...e2+ and ...♘f1+. His only hope is to bring the knight back to the defence, but only one route is effective.

**5 ♘e6 e3**

The c5-square is the correct choice because from there the knight controls both d3 and e4 – these squares are both vital, as we shall see.

**6 ♘c5!**

6 ♘f4? is tempting, but then Black has a surprising draw by 6...e2+! 7 ♘xe2 (7 ♘d2 ♘e4+ also draws) 7...♘f1, when there is no defence against perpetual check by ...♘e3+ followed by ...♘f1+.

**6...e2+**

Black has no choice but to press ahead with his plan, since otherwise White will win with his extra material.

**7 ♘d2**

White's knight covers e4, so Black is forced to go for the check on f1.

**7...♘f1+ 8 ♖c1 ♖xe1**

After 8...♖e3, White wins with his extra material, although a little care is still required: 9 ♖c2 ♘h2 10 ♘d3 ♘f3 11 ♜b1! (11 ♜a1? ♘d4+ 12 ♖c3 ♘b5+ draws) 11...♘d4+ 12 ♖c3 ♘f3 13 ♜h1 ♘g5 14 ♜h8 and now that the rook is free, the win is easy.

**9 ♘d3#**

This study shows that quality is not related to analytical complexity. The play is simple, but the end result is very appealing.

### 133) J. Kling

*Schachzeitung*, 1864

These days one just has to look five-man positions up in a database to determine the best play, but without the assistance of a computer this is a very tough position to solve. The difficulty is largely due to the fact that the winning procedure is extremely counter-intuitive. White's rook appears very well placed on the seventh rank, but the win involves manoeuvring the rook to c1! Full credit to Kling, who found the basic winning idea by hand. However, Kling's analysis contained several inaccuracies, so we do not follow precisely his variations.

**1 ♜f8+**

This is forced, or else Black can draw by ...♖b8 or ...♜a1+.

**1...♜b8 2 ♜f3!**

Other moves along the f-file retain the win, but this is the only move to make progress. 2 ♜f6 and 2 ♜f5 are met by 2...♜b1, while 2 ♜f1 ♜b1, 2 ♜f4 ♜b4 and 2 ♜f2 ♜b2 all utilize stalemate to prevent White from making progress. In all five cases, White can only retain the win by repeating the position with 3 ♜f8+.

The text-move is best because 2...♜b3 may be met by 3 ♘xb3, so the stalemate defence is ruled out.

**2...♜b4**

The toughest defence. The alternatives are:

1) 2...♜h8 (other squares on the eighth rank lose similarly) 3 ♜f6 ♖b8 4 ♜c6 ♜d8 5 ♖b6 ♜h8 6 ♘d7+ ♖a8 7 ♖a6 ♜g8 8 ♜c7 ♜g6+ 9 ♘b6+.

2) 2...♜b2 3 ♘a4 and White wins at once.

3) After 2...♖b1 3 ♜c3 Black loses as in the main line, but rather more quickly as we have already reached the key zugzwang position.

**3 ♜c3!**

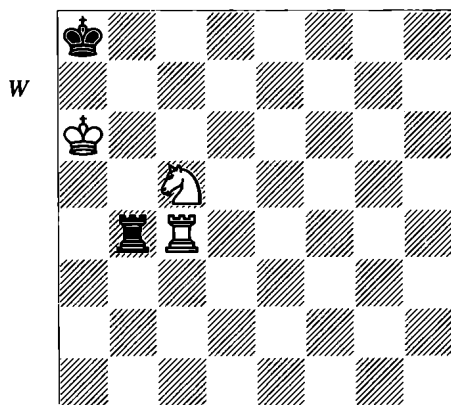
The point of playing the rook to the c-file is to prevent ...♕b8, which can now be met by ♖d7+. Now Black will try to avoid moving his rook to the inferior squares b2 and b4 for as long as possible.

**3...♖b1 4 ♜c4**

4 ♜c2 is just as good as the text-move since in both cases Black is in zugzwang and must move his rook away from the optimal square b1. 4 ♖d7? is premature as Black can draw by 4...♜c1!

**4...♖b4 (D)**

Black again uses stalemate to delay White's plans. After 4...♖b2 5 ♖a4 and 4...♖b8 5 ♖d7 ♜h8 6 ♜c7 White wins at once, while 4...♖h1 5 ♕b6 ♖b1+ (5...♖h2 6 ♕c7 is similar) 6 ♕c7 ♜a1 7 ♖d7 ♜a7+ 8 ♕c8 ♜a1 9 ♖b8 ♕a7 10 ♕c7 ♜a2 11 ♖b4 is also decisive.



**5 ♜c1**

The best square. White is aiming for a zugzwang position with ♜c3 vs ♖b1. After 5 ♜c2, 5...♖b2 delays matters.

**5...♖b1**

5...♖h4 6 ♖d7 ♜a4+ 7 ♕b6 ♜a6+ (7...♖b4+ 8 ♕c6 ♖b7 9 ♖h1) 8 ♕c7 ♜a7+ 9 ♕c8 and White wins as after 4...♖h1.

**6 ♜c3**

This is the key moment. Black is in zugzwang, since his rook must leave the optimal square b1; moreover, he cannot use the b-file stalemate trick because b3 is covered by the knight.

**6...♖b4**

6...♖h1 7 ♕b6 leads to a win as after 4...♖h1, while 6...♖b2 7 ♖a4 and 6...♖b8 7 ♖d7 are decisive.

**7 ♖d7 ♜a4+**

The reason why b4 is inferior is that there is no c-file stalemate trick: 7...♜c4 is met by 8 ♖b6+ followed by ♖xc4.

**8 ♕b6 ♜a6+ 9 ♕c7 ♜a7+ 10 ♕c8**

White has reached a standard winning position. The end might be 10...♜a1 11 ♖b8 ♕a7 12 ♕c7 ♕a8 13 ♖c6 ♜a6 14 ♖h3 followed by mate.

### 134) P. Arestov

2nd Pr., *Shakhmatny Vestnik*, 1993

White is a rook up, but such is the strength of the protected passed h-pawn that he is the one struggling to reach a draw. Black's immediate threats are 1...h1♖, 1...♖xg7 and 1...♕xd2.

**1 ♖f1+**

This is the only move, since giving up the knight by 1 ♖h7? ♕xd2 2 ♕d5 loses to 2...♕e3 3 ♕e5 ♖d4 followed by ...♕f2 and ...♕xg2.

**1...♕f2**

The only challenging reply. 1...♕e2 2 ♖xg3+ ♖xg3 3 ♖h7 is an easy draw, while 1...♕f4? loses after 2 ♖h7 ♖e3+ 3 ♕d3!

**2 ♖xg3!**

The best move. White allows Black to queen in the hope of meanwhile gaining enough material to draw. 2 ♖xh2? leads to a lost knight ending after 2...♖xg7, and now:

1) 3 ♖f3 ♕xg2 4 ♖h4+ ♕h3 5 ♖f3 g2 6 ♕d3 ♕g3 7 ♖g1 (or 7 ♕e4 ♕f2 8 ♖g5 ♖e6 9 ♖h3+ ♕f1 10 ♕f5 ♖c5 11 ♕f4 ♖d3+ and 12...♖f2) 7...♕h2 8 ♖f3+ ♕h1 9 ♕e3 ♖f5+ 10 ♕f4 ♖h4 and Black wins.

2) 3 ♖g4+ ♕xg2 4 ♕d3 ♖f5 5 ♕e4 ♕h1 6 ♕f3 g2 7 ♖f2+ ♕h2 8 ♖g4+ ♕g1 9 ♕f4 ♕f1 10 ♖h2+ ♕f2 11 ♖f3 ♖d4 12 ♖g5 ♖e6+ and the pawn promotes.

**2...♖d6+**

Black seeks to preserve his knight. The immediate 2...h1♖ 3 ♖f3+ ♕xg2 4 ♖xf5 ♕h3 5 ♕d4! is a draw since White's pieces defend one another.

**3 ♕b3!!**

The only square; other moves fail for various reasons:

1) 3 ♖c5? h1♚ 4 ♜h3 ♚g1 differs from the main line because Black is threatening to play ...♙xf1 with check, and so White has no time to play ♜c3 or ♜a3.

2) 3 ♖c3? h1♚ 4 ♜h3 ♚g1 5 ♜f3+ ♖e1 6 ♜e3 ♖e2 and Black frees himself.

3) 3 ♖d5? h1♚ 4 ♜h3 fails since 4...♚xg2+ is check.

4) 3 ♖b4? h1♚ 4 ♜h3 ♚g1 5 ♜b3 ♖e2 6 ♜g3+ ♖d2 7 ♜b2+ ♖d3 8 ♜b3+ ♖c2 and Black escapes from the checks.

**3...h1♚ 4 ♜h3!**

The material situation indicates a loss for White, so he has to keep Black's queen imprisoned in order to draw.

**4...♚g1**

The only move to avoid immediate loss of the queen, but now Black threatens ...♙xf1.

**5 ♜c3!!**

A remarkable move, threatening to give perpetual check by 6 ♜c2+ ♖e1 7 ♜c1+. Although Black has a free move, he is unable to disentangle his king and queen. Instead, 5 ♜f3+? ♖e1 6 ♜e3 ♚h2 and 5 ♜d3? ♖e2 6 ♜d2+ ♖e1 are winning for Black.

**5...♖e2**

The only way to avoid both perpetual check and loss of the queen. The various captures all allow a skewer: 5...♙xf1 6 ♜c1+, 5...♚xf1 6 ♜f3+, 5...♙xg2 6 ♜g3+ and 5...♚xg2 6 ♜c2+.

**6 ♜g3+!**

Not 6 ♜c2+? ♖d1 7 ♜d2+ ♖e1.

**6...♖d2**

6...♙f2 7 ♜f1 repeats.

**7 ♜c2+ ♖e3**

The king must move up the board, since 7...♖d1 8 ♜c1+ ♖xc1 9 ♜e2+ costs Black his queen.

**8 ♜c3+**

The squares d4 and f4 are out of bounds, so Black must return to the second rank.

**8...♙f2 9 ♜f1!**

The position has been repeated. Black cannot make progress; for example, 9...♚h1 10 ♜h3 or 9...♖e2 10 ♜g3+.

### 135) K.A.L. Kubbel

2nd Pr., *L'Eco degli Scacchi*, 1917

There is no immediate way for White to prevent the promotion of Black's pawn, so he can only

give a check and hope that this improves the situation.

**1 ♜d8+ ♖c5**

If the king moves to the e-file, then the rook can return to the first rank via e8 and e1.

**2 c7**

White must not play his moves in the other order as 2 ♜d3+? ♖b6 3 c7 allows 3...♙xc7, when Black wins.

**2...♜xc7 3 ♜d3+**

Now there are potential knight forks, so Black must choose his square with care.

**3...♖b6!**

3...♖c4 allows 4 ♜d4+! ♙xd4 (4...♖b5 5 ♜b4+ ♖a5 6 ♜c1) 5 ♜b4 a1♜ 6 ♜c2+, exchanging knights, while 3...♖b5 4 ♜b8+ ♖a5 5 ♜c1 is even simpler.

**4 ♜b8+**

4 ♜d6+? loses to 4...♖a7, so this check is forced.

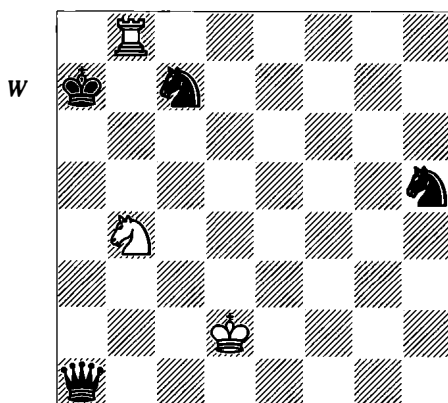
**4...♖a7!**

Now the checks have run out and White's rook still cannot return to the first rank. Although promotion cannot be prevented, White can aim to set up a standard checking mechanism with rook and knight.

**5 ♜b4!**

The pawn is attacked, so Black must promote.

**5...a1♚ (D)**



Many games have been saved by a perpetual check based on this formation, but normally it only works if Black's king can be prevented from marching down the edge of the board and thereby fleeing the checks. Here, there seems to be no such obstacle so it remains unclear how White can save the game.

6 ♖c6+ ♖a6 7 ♜b4+ ♖a5 8 ♖c6+ ♖a4 9 ♜b4+ ♖a3

This ends the checks, but thanks to an amazing resource it is not the end of the game.

10 ♜d4!!

This remarkable move saves the day. White sets up a new perpetual check based on ♜c2+ followed by ♜a4+, and since Black has to spend a tempo saving his queen he lacks the time necessary to nullify the checks (with ...♜d5, for example).

10... ♖h1

There is nothing better, since White's rook is indirectly defended by a knight fork. 10... ♖a2+ is also met by 11 ♜c2+.

11 ♜c2+ ♖a2 12 ♜a4+ ♖b3 13 ♜b4+

White draws by perpetual check.

### 136) J. Fleck

2nd Pr., *Phénix*, 1994

White's forces are going to have a hard time dealing with the b2-pawn, since they are currently stranded at the opposite end of the board.

1 ♜b6+!

After 1 ♜c7+? ♖xc5 Black wins easily; for example, 2 ♜e6+ ♖d6.

1... ♖e6!

Other possibilities cause White less difficulty:

1) 1... ♜xb6 2 cxb6 b1 ♖ 3 b7 ♖h1 + 4 ♖g7 ♖gl + 5 ♖h8 is a draw; Black can zigzag his queen up to g6 and h6, but it doesn't do him any good.

2) 1... ♖e4 2 ♜a4 is an easy draw.

3) 1... ♖d4 2 ♜d8+ ♖e4 (the other squares are no better) 3 ♜a4 draws.

2 ♜e8+ ♖f5

2... ♖f6 3 ♜d5+ is safe for White after 3... ♖f5 4 ♜c3 or 3... ♖f7 4 ♜e1, while 2... ♖f7 3 ♜e1 ♜c1 4 ♜xc4 b1 ♖ 5 ♜d6+ ♖f6 6 ♜e4 transposes to the main line.

3 ♜e1!

Not 3 ♜f8+? ♖g4 4 ♜f1 ♜c1, when the drawing idea no longer works.

3... ♜c1

The key moment. White has done his best, but now promotion cannot be further delayed. The drawing idea is still quite well hidden and hard to spot even at this late stage.

4 ♜xc4

White must not invert the order of his moves: 4 ♜e4? fails to 4... ♜d2 5 ♜b4 ♜cb3 and Black wins.

4... b1 ♖ 5 ♜e4!!

An incredible move. The rook is placed *en prise* to two different pieces, but it is invulnerable due to the knight forks. At the same time, White threatens a perpetual check with the knight on d6 and e8. 5 c6? ♖d3 6 ♜e3+ (6 ♜xc1 ♖f6 mates) 6... ♖e5 wins for Black as the discovered checks don't help.

5... ♖f6

Black can delay the perpetual slightly but cannot prevent it.

6 ♜d6

Now the draw is inevitable.

### 137) V. Korolkov

1st Pr., *Spartak* (Georgia), 1962

Both sides have advanced passed pawns, but whereas Black's b6-knight prevents the promotion of White's pawn, there is no obvious way White can prevent the promotion of Black's pawn.

1 ♜a8!

Already quite a tricky move. White intends to take both pawn and knight with check, but even this does not guarantee a draw because when Black promotes he is threatening mate on g3.

1... e1 ♖

Black calls White's bluff and simply promotes. Other moves cause fewer difficulties: 1... ♜xa8 2 c8 ♖ e1 ♖ 3 ♖xa6+ is a simple draw, while after 1... ♜c8 2 ♜xa6+ ♖b1 (2... ♖b2?! 3 ♜f4 would even favour White) 3 ♜d4! e1 ♖ 4 ♜al + ♖xal 5 ♜c2+ Black loses his newly-born queen.

2 ♜xa6+ ♜a4!

The best try, since otherwise White delivers perpetual check with his rook after 2... ♖b3 3 ♜xb6+ ♖a4 4 ♜a6+ ♖b4 (4... ♖b5 5 ♜d4+ transposes) 5 ♜b6+ ♖a5 6 ♜a6+ ♖b5 7 ♜d4+ and now Black should take the rook or else he would lose.

3 ♜xa4+

With his rook on the fourth rank, White has no immediate perpetual check.

3... ♖b2

3... ♖b3 4 ♜c5+ leads to an immediate draw after 4... ♖c2 (4... ♖c3 5 ♜a3+ defends g3 with

gain of tempo) 5 ♖c4+ ♖b1 6 ♖c1+ ♗xc1 7 c8♗.

4 ♖b4+!

If Black takes this rook, White can promote in safety.

4...♗a3

Now there are no obvious checks, yet Black still has a mate threat.

5 ♖b3+!

White is prepared to sacrifice his rook in order to gain a knight check at d4, although it is not yet clear why this is of any value for White.

5...♗xb3

Forced, or else White just promotes.

6 ♖d4+ ♗a4

6...♗a2 and 6...♗b2 are met the same way.

7 ♖e2!!

The astounding point behind White's play. The knight prevents the mate on g3, and at the same time covers the c1- and c3-squares, thus blocking off all the paths by which the queen could prevent White's promotion.

7...♗xe2 8 c8♗

Black has only a couple of harmless checks, so the position is a draw.

### 138) V. Pachman

1st Pr., *Šachové Umenie*, 1979

White's advantage of the exchange would be enough to win under normal circumstances, but here Black has counterplay based on his active king and the immediate threats of ...♗xc5 and ...f1♗+.

1 ♖e4+

Not 1 ♖e6+? ♗f5 2 ♖g7+ ♗g6! and White loses his knight.

1...♗f4!

Black not only attacks the knight, but also plans to meet 2 ♖xf2 with 2...♗g3.

Instead, 1...♗g4 2 ♗e2 and 1...♗f5 2 ♖xf2 allow White a simple win on material.

2 ♖h4+

This preliminary check is essential since 2 ♖xf2? ♗g3 3 ♖h5 ♖c3+ costs White his knight. 2 ♗e2? is also wrong since 2...♖d4+ followed by ...♗xe4 safely wins a piece.

2...♗e3

After other moves White can win by capturing on f2.

3 ♖xf2

Removing the dangerous pawn, but White is not out of the woods yet because his knight is hanging. 3 ♖g3? looks natural, but surprisingly it even loses to 3...♗d3! (threatening mate in two by 4...♖c3+ 5 ♗c1 ♗a3#) and after the forced sequence 4 ♖xb4 (4 ♗c1 ♗a3+ 5 ♗b1 ♖c3+ 6 ♗a1 ♖c2 mates) 4...♖c3+ 5 ♗c1 ♖a2+ Black reaches a winning knight and pawn ending.

3...♖c3+!

The best chance, as after 3...♗xf2 4 ♖xb4 ♖c3+ 5 ♗d2! ♖d5 6 ♖d4 and 3...♗e7 4 ♖g4+ ♗f4 5 ♖f6+ ♗g3 (5...♗e3 6 ♖d5+ and 5...♗g5 6 ♖h5+ are also winning for White) 6 ♖g4+ ♗f2 7 ♖e4+ ♗e3 8 ♗e1 White consolidates his material advantage.

4 ♗e1!

After 4 ♗c2? ♗xf2 5 ♖xb4 ♖d5 followed by ...♖e3+ and ...♖xg2 Black achieves a draw. Therefore White has no choice but to walk into the bishop and knight battery, but because the bishop is attacked Black doesn't have an especially dangerous check. After most moves White can play ♗f1 and win on material.

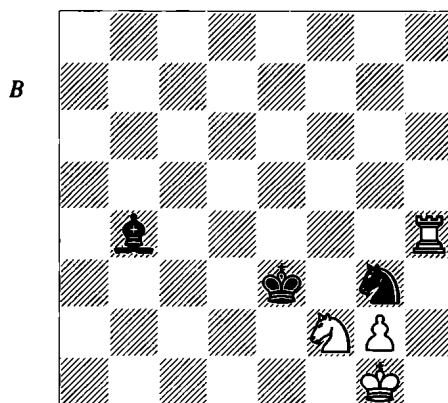
4...♖e4+

This is the most dangerous check. Black cuts the rook's line of attack to b4 and prepares to harass White's king even after it moves to f1.

5 ♗f1 ♖g3+

5...♖d2+ 6 ♗g1 leads to a technical win for White.

6 ♗g1 (D)



A critical moment. White is on the verge of consolidating so Black must keep his opponent off-balance.

6...♖e2+

Black continues his attack. It is also possible to try confining White's king to the corner, but such attempts eventually fail; for example:

1) 6...♙e1 7 ♖g4+ ♜f4 (7...♙e2 8 ♜h8) 8 ♜h6+ ♜g5 (8...♙e5 9 ♜a4 ♜d5 10 ♜h2 and the king escapes) 9 ♜h3 ♜f4 10 ♜f7 ♜f5 11 ♜h6 and White wins.

2) 6...♙e7 7 ♜h3 ♜f4 8 ♜d3+ ♜g4 9 ♜e5+ ♜f4 10 ♜g6+ is also decisive.

3) 6...♙c5 7 ♜g4 ♙d6 8 ♜c4 ♜e2+ (8...♙b8 loses to 9 ♜g4+ ♜d3 10 ♜c8 followed by ♜f2 or ♜h2) 9 ♜f1 ♜g3+ 10 ♜e1 ♙b8 11 ♜g4+ ♜d3 12 ♜c8 ♙a7 13 ♜f2+ ♜d4 14 ♜g8 and Black's bind is broken.

7 ♜h1

Not 7 ♜h2? ♙d6+, drawing.

7...♙e1

This is the point of Black's counterplay: he hopes to win a piece by pinning the knight. Instead, 7...♜g3+ 8 ♜h2 ♜f1+ 9 ♜gl is a technical win for White.

8 ♜h3+!

A surprising twist. After several moves in which Black has harassed White's king, the tables are suddenly turned. After 8 ♜g4+? (8 ♜d1+? ♜d2 is also a safe draw) 8...♜f4 9 ♜f2+ ♜g5! (Black need not repeat the position) 10 ♜g4+ (10 ♜e4 ♜g3+) 10...♜h5 Black wins a piece and draws.

8...♜xf2

Otherwise White wins on material.

9 ♜f3#

### 139) M. Matouš

2nd Pr., Československý Šach, 1997

White is a piece up in this game-like position, but Black's advanced pawn provides considerable counterplay. Only very precise play results in a win.

1 ♜f6+

There is nothing else; Black was threatening 1...♜f1, and if 1 ♜e1?, then 1...♜g7 draws at once.

1...♜g7 2 ♜e8+!

After 2 ♜h5+? ♜h6 3 g7 ♜f1 4 ♜g6+ ♜xh5 it is time for White to force a draw by 5 ♜g5+.

2...♜h6

2...♜g8 loses to 3 g7 e1 ♜+ 4 ♜xel ♜g2 5 ♜h1 ♜f7 6 ♜h8 followed by ♜f8+.

3 g7 ♜f1

Play becomes very sharp as both pawns hover on the edge of promotion. If 3...♜g2, then 4 ♜h1+ mates.

4 ♜g6+! ♜h5

Or 4...♜xg6 5 g8 ♜+ ♜h6 6 ♜g7+ ♜h5 7 ♜f6+ ♜xf6 8 ♜xf6 e1 ♜ 9 ♜g5#.

5 ♜f6+

Not 5 ♜g5+? ♜h4 6 ♜g4+ ♜h3! 7 ♜e4 (7 ♜g3+ ♜h4) 7...e1 ♜ 8 ♜xel ♜xel+, drawing.

5...♜xf6 6 ♜xf6

After 6 ♜g5+? ♜xg5 7 g8 ♜+ Black can just scrape a draw by 7...♜g6 (7...♜h4? loses to 8 ♜c4+) 8 ♜d8+ ♜g4 9 ♜d2 ♜f3 10 ♜d3+ ♜f2 11 ♜f5+ ♜e3! 12 ♜f4+ ♜d3 13 ♜d4+ ♜c2 14 ♜e3 ♜g2 15 ♜e4 ♜d1! 16 ♜d3+ ♜c1 and White cannot make progress.

6...e1 ♜ 7 ♜g5+!

7 g8 ♜? permits Black a draw after 7...♜al+ 8 ♜f7 ♜a7+! 9 ♜f8 ♜a8+ 10 ♜g7 (or else perpetual check) 10...♜xg8+ 11 ♜xg8 ♜xg6.

7...♜h6!

After 7...♜h4 8 g8 ♜ there is no perpetual; e.g., 8...♜c3+ 9 ♜g6 ♜d3+ (9...♜c6+ 10 ♜h7 ♜e4+ 11 ♜h8 ♜d4+ 12 ♜g7 ♜d3 is similar) 10 ♜h6 ♜d6+ 11 ♜h7 ♜e7+ 12 ♜g7 ♜e4+ 13 ♜h8 and the checks run out.

8 g8 ♜+!

Not 8 g8 ♜? setting up a stalemate. Amongst many other moves, the simple 8...♜e5+ draws.

8...♜h7 9 ♜f7

Black has no defence to the twin threats of 10 ♜h5# and 10 ♜f6+.

9...♜e2 10 ♜f6+ ♜h6 11 ♜g6#

### 140) D. Gurgenidze

= 1st/3rd Pr., *Komunisti* (Tbilisi), 1973

White has an extra piece, but his rook is under attack and both black pawns are very dangerous.

1 ♜g3+

Defending the rook with gain of tempo is White's only hope. Not 1 ♜f1? ♜c1 2 ♜f2+ (2 ♜g3+ ♜e5 3 ♜f5+ ♜e6 is also losing for White) 2...♜d4 3 ♜d1 a2 and the a-pawn promotes.

1...♜d4

This square turns out to be rather unfortunate, but the alternatives also have tactical defects; for example, 1...♜e3 2 ♜f1+ or 1...♜d3 2 ♜d5+ ♜c2 3 ♜e4 d1 ♜ 4 ♜xd1 ♜xd1 5 ♜xa3 ♜c4 6 ♜d6 with an easy draw.

**2 ♖f1!**

White should not give another check, since 2 ♖e2+? is refuted by 2...♗d3! (2...♗e3 3 ♖e5+ ♗f2 is not clear as 4 ♖c3! ♖xc3 5 ♖d5! leads to a draw) 3 ♗xa3 (3 ♖d5+ ♗xe2 4 ♗xa3 ♖c3+) 3...♖d8! 4 ♖f1 (4 ♖f4+ ♗e4) 4...♗xe2 5 ♖b1 d1 ♖ 6 ♖xd1 ♖xd1 7 ♗b4 ♗d3 and Black's king is too close. 2 ♖f4+? ♗e5 3 ♖f1 ♖c1 and 2 ♖f7? a2 cause Black even less trouble.

After the text-move, Black cannot continue 2...♖c1 because of the fork at e2.

**2...a2**

Black prepares to push his a-pawn home with either 3...♖c1 or 3...♖b8+ followed by ...♖b1. Slower methods also fail; for example, 2...♗d3 3 ♖d1 ♖c1 (3...a2 4 ♖f1 ♖c2 5 ♖xd2 ♖xd2 6 ♖a1 also defends) 4 ♖xd2+ ♗xd2 5 ♗xa3 ♖c3+ 6 ♗b4 ♖xg3 7 a5 and White draws.

**3 ♖d1!**

Threatening to gobble up both enemy pawns, so Black must move his king. 3 ♖e2+? fails to 3...♗d3.

**3...♗e5**

3...♗d3 4 ♖f1 draws (see the analysis of 2...♗d3), so this is forced, renewing the threat of ...♖c1.

**4 ♖e2**

The only way to prevent 4...♖c1, so Black chooses an alternative route to the first rank.

**4...♖b8+**

4...♖c1? even loses after 5 ♖xc1 a1 ♖ 6 ♖d3+, but following the text-move it looks all over for White, since he either loses his rook or Black promotes his a-pawn.

**5 ♗a3!**

This move is the key to White's defence. His plan is to trap Black's newly-born queen.

**5...♖b1 6 ♖xd2! a1 ♖+ 7 ♖a2**

Black must lose either his queen or his rook (after 7...♖b3+), with a clear draw in either case.

**141) N. Elkies**

1st Pr., Israel Ring Tny, 1987

In order to avoid confusion for over-the-board players who may not be familiar with the conventions of chess composition, I stated explicitly by the diagram that White may still castle. For more on this, see the solution to No. 57.

**1 g7**

Other moves are inferior: 1 0-0-0? ♖b8 and White cannot both defend his last pawn and cope with the g3-pawn, or 1 ♖g5? g2 2 ♖f3+ ♗g3 3 g7 ♖b8 4 ♖g1 ♖g8 5 ♖a7 ♗g4, when the black king heads back to capture the g7-pawn.

**1...g2**

After 1...♖b8 2 ♖f8 g2 3 ♗d2 ♖b2+ 4 ♗c3 White wins comfortably.

**2 g8 ♖!**

Not 2 g8 ♖? ♖b8! followed by ...g1 ♖+, when Black draws.

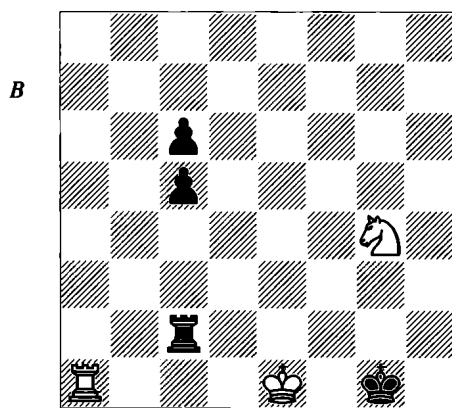
The text-move appears decisive, since after 2...g1 ♖+ 3 ♖xg1+ ♗xg1 4 0-0-0+ Black loses his rook. However, Black has a cunning defence which almost saves the day.

**2...♖c2!!**

Simply preventing castling and threatening to draw by promoting the g-pawn.

**3 ♖f6!**

An unlikely-looking move, as it allows Black to force the exchange of queens. 3 ♗d1? ♖f2 4 ♖b8+ ♗h1, 3 ♖a2? ♖xa2 4 ♖xa2 ♗h1 and 3 ♖b8+? ♗h1 all lead to a draw.

**3...g1 ♖+ 4 ♖xg1+ ♗xg1 5 ♖g4!! (D)**

A remarkable position has arisen in which Black is almost paralysed; for example, 5...♖b2 6 0-0-0+, 5...♖g2 6 0-0-0#, 5...♖c3 6 ♗d2+, 5...♖c4 6 ♗e2+ ♗g2 7 ♖e3+, 5...♗g2 6 ♖e3+ and 5...♗h1 6 ♖e3 ♖h2 7 0-0-0# are all decisive. That only leaves the c-pawn to provide a possible move.

**5...c4 6 ♖e3**

Now the rook has to move.

**6...♖f2**

6...♖h2 is met the same way.

7 0-0-0+ ♖h2 8 ♜g4+

A study with a distinctly humorous touch.

#### 142) O. Pervakov and A. Grin

2nd Pr., 64-Shakhmatnoe Obozrene, 1988

Both advanced h-pawns are about to promote, but Black's will promote with check so White has to take some defensive action.

1 ♜g3!

The only winning try, since 1 ♜f1? ♜b1+ and 1 ♜xh4? h1♚+ 2 ♜xh1 ♜b1+ cause Black no problems at all.

1...hxcg3

1...♜b8 loses to 2 ♜xh4, so this is forced, but now White can promote himself and at the same time stop Black promoting.

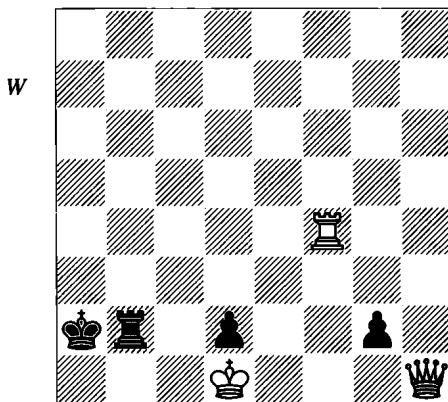
2 h8♚ h1♚+!

2...♜b1+ 3 ♜xd2 h1♚ leads, not surprisingly, to a quick mate after 4 ♚g8+ ♜b3 5 ♜a4+ ♜b2 6 ♚g7+.

The text-move appears to be no better, since 3 ♚xh1 ♜b1+ 4 ♜c2! sets up a deadly mate on the a-file. However, Black has something more subtle in mind.

3 ♚xh1 g2! (D)

This is the idea. Black attempts the deflect the white queen onto the vulnerable second rank. 3...♜b1+ 4 ♜c2 ♜b2+ 5 ♜d3 is hopeless for Black.



4 ♚h2!!

The only move; White has to retain control of g1 without losing the queen to a skewer along the second rank. Other moves only draw:

1) 4 ♚xg2? ♜b1+ 5 ♜c2 ♜b2+ 6 ♜c3 d1♜+! costs White his queen.

2) 4 ♜a4+? ♜b3 5 ♚h3+ ♜xa4 and White still can't take on g2 because of ...♜b1+ followed by ...♜b2+.

3) 4 ♚g1? ♜b1+ 5 ♜c2 ♜c1+ and it's time for White to force a draw by 6 ♜xd2 ♜xg1 7 ♜g4.

4...♜b1+

4...g1♚+ 5 ♚xg1 ♜b1+ 6 ♜c2 is still a win for White, so the text-move is the only option.

5 ♜xd2 g1♚

Usually, having the first check proves decisive in such positions, but here White has to take care as his queen is under attack.

6 ♜c3+!

This queen sacrifice is the only way to win. After 6 ♜a4+? ♜b3 White has no follow-up.

6...♜a3

6...♚xh2 7 ♜a4#.

7 ♚a2+!

White is determined to give up his queen. Now Black is forced to accept.

7...♜xa2 8 ♜a4#

A neat finish. Another version of this study by the same composers appeared with the position w♜c2, ♜f1, ♜f5, ♜h7 vs b♜a2, ♜b8, ♜a6, d2, h3, h4 and the intended solution 1 ♜f4! ♜b2+! 2 ♜d1 h2 3 ♜g3! with the further play as above. However, in this version White can also win by 1 ♜e7 h2 (1...♜h8 2 ♜f5 d1♚+ 3 ♜xd1 ♜xh7 4 ♜c2 ♜a3 5 ♜c6) 2 ♜d5! a5 (2...♜h8 3 ♜c3+ ♜a3 4 ♜b1 d1♚+ 5 ♜xd1 ♜b4 6 ♜d4+ ♜c5 7 ♜xh4) 3 ♜c3+ ♜a3 4 ♜a1+ ♜b4 5 ♜a4+ ♜c5 6 ♜xh4 ♜h8 7 ♜xd2, so I was forced to reject it.

#### 143) A. Sochniev

1st Pr., Schakend Nederland, 1986

The position favours Black despite White's extra exchange, because his passed pawn is far more advanced.

1 ♜b8+

1 ♜c8? fails to 1...♜c3 2 ♜xc3+ ♜xc3 3 ♜f4 ♜d2, when White's pawn only reaches the seventh rank.

1...♜b6!

This sacrifice is the only winning try, because after any king move White can play ♜c8(+) with an easy draw.

2 ♜xb6+ ♜a3!

Or:

1) 2...♖a2 3 ♜b2+! ♜xb2 4 ♜e1 ♜f6 5 a6 ♜d5 6 a7 ♜b6 7 ♜g4 c1♜ (7...c1♞ 8 ♜d3+ ♜c2 9 ♜xc1 ♜xc1 10 ♜f5 is also a draw) 8 ♜f5 with an easy draw as White can eliminate Black's last pawn.

2) 2...♖a4 3 ♜b4+ ♜xb4 4 ♜e1 is also a draw.

After the text-move there is no b-file rook sacrifice, so White has to find another method.

### 3 ♜c6!

Sacrificing the rook to free the d-pawn seems pointless, because Black's knight can make it back in time to cover d8. However, there is a deeper motivation behind White's play.

### 3...dxc6 4 d7 ♜g5+ 5 ♜h2!

The only square, for reasons which will soon become apparent.

### 5...♜f7 6 a6

Not 6 d8♞? ♜xd8 7 a6 ♜e6 followed by ...♜c7, when Black wins.

### 6...c1♞ 7 d8♞! ♜xd8 8 a7

A remarkable position. White is a whole queen down and it is Black to move, yet the position is a draw. There is no way that the queen can cover a8, and Black has only one check. Had White played his king to any other square at move five, then Black would be able to check and stop the pawn.

### 8...♞h6+ 9 ♜gl

Once again the queen cannot cover a8 (the preliminary 7 d8♞ was intended to stop the queen retreating to the back rank at this point).

### 9...♞c1+ 10 ♜h2

If White is allowed to promote, then Black's extra pawn will not be enough to win, while otherwise Black cannot make progress. Thus it is a draw.

## 144) B. Rivkin

1st Place, theme 1, 11th USSR Team Ch., 1982

White is only marginally ahead on material (the exchange for a pawn) and, in view of the limited number of pieces left on the board, it might seem that Black should be able to draw. Indeed, White can only hope for a win by playing for a direct attack against the enemy king.

### 1 ♜e4!

Confining Black's king. The obvious alternative is to take one of Black's pawns, but this does not win:

1) 1 ♜xf6? hxg4 2 ♜e4 ♜f3 3 ♜f7 ♜h5 and Black will soon be able to take the h2-pawn in safety, with a draw.

2) 1 gxf5? ♜xh5 2 ♜xf6 ♜g4 3 ♜xg6+ (3 ♜f7 ♜h3) 3...♜h3 4 ♜h6+ ♜h4, followed by ...♜ef3 and ...♜xh2, is a draw. Note that while there are some winning positions with ♜+♜ vs 2♜, the general result is a draw and the attacker normally requires a significant advantage in order to win.

The text-move carries the brutal threat of 2 ♜f7 and 3 ♜h7#. Black has only one way to avoid a quick mate.

### 1...♜f3!

1...hxg4 fails to 2 ♜f7 g5 3 ♜xf6+ ♜h5 4 ♜g3+ ♜h4 5 ♜h6#.

### 2 h4!

Again playing for the attack and renewing the threat of mate by 3 ♜f7 and 4 ♜h7#. 2 ♜f7? ♜g5 3 ♜xg5 ♜xg5 4 gxf5 only draws because White's king is in no position to defend his last pawn; e.g., 4...♜e3 5 h6 (5 hxg6 ♜xg6 6 ♜g7+ ♜h5 7 ♜f7 f5 8 ♜e6 f4 draws) 5...♜xh6 6 ♜xf6 ♜g4 7 ♜f3 ♜g5 8 h3 ♜f6+ 9 ♜g7 ♜h5+ 10 ♜f7 ♜h4 11 ♜xg6 ♜g3 and Black takes the pawn in safety.

### 2...♜gxh4

Forced, but apparently strong as White seems unable to avoid the exchange of his last pawn.

### 3 g5+!

A surprise. White gives his pawn up voluntarily in order to strengthen his attack.

### 3...♜xg5

3...fxg5 4 ♜f7 mates.

### 4 ♜d6!

The threat is 5 ♜xf6 with mate next move by ♜f5# or ♜f7#, depending on which knight Black moves.

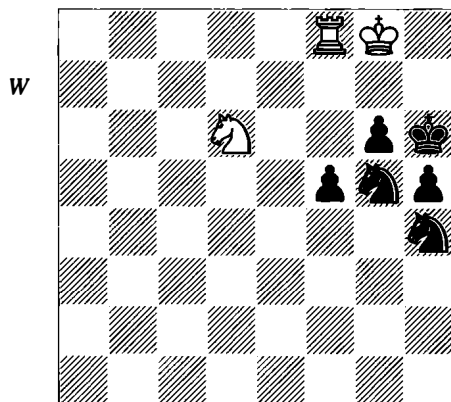
### 4...f5 (D)

This is Black's only possibility because moving the g5-knight allows mate in one by 5 ♜f7#, while moving the h4-knight allows mate in two by 5 ♜f5+! gxf5 6 ♜xf6#.

The text-move makes it clear that Black is restricted to pushing his f-pawn, but it is still not obvious how White is going to create a decisive threat.

### 5 ♜f6!

5 ♜f7? is wrong because it blocks the f7-square and Black can safely move the g5-knight. Waiting by 5 ♜h8? is also bad, because sooner



or later White will have to take the f-pawn and then Black draws, for example after 5...f4 6 Rxf4 Qf5. Finally, 5 Rxe8? loses touch with the f6-square, and so Black can play 5...Qhf3.

The text-move maintains the mates on f7 and f5, so once again Black has to push the pawn.

**5...f4 6 Rxe6!**

Suddenly White's plan becomes clear. He intends to transfer his rook to the seventh rank without blocking the f7-square on the way.

**6...f3**

Once again forced.

**7 Re7! f2**

Moving the h4-knight leads to the same end.

**8 Rh7+! Qxh7 9 Qf7#**

A beautiful slow-motion attack.

#### 145) A.I. Kotov and L. Mitrofanov

3rd Pr., *Molodoi Leninet*s (Kurgan), 1977

The obvious line is 1 Rxd3? d1 R2 Rxd1 Rxd1 3 Qc6 d3 4 g6, hoping for 4...d2? 5 b6 Rb1 6 g7 d1 R7 g8 R with a decisive attack, but Black can play 4...Rc1! 5 g7 Rgl 6 b6 Rxc7 and it is White who loses. It follows that instead of trying to stop the d-pawn, White should play for direct threats against Black's king.

**1 Qc6! d1 R**

With Black's rook tied to the a-file, there is nothing else.

**2 b6**

Threatening mate in one. If now 2...Ra7, then 3 b7+ Rxb7 4 Ra3+ mates.

**2...Rb1**

Now what? Black is a queen for knight up and is attacking the b6-pawn. If 3 Qc7?, then 3...Rh7+ wins.

**3 Rf1!**

This move is the answer. By pinning the queen against the rook, White paralyzes both pieces. Although there is no instant threat, Black has to take some action to counter the eventual promotion of White's g-pawn.

**3...d3**

Since neither queen nor rook can move without a quick mate, this is the only possibility.

**4 g6 d2 5 Rxb1**

White must not blindly push the g-pawn without thinking, since 5 g7? lets Black off the hook after 5...d1 R6 Rxd1 Rf5+ 7 Rxd7 Rxd7+ 8 Qxd7 Rgl, with a draw.

**5...Rxb1 6 g7 d1 R7 g8 R**

White is threatening both 8 Qc7+ and 8 Ra2+, so the reply is forced.

**7...Rb3 8 Rf8!**

8 Rh8? Rf7 and 8 Rd8? Rxb6 are obviously wrong, but 8 Re8? appears quite tempting until one notices 8...Re1! 9 Rxe1 (Black also draws after 9 Rf8 Re8+ 10 Rxe8 Rf7 with ...Qc7+ to come) 9...Re6+ 10 Qc7 Re7+ 11 Qc8 Rxc7+ with stalemate.

**8...Rf1**

A good try, since 8...Rg3 fails to 9 Rh8! Rb2 10 b7+ Rxb7 11 Ra1+ forcing mate.

After the text-move, 9 Rxf1? doesn't work owing to 9...Re6+ 10 Qc7 (10 Qd8 Rd6+) 10...Re7+ 11 Qc8 Rxc7+. However, moving the rook off the b-file allows another possibility.

**9 Ra3+! Rxa3 10 b7#**

#### 146) A. Kuznetsov

2nd Pr., *Revista de Sah*, 1968

Material is equal, but White is definitely struggling to draw because Black's two connected passed pawns are far stronger than White's single advanced a-pawn.

**1 a7**

White has to make the most of his pawn, as it is his only major asset.

**1...Ra6 2 Qb7 Rxa7+**

A simple but very dangerous plan. Black sacrifices his rook to eliminate White's pawn, banking on his own pawns to carry the day. 2...Ra4 3 a8 Rxa8 4 Qxa8 is less troublesome, as White draws by 4...g2 (4...g3 5 Qe2 g2 6 Qg3+ Qgl 7 Qe2+ is perpetual check) 5 Rh8 h1 R6 Rxh1 Qxh1 7 Qf5 and if Black

moves his knight to help advance his own pawn, White can push his a-pawn.

**3 ♖xa7 ♜b5+!**

A second sacrifice deflects the white knight away from the fight against Black's pawns. 3...♜g2 4 ♜h8 h1 ♖5 ♜xh1 ♜xh1 6 ♜f5 is essentially the same as the note to Black's second move.

**4 ♜xb5 g3**

The pawns start to look really menacing.

**5 ♜f1+**

This is forced, or else Black wins by ...g2 and ...g1 ♖.

**5...♜g2**

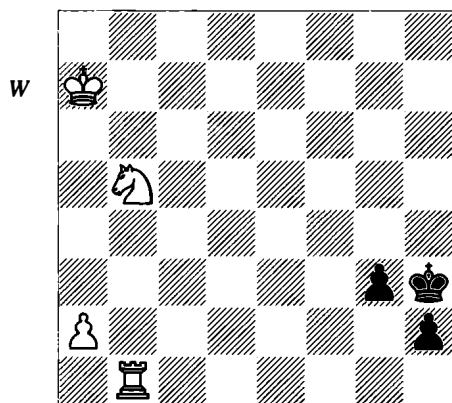
The critical moment, and it looks bad for White. Black's plan is simple: after White moves the rook, Black will play ...♜h3 followed by ...g2. Spotting the drawing idea requires a good deal of imagination.

**6 ♜b1!**

No other square will do, for reasons which soon become clear. 6 ♜c1? loses to 6...♜h3 7 ♜c8 g2 8 ♜h8+ ♜g3 9 ♜g8+ ♜f2 10 ♜f8+ ♜e3 11 ♜e8+ ♜d2, when White's checks soon run out.

**6...♜h3 (D)**

Not 6...h1 ♖? 7 ♜xh1 ♜xh1 8 ♜d4, when White even wins. If 6...♜f2, then 7 ♜h1 (White can also draw by the same method as in the main line) 7...♜e3 8 a4 g2 9 ♜xh2 g1 ♖ 10 ♜h3+ ♜e4+ 11 ♜a6 draws easily.



**7 ♜a3!**

This move looks extremely odd, but the point is to set up a perpetual check along the b-file. 7 ♜h1? loses to 7...g2.

**7...g2**

There is nothing better.

**8 ♜b3+**

Surprisingly, there is no escape for Black's king. All the squares along the b-file are covered except for b2 and b4, and these squares don't matter because c2 and c4 are out of bounds for the king. The finish might be 8...♜g4 9 ♜b4+ ♜f5 10 ♜b5+ ♜e6 11 ♜b6+ ♜d7 12 ♜b7+ ♜c8 13 ♜b8+ ♜c7 14 ♜b7+ ♜c6 15 ♜b6+ ♜c5 16 ♜b5+ ♜d4 17 ♜b4+ ♜c3 18 ♜b3+ ♜d2 19 ♜b2+ and the checks continue indefinitely.

### 147) G. Kasparian

=1st Pr., Kubbel Memorial Tny, *Shakhmaty v SSSR*, 1945

In this game-like position, White's hopes lie entirely with his h-pawn.

**1 ♜g7!**

White must already take care. 1 h7? looks natural, but Black draws by 1...♜e6+ 2 ♜f3 ♜h6 3 ♜c5+ ♜xd3 4 ♜xc7 ♜xh7, eliminating White's last pawn. The text-move threatens 2 h7 ♜h6 3 ♜h5, so Black is more or less forced to take the pawn.

**1...♜xh6**

After 1...♜f4 2 h7 ♜h6 3 ♜h5 ♜xh5 4 ♜xh5 ♜e5 5 ♜f4 ♜d4 6 ♜g6 ♜f6 7 ♜xe7 followed by ♜g6 White wins easily.

**2 ♜c5+ ♜d4 3 ♜c4+**

A necessary interpolation. 3 ♜xc7? ♜h2+ is an immediate draw.

**3...♜e5 4 ♜xc7**

White has won a piece and still has a pawn so normally the win would be straightforward, but in this position there are complications because the g7-knight is short of squares.

**4...♜f6 5 ♜e8+**

5 ♜e3? ♜xg7 6 ♜xe7+ ♜f6 7 ♜e4 ♜h7 is a simple draw.

**5...♜f7 6 ♜c8**

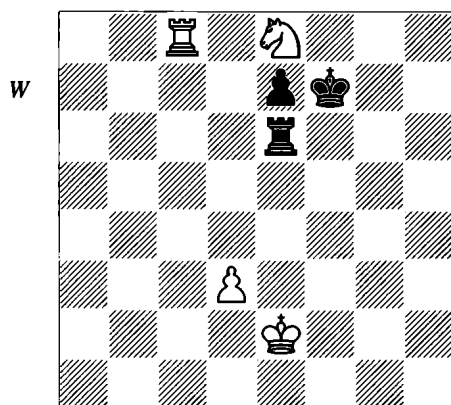
Now Black has to decide how to proceed with his counterplay. The basic idea is to meet ♜c7 with ...♜c6, paralyzing both rook and knight; indeed, Black can force this by playing ...♜g6, threatening ...♜g8, which obliges White to move his knight (note that 6...♜h8 fails to 7 ♜d6+). Although White has a spare tempo, he can't put this to much use.

**6...♜e6+! (D)**

This gives White the greatest chance to go wrong. The alternative is the immediate 6...♖g6, and now:

1) 7 ♖a8? ♜c6 is a draw as White can never free his knight; for example, 8 ♖e3 ♜c1 9 d4 ♜c2 10 ♖e4 ♜c1 11 d5 ♜c2 12 ♖e5 ♜e2+ (even 12...♜c1 13 ♖d6+ exd6+ 14 ♖xd6 ♜d1! is a draw) 13 ♖d4 ♜c2 and progress is impossible.

2) 7 ♖c7! ♜c6 8 ♖d2! transposes to the main line.



### 7 ♖d1!!

This is the only move to win. 7 ♖d2? ♜g6 8 ♖c7 ♜c6 arrives at the key reciprocal zugzwang with White to play. White can neither make progress nor transfer the move to Black; for example, 9 ♖d1 (9 d4 ♜c4 10 ♖d3 ♜c1 11 ♖e4 ♜c2 12 ♖e5 ♜c1 13 d5 ♜c2 doesn't help White) 9...♜c3 10 ♖e2 ♜c2+ 11 ♖e1 ♜c1+ 12 ♖d2 ♜c6. 7 ♖f2? ♜g6 8 ♖c7 ♜c6 is similar; if White can't put Black in zugzwang straight away, no amount of manoeuvring will help him.

### 7...♜g6

Other rook moves lose the same way; e.g., 7...♜a6 8 ♖c7 ♜c6 9 ♖d2!. However, the text-move is more forcing as ...♜g8 is a threat.

### 8 ♖c7!

8 ♖a8? ♜c6 is a draw, as mentioned in the note to Black's sixth move.

### 8...♜c6 9 ♖d2!

Now the reciprocal zugzwang arrives with Black to move. Whatever he plays, White has a tactical trick to break the pin along the c-file.

### 9...♜c5

9...e6 (or 9...e5) 10 ♖b5! and 9...♖g6 10 ♖d5! are also winning for White.

### 10 ♜f8+! ♖xf8 11 ♖e6+

White wins with his extra piece.

## 148) D. Przepiorka

*Szachista Polski, 1920*

The material situation is in Black's favour so White's only hope is to exploit the awkward position of Black's king in the corner of the board.

### 1 ♖f6

This move looks very strong. The queen must move down the g-file, but then 2 ♜e8+ and 3 ♜g8+ wins it. Any king and pawn endings which result will be winning for White because Black cannot stop the a-pawn.

### 1...♜g1!

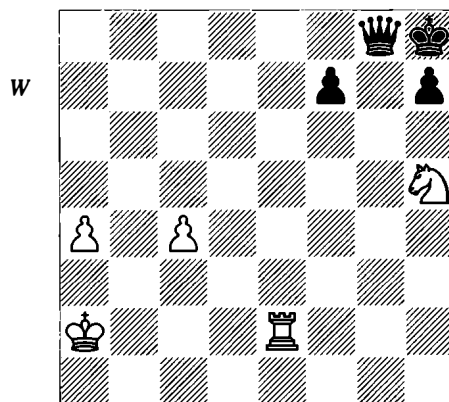
1...♜g3 2 ♜e8+ ♖g7 3 ♖h5+ and 1...♜g5 2 ♜e8+ ♖g7 3 ♜g8+ ♖h6 4 ♜xg5 are easy wins for White. The text-move is a cunning defence, based on the stalemate which arises after 2 ♜e8+? ♖g7 3 ♜g8+ ♖h6 4 ♜xg1. With White's main idea neutralized, it is hard to see how he can achieve more than a draw.

### 2 ♖h5!

With a new threat of 3 ♜e8#.

### 2...♜g8! (D)

2...h6 destroys the stalemate and loses to 3 ♜e8+ ♖h7 4 ♖f6+, so the queen has to return to g8.



After the text-move, however, White again appears to have run out of ideas. He can, of course, repeat the position by returning to f6, but the win is elusive. This is one of those positions where you either see the idea or you don't; the winning point is not that deep, but it requires a certain amount of imagination to spot it.

**3 ♖g7!!**

A stunning move. White again threatens ♖e8, and this time there is no escape for Black's queen along the g-file. If Black takes the knight, then White forces a won king and pawn ending.

**3... ♗xg7**

**3... ♗xg7 4 ♖e8+** is the same.

**4 ♖g2+ ♗f8 5 ♖xg8+ ♗xg8 6 a5**

This study can only really be appreciated by attempting to solve it oneself.

### 149) G. Zakhodiakin

1st Pr., Trud, 1950

White is too far behind on material to save the game by normal means, so he must make use of his active pieces and attacking chances.

**1 ♖e6+!**

**1 ♖e8+?** ♗h8 gets White nowhere.

**1... ♗h7!**

The only winning chance, since **1... ♗g8 2 ♖c8+ ♗h7 3 ♖f8+ ♗g7 4 ♖e6+** forces an immediate draw.

**2 ♖c7!**

**2 ♖f8+?** ♗g8 **3 ♖c8** is tempting, but Black can win by **3... ♗e2+! 4 ♖e6+ ♗h7 5 ♖c7 ♖xg3 6 ♖d7 ♖h4+ 7 ♗f8+ ♗h8**, when White's attack runs out of steam.

After the text-move, however, White even threatens to mate by **3 ♗f6+ ♗g8 4 ♖c8+**, etc., so Black has to take defensive measures.

**2... ♖xg3!**

**2... ♖d4 3 ♖xd4 ♗xd4 4 ♗e6+ ♗g8 5 ♖c8+** is perpetual check, while **2... ♖b6 3 ♖b7** costs Black his bishop and White draws comfortably after **3... ♗d5 4 ♖xb6 ♗xh5 5 ♖b4**.

The text-move looks rather awkward, since after **3 ♖d7? ♗f3** Black has all the vital squares under control, and even a tricky move such as **4 ♖f4** fails to have any impact after **4... ♖h4+! 5 ♗e6+ ♗g8**. The key point in this line is that Black's queen is very well placed on the f-file, preventing White's king from approaching the enemy king with (discovered) check.

**3 ♖f4!!**

A fantastic move. It is worth a piece to block the f-file.

**3... ♖xf4**

This is forced in view of the numerous threats such as **4 ♗f8+ ♗h8 5 ♖g6#** and **4 ♗f6+ ♗g8 5 ♖c8+**.

**4 ♖d7!**

White makes use of the fact that Black has a rook's pawn and wrong bishop combination, so giving up the queen for the rook does not win.

**4... ♗g4**

Other moves are no better:

**1) 4... ♖g5+ 5 ♗e6+ ♗xd7+ 6 ♗xd7 ♗g7 7 ♗e6** and the white king reaches h1.

**2) 4... ♖d6+ 5 ♗e6+ ♗g8 6 ♖d8+ ♗h7 7 ♖d7+** draws.

**3) 4... ♗a1 5 ♗e6+** is again a draw.

After the text-move, White's rook is under attack, but that doesn't stop White!

**5 ♗f6+!**

A surprise. Stalemate enters the equation and allows White to play a check which would be impossible otherwise.

**5... ♗h8 6 ♖d8+ ♗h7**

**6... ♗g8 7 ♖xg8+** draws.

**7 ♖d7+**

It is perpetual check or stalemate.

### 150) O. Pervakov

5th Pr., *Shakhmaty v SSSR*, 1985

**1 c8♖**

A queen for a rook down, White must take the chance to increase his material assets. Indeed, the promotion shifts the balance in White's favour and it might seem that, with an extra rook in the bank, he is all set for victory. However, Black has a surprise in store.

**1... ♗f1+!**

This unexpected move enables Black to restore the material balance. **1... ♖g2+ 2 ♗h2 ♗d6+ 3 ♗g1** is hopeless for him.

**2 ♖xf1 ♖g2+ 3 ♗h2 ♖xf1♖**

This was all forced and we can pause to reassess the situation. With exact material equality, it might appear that White should take the opportunity to force perpetual check, because Black's d-pawn is on the verge of promotion. However, White can use his temporary initiative to start weaving a web around the black king.

**4 ♗f5+!**

**4 ♗xb7+? ♗xf2 5 ♗f7+ ♗e2 6 ♗c4+ ♗f2** really is a draw; once the f2-pawn has gone, White cannot transfer his queen to g4 without allowing the black queen out; e.g., **7 ♗f4+ ♗e2 8 ♗g4+ ♗f3!** and Black escapes.

4...♖e2 5 ♖g4+ ♜xf2

5...♜e1 loses rather simply to 6 ♜c2+ ♜xf2 7 ♖f4+ ♜e2 8 ♜d4+ ♜e1 9 ♖e4+ ♜f2 10 ♖f3+ ♜e1 11 ♜c2#.

6 ♜c2!

White has both surrounded the black king and, thanks to the possible mate at g2, immobilized the black queen. There is a threat of 7 ♖f4+ ♜e2 8 ♜d4+, etc., as in the previous note, so Black has no time to push his h-pawn.

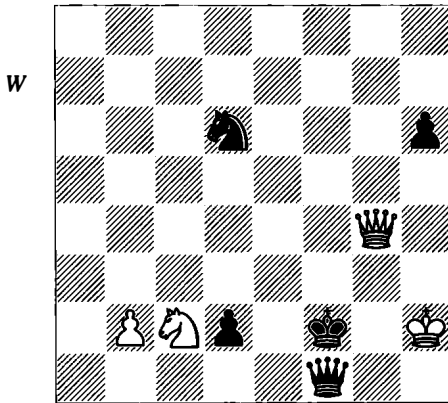
6...♜d6 (D)

Other moves also lose:

1) 6...d1 ♜ 7 ♖f4+ ♜e2 8 ♜d4+ ♜e1 9 ♖e4+ ♜f2 (9...♜d2 10 ♜b3#) 10 ♖f3+ ♜e1 11 ♜c2+ picks up the queen.

2) 6...d1 ♖ 7 ♖g3+ ♜e2 8 ♖e3#.

3) 6...♜c5 7 ♖f4+ ♜e2 8 ♖c4+ ♜d3 (after 8...♜f2 9 ♖xc5+ ♜e2 10 ♖c4+ ♜f2 11 ♖f4+ ♜e2 12 ♜d4+ White wins the queen or mates) 9 ♖e4+ ♜d1 10 ♜e3+ ♜c1 11 ♖c4+ ♜xb2 12 ♖c2+ and 13 ♜xf1 wins.



The text-move prevents any immediate win by White and, indeed, it threatens to draw by 7...h5, displacing White's queen from its optimum square. White needs to introduce a new element into the position, yet his pieces seem fully occupied at the moment.

7 b3!!

The only exception is the idle b-pawn. This move, as we shall see, sets up a new mating possibility and in fact gives rise to a remarkable position of reciprocal zugzwang. The various possibilities are now:

1) 7...d1 ♜ 8 ♖f4+ ♜e2 9 ♜d4+ ♜e1 10 ♜f3+ ♜e2 11 ♜g1+ ♜e1 12 ♖b4+ ♜c3 13 ♖xc3+ ♜d1 14 ♖a1+ costs Black his queen.

2) 7...d1 ♖ 8 ♖g3+ ♜e2 9 ♖e3#.

3) 7...♜f7 8 ♖f4+ ♜e2 9 ♖e4+ ♜d1 10 ♜e3+ wins the queen.

4) 7...♜f5 8 ♖xf5+ ♜e2 9 ♜d4+ ♜e1 10 ♖e4+ mates.

This only leaves the h-pawn.

7...h5 8 ♖f4+ ♜e2 9 ♖e5+ ♜d3

9...♜f3 10 ♜d4+ ♜g4 11 ♖g3# shows why playing ...h5 weakened Black's position.

10 ♜b4#

The final position reveals why White had to play 7 b3 and not 7 b4?.

## 151) M. Matouš

1st Pr., *Sachové Umenie*, 1982

White's huge material advantage might seem to be easily sufficient to vanquish Black's little army, especially as Black is not even threatening to promote yet. However, the distant e7-knight and Black's defensive possibilities based on underpromotion make it a far trickier task than one might expect.

1 ♜c5

Black's main threat is to promote the b-pawn with check, so White manoeuvres his first knight round to b3 to force Black's king in front of the dangerous pawn.

1...b2 2 ♜b3+ ♜b1

Now it is time for the other knight to enter the fray, but White has to choose the correct square.

3 ♜d5!

3 ♜c6? looks good, since 3...a1 ♖? is met by 4 ♜b4 and mate next move, but Black can defend by 3...a1 ♜!, when White cannot win; e.g., 4 ♜ca5 ♜xb3 5 ♜xb3 ♜a2 6 ♜xd4 ♜a1 7 ♜c2+ ♜a2 and White cannot make progress, or 4 ♜ba5 ♜c1 5 ♜c4 b1 ♖ 6 ♜6e5 ♖b3 7 ♜d3+ ♜b1 8 ♜f2 ♖c3 and Black defends.

3...a1 ♜

This underpromotion is again Black's only chance, because 3...a1 ♖ 4 ♜b4 still leads to mate.

4 ♜xd4!

Other moves fail:

1) 4 ♜c5? ♜c1 5 ♖g2 b1 ♖ (but not 5...♜c2? 6 ♜d3+ ♜b1 7 ♜5b4 with a quick win) 6 ♜b4 ♜d1! (6...♖f5? 7 ♜bd3+ ♜d1 8 ♜a4 gives White an irresistible attack) 7 ♜bd3 (7 ♜cd3 ♜c2! defends) 7...♜b3 and Black escapes.

2) 4 ♖a5? ♜c1 5 ♜c4 b1 ♚ 6 ♜f4 ♚b3 7 ♜d3+ ♜b1 transposes to the note to White's third move.

3) 4 ♜xd4? ♜xb3 5 ♜c4 ♜c1 6 ♜c3+ ♜c2 leads to a draw.

4...♜c1

Black again attacks the white rook, and there is no mate in sight. What should White do?

5 ♜c2+!

This rook sacrifice is the surprising answer.

5...♜xc2 6 ♜b3+ ♜d1

6...♜b1 7 ♜c3# is an attractive mate.

7 ♜f1!

The text-move threatens mate on c3, and the c2-knight cannot move due to the second possible mate on e3. However, 7 ♜f2? is wrong since after 7...b1 ♜ White finds himself to move in a reciprocal zugzwang (8 ♜f1 fails to 8...♜d2+).

7...b1 ♜

Black's second underpromotion to a knight.

8 ♜f2

Now Black must move a knight, allowing mate on c3 or e3. There are many studies featuring a similar final position, but for both black knights to arise by underpromotion may be unique.

## 152) A. Gurvich

*Revista Romana de Sah*, 1948

White has sufficient material advantage to win, but his pieces lack coordination and two of them are under attack.

1 ♜f5!

1 ♜h5+? ♜g4 costs White material.

1...♜g3

A good defence, seeking to remove the guard of White's rook. The alternatives are:

1) 1...♜g4 2 ♜xh4 ♜g3 transposes to the main line.

2) 1...♜xf5 2 ♜xh4 regains the piece.

3) 1...♜f3 2 ♜f6 h3 3 ♜fe3 h2 4 ♜xf3 ♜f2 5 ♜g3+ mates.

2 ♜xh4

Removing the pawn, but White's pieces are still clumsily placed.

2...♜g4

2...♜f3 3 ♜h3 and 2...♜hf1 3 ♜f4 are hopeless for Black. The text-move looks like a safe draw, since the f5-knight is doubly attacked, and if it moves the rook falls.

3 ♜d4!!

A surprising rook sacrifice. Black must accept, or else White just moves the rook away.

3...♜xh4 4 ♜f3+

If Black could remove both his knights from the board then it would be a draw, but he is doomed because they take away vital squares from his king.

4...♜h5

4...♜h3 5 ♜f4# is an attractive mate.

5 ♜g7

Threatening 6 ♜f4#.

5...♜e2

Or 5...♜f5+ 6 ♜h7 and mate next move.

6 ♜h7!

A neat (non-reciprocal) zugzwang. Black is mated after 6...♜f2 7 ♜f6# or 6...♜d4 7 ♜f4#.

## 153) S. N. Tkachenko

2nd Pr., Kaiev Memorial Tny, 1990

It is Black to play and he must make quick use of his h-pawn, or else White will win on material.

1...♜e4+!

After 1...h2 2 ♜d2+ ♜b3 3 ♜xh2 ♜f7+ 4 ♜g4 White wins easily, so Black cuts out the check on d2 with gain of tempo.

2 ♜f5!

It is wrong to block the h-file; for example, 2 ♜h4? h2 3 ♜ce3+ ♜c1 4 ♜c7+ ♜b1 5 ♜b7+ is only perpetual check. Since 2 ♜g4? is ruled out by the fork on f6, the text-move is forced by a process of elimination.

2...h2

2...♜g3+ 3 ♜g4 is an easy win for White, so Black must now push his pawn.

3 ♜ce3+!

White improves the position of his knight with gain of tempo. Instead, 3 ♜h7? h1 ♚ 4 ♜xh1 ♜g3+ and 3 ♜de3+? ♜c3 4 ♜h7 h1 ♚ both allow Black to escape.

3...♜c1

3...♜b1 4 ♜h7 transposes to the main line, while 3...♜b3 leads to a very similar (but not identical) conclusion to the main line: 4 ♜b7+ ♜a4 (4...♜a3 5 ♜c4+ ♜a2 6 ♜b2+ mates) 5 ♜h7! h1 ♚ 6 ♜xh1 ♜g3+ 7 ♜f6 ♜xh1 8 ♜c3+ ♜a5 (8...♜b3 9 ♜e4 is essentially the same as the main line) 9 ♜e4 and we have an extraordinary situation in which White can win both

knight by force and still blockade the pawn on the Troitsky line (see No. 227 for more on this), leading to a win for White. Play might continue 9...♖b6 10 ♖g7 ♖c6 11 ♖xh8 ♖d7 12 ♖g7 ♖e7 13 ♖g6 ♖e6 14 ♖g5 ♖f7 15 ♖g4 ♖g6 16 ♖f3 ♖h5 17 ♖g2 and White wins.

**4 ♖c7+!**

A very important move. White will need a knight check on c3 later, so the king must be driven to b1.

**4...♖b1**

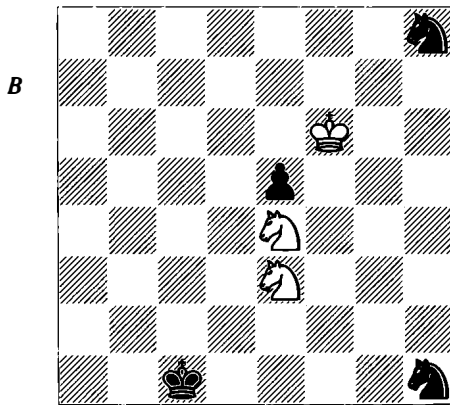
4...♖d2 loses to 5 ♖c2+.

**5 ♖h7!**

White's play may look odd, because Black can now win the rook. However, White has an incredible idea in mind.

**5...h1♖ 6 ♖xh1 ♖g3+ 7 ♖f6! ♖xh1 8 ♖c3+ ♖c1 9 ♖e4!! (D)**

Amazingly, despite being a pawn down and having only two knights left, White has a winning position.



White's knights maintain an extended barrier against the black king by controlling d1, d2, c2 and so on all the way up to c6 and d6. Black's king can only escape by creeping round via c6, d7, etc. (and as we saw in the note to Black's third move, even that may not help). In the meantime, White's king polishes off the knight on h8 and then comes back for the other trapped knight on h1. The result will be a 2♖ vs ♜ position in which the black pawn is no further up the board than e4 (Black can achieve this by playing ...♖g3 followed by ...e4 at some stage). However, on e4 the pawn is on the Troitsky line (see No. 227 for more on this), and so White is guaranteed a slow but sure win. Remarkable.

## 154) V. Khortov

Special Pr., *Shakhmaty v SSSR*, 1974

Two knights against a bare king is a draw, but with a rook added for each side it is an easy win. It follows that White has enough material for victory, but both his knights are under threat. Can he keep his extra material?

**1 ♖d6!**

This is the only realistic chance, since any other move by the knight is met by 1...♖e7+ and 2...gxh3, with an immediate draw.

**1...♖e7+**

After 1...♖d7 2 ♖e4 White maintains his two extra pieces.

**2 ♖f2!**

White must clear the first rank to be ready to play ♖a1+, but 2 ♖d2? is bad owing to 2...♖d7. Therefore the text-move is forced.

**2...♖e6!**

A spirited defence. Black's alternatives are 2...gxh3 3 ♖a1+ ♖b6 4 ♖c8+ winning the rook, and 2...♖d7 3 ♖a1+ (3 ♖e4? ♖f7+) 3...♖b6 4 ♖c4+ ♖b5 5 ♖e5, when White keeps both his knights. The text-move aims to keep both white knights under threat.

**3 ♖a1+ ♖b6 4 ♖c4+**

Not 4 ♖c8+? ♖b7.

**4...♖c5**

The only move, as 4...♖b5 5 ♖a3+ ♖b4 6 ♖f4 is an easy win for White.

**5 ♖f4**

5 ♖g5? ♖f6+ draws.

**5...♖e4**

5...♖f6 6 ♖e5! ♖xf4+ transposes to the main line.

After the text-move, White's winning prospects appear to have evaporated. Both knights are attacked by the rook, one is also attacked by the king and the fact that ...♖xf4 is check reduces White's chances of arranging a knight fork. 6 ♖a5+? looks like the only chance, but after 6...♖b4 White's hopes are dashed.

**6 ♖e5!**

This surprise move is the solution to White's dilemma. It is easy to see that Black can't take on e5, but what about the other knight?

**6...♖xf4+ 7 ♖e3!**

Not 7 ♖g3? ♖e4, but after the text-move Black's rook is short of squares. With b4, f6, and f8 out of bounds due to knight forks, and

7...♖d4 losing to 8 ♘d3+ ♘d5 9 ♖a5+ ♘c4 10 ♖a4+, the only remaining square is f5.

7...♗f5 8 ♘e4

Since f2 is also indirectly covered, the rook must now move along the rank. Unfortunately for Black, even this does not save him as White can set up a discovered attack.

8...♗h5 9 ♖a5+ ♘b6

Or 9...♘b4 10 ♘c6+.

10 ♘c4+

White wins.

### 155) A. Gurvich

1st Pr., *Shakhmaty v SSSR*, 1955

White has an extra piece, but both his knights are under threat, one directly by 1...axb5 and the other indirectly via 1...♗f1+.

1 ♖d2+

The best move, since otherwise Black draws immediately; for example, 1 ♘c3? ♗f1+ 2 ♘c2 ♗xal 3 ♗xb7 ♗xa3.

1...♘c8!

If the king goes to the e-file, then 1...♘e7 2 ♖e2+ ♘d7 3 ♘c3 ♗f1+ 4 ♖e1 ♗xe1+ 5 ♘xe1 leads to a position which should be a win for White. Black can give up his knight for the a3-pawn (by ...♘d6-c4), but the result is only a lost 2♙ vs ♗ ending with Black's pawn far behind the Troitsky line (see No. 227 for more on the Troitsky line). If Black does not give up the knight immediately, White will improve the position of his pieces and drive Black back, being careful to take the a6-pawn only when Black is no longer in a position to give up his knight for White's a-pawn.

2 ♘a7+ ♘b8

2...♘c7 is an interesting line, because it provides a good illustration of 'giving the composer the benefit of the doubt'. After 3 ♖c2+ ♘d7 (3...♘b6 4 ♘c8+ ♘a5 5 ♘c1 ♘a4 6 ♘b2 permits White to consolidate more easily) 4 ♖h2 (there doesn't seem to be anything better) 4...♘d6 (4...♗f1+ 5 ♘c2 ♗xal 6 ♖h7+ ♘d6 7 ♘b2 wins for White) White's extra piece is not in any immediate danger, but still the position looks hard to win. It isn't clear how the knight on a7 is going to escape, and all the time White has to ensure that he keeps his last pawn. All one can say is that it 'looks as though White should win in the end'.

After the text-move, the play is far more concrete. Both white knights are still in danger, so White has to give another check.

3 ♘c6+ ♘c7

After this White cannot avoid the loss of a piece, but by sacrificing the c6-knight he can launch a direct attack on the enemy king.

4 ♘c2!

After 4 ♘b3? ♖a4 Black wins the a3-pawn.

4...♘xc6

Black must accept, or White frees himself and wins with the extra piece.

5 ♘d4+

Black has only one move to avoid the immediate loss of his rook.

5...♘b6 6 ♖b2+

The attack gathers pace.

6...♘a7

6...♘a5 7 ♖b4! forces Black to give up the exchange to avoid mate, with a technical win for White.

7 ♘c6+ ♘a8 8 ♖b6!

The knight is pinned against the mate on b8, so Black is forced to cover the mate on a6 with his rook.

8...♖a4

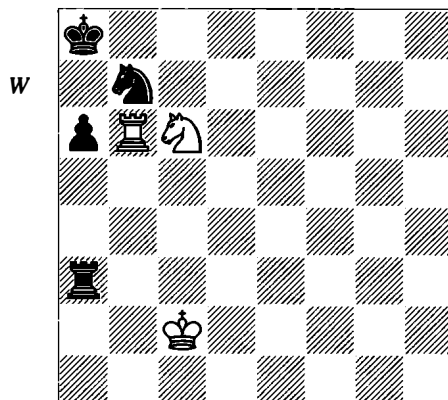
Black's mobility is severely restricted – he can only move his rook along the a-file. Nevertheless, White must still play accurately to win.

9 ♘c2

9 ♘c1 is just as good.

9...♗xa3 (D)

9...♖c4+ 10 ♘b2 (not 10 ♘b3?? ♗xc6 and Black wins) 10...♖a4 11 ♘a2 puts Black in zugzwang.



10 ♘b1!

10 ♖b2? is a mistake because after 10...♖a4 a reciprocal zugzwang arises with White to move. The position is a draw since he cannot lose a tempo; e.g., 11 ♖bl ♖a3 12 ♖c2 ♖a2+ 13 ♖cl ♖al+ 14 ♖b2 ♖a4, etc.

10...♖a4 11 ♖b2

Now it is Black who is in zugzwang.

11...♖a5

The only way to avoid a quick mate.

12 ♖xa5 ♖xa5 13 ♖xa6+

White emerges a rook up.

### 156) Y. Bazlov and V. Kovalenko

2nd Pr., *Problemista*, 1985

White is a piece up but has rook and knight under attack; it will require all his ingenuity to maintain an advantage.

1 ♖e5!

1 ♖b8? loses a piece to 1...♖c8 and even the attempt to tie Black down by 2 ♖f2 ♖xb8 3 ♖b2 fails to 3...♖h8.

1...♖d6!

Black cannot win a piece, so he takes aim at White's last pawn. After 1...♖xe5 2 ♖xe7+ ♖d4 3 ♖f3+! ♖c3 4 ♖xb7 ♖f6 5 ♖el White keeps his material advantage and wins.

2 ♖d2!

Accurate play is essential as there are some plausible alternatives:

1) 2 ♖hf3? ♖xd3+ draws easily.

2) 2 ♖hg6? ♖xd3+ 3 ♖e2 ♖d7! and Black defends; e.g., 4 ♖f8+ ♖xe5 5 ♖xd7+ ♖e6 6 ♖e5 ♖d6 and White loses his knight.

3) 2 ♖e2? fails to 2...♖d8 3 ♖f5 ♖d5 because, unlike the main line, Black is threatening to take on e5 with check.

4) 2 ♖c2? is bad for reasons which will be explained later.

2...♖d8

Setting up a double attack on knight and rook. 2...♖c5 exerts pressure on the d3-pawn, but 3 ♖f3 ♖d5 4 ♖eg6 consolidates White's material advantage. Note that 4...♖xd3+ 5 ♖xd3 ♖xd3 6 ♖xd3 is a win for White since Black's pawn can be blockaded by a knight on e3, at which point it is exactly on the Troitsky line, ensuring a win for White (see No. 227 for more about the 'Troitsky line'). One possible continuation runs 6...♖f6 7 ♖f8 e5 8 ♖e4 ♖g5 9 ♖f5 ♖g4 10 ♖e3+ with a slow but sure win in prospect.

3 ♖f5

Hanging on to all the material, at least for the moment.

3...♖d5

This looks very strong. The knight is pinned against the rook, and White's pieces have little freedom of movement. Some imagination is necessary to spot the winning idea.

4 ♖f8!

White simply gives up the e5-knight, but reaches a position in which his pieces cooperate perfectly in an attack on the black king.

4...♖xe5

The attack on the d8-knight forces Black to take with his king.

5 ♖g6+ ♖d4

Forced, as 5...♖e6 6 ♖f4+ ♖e5 7 ♖xd5 ♖e6 8 ♖f7 ♖xd5 9 ♖xe7 is an easy win for White.

6 ♖xe7!

6 ♖f4? is extremely tempting, with the point that 6...♖d6? loses to 7 ♖xd8. 6...♖c6? is also wrong, for example, since after 7 ♖xd5 ♖xd5 8 ♖e3 Black cannot arrive at the basic drawing formation of pawn on e5 and knight on c5. The continuation might be 8...e5 9 ♖a8 ♖e7 10 ♖a5+ ♖d6 11 ♖e4 ♖c6 12 ♖a6 followed by taking on c6, and White wins. Black can defend against 6 ♖f4?, but accurate play is required. 6...e5!! is the beautiful drawing move; after 7 ♖xd5 ♖e6 8 ♖a8 ♖xd5 9 ♖e3 ♖c5 Black has achieved the required defensive set-up. The only way White can try to make progress is by ♖d2-c3 and ♖a5, but Black responds by transferring his knight to f4, and White is once again stymied.

6...♖e6

The only chance, as 6...♖d7 loses to 7 ♖xd8 ♖xd8 8 ♖c6+.

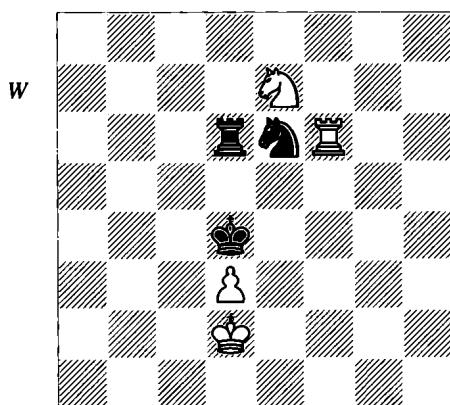
7 ♖f6

White is only a pawn ahead, and since he cannot count on a win based on material he must maintain his initiative. The text-move attacks both rook and knight. We can now see why it would have been wrong for White to play 2 ♖c2?. With his king on c2 in this position, Black would now be able to defend by 7...♖h5 8 ♖xe6 ♖h2+, winning the last pawn.

7...♖d6 (D)

7...♖b5 loses to 8 ♖c6+! (after 8 ♖xe6? ♖b2+ 9 ♖cl ♖h2 10 ♖d6+ ♖c3 11 ♖bl ♖d2 Black wins the d-pawn) 8...♖d5 9 ♖xe6 ♖b6 10

**Re5+!** (10 **Rh6?** **Rxc6**) 10...**Qd6** (10...**Rxc6** 11 **Re6+** **Qc7** 12 **Rxb6** **Qxb6** 13 **Qe3** and White wins) 11 **Qa5!** **Qxe5** 12 **Qc4+**.



### 8 **Rf5!**

Now Black cannot move his rook due to mate in one, so he must move the knight. Note that this is not really zugzwang, as White threatens 9 **Ra5**, but it is true that Black has no waiting move.

### 8...**Qc5**

A random knight move such as 8...**Qd8** allows 9 **Ra5** followed by mate. There are only two moves to stop this; one is 8...**Qc7**, which loses to 9 **Ra5** **Qd5** 10 **Qf5+**, and the other is the text-move.

### 9 **Rd5+!**

This spectacular finish is the only way to win.

### 9...**Rxd5** 10 **Qc6#**

This is surely one of the greatest studies of the 20th century; a natural starting position, some intricate play and a surprising finale combine into a wonderfully aesthetic whole.

## 157) Y. Bazlov and V. Kovalenko

1st Pr., *Uralski Problemist*, 1993-6

White is ahead on material, but with all three pieces under attack he cannot maintain this superiority. His task is to find a way to surrender a piece in return for threats against the black king.

### 1 **Qh7+**

1 **Qd7?** **gxh6** 2 **Qh7+** **Qg7!** 3 **Re7+** **Qh8** is only a draw.

### 1...**Qe8** 2 **Qf6+!**

Forking king and queen, so Black must accept.

### 2...**gxf6** 3 **Rc2**

Other squares on the second rank fail because Black's king can slip out by 3...**Qd8**.

### 3...**Qf8**

Now this is forced because 3...**Qd8** loses to 4 **Qf7+**.

### 4 **Rc8+** **Qg7** 5 **Rg8+** **Qh7**

Black's moves are all compulsory, but now White has no checks whereas Black is threatening both 6...**Qxh6** and 6...**Qe2+**.

### 6 **Qg4!**

The logical move, with the simple threat of taking on f6. It might seem to be all over, but Black has a neat defence.

### 6...**Qf7+!**

This study is hard to solve because Black's queen check seems to wreck White's hopes of a win. There is therefore a temptation to go back to the start and look for something better for White. It is not obvious that the check on f7 doesn't really help Black.

### 7 **Qd6!**

Incredibly, Black is now in zugzwang (not reciprocal, as White has pass moves with the a-pawn). Either capture of the rook costs the queen, while otherwise Black cannot maintain his defence of f6.

### 7...**Qxa2** 8 **Qxf6+** **Qh6** 9 **Rg6#**

**158) H. Rinck** (after R. Réti, *Kölnische Volkszeitung*, 1928)  
*Bohemia*, 1935

White can stop Black's pawns after either bishop check, but only one leads to a win.

### 1 **Qf5+!**

1 **Qc6+?** results in stalemate after 1...**Qd6** 2 **Qd4+** **Qe5** 3 **Re4+** **Qd6** 4 **Rxe3** e1 **Q** 5 **Rxe1**.

### 1...**Qd6**

1...**Qd8** 2 **Rd4+** transposes.

### 2 **Rd4+** **Qe7**

2...**Qe5** is met by 3 **Re4+** **Qxf5** 4 **Rxe3**, picking up the pawns.

### 3 **Re4+** **Qd8!**

This is Black's defence. Now 4 **Rxe3** would again allow Black to force stalemate by 4...e1 **Q** 5 **Rxe1**. However, with the bishop on f5 White has an alternative possibility.

### 4 **Qd7!!** e1 **Q** 5 **Qb5**

and Black cannot prevent mate at e8. The bishop has to go to b5 to prevent the potential queen check on b1. There is some similarity between this study and Kubbel's No. 159. In that composition, the bishop bounces off White's first rank, whereas here it reflects off the seventh rank.

### 159) K.A.L. Kubbel

1st Pr., *Bakinski Rabochi*, 1928

White has an extra rook, but the two connected passed pawns on the seventh rank are an imposing asset.

**1 ♖f7+**

White must launch an immediate attack against Black's king, since the pawns cannot be halted.

**1...♗b8 2 ♗b6**

Threatening mate on one.

**2...♗c8**

This is the main line, but the alternative defence 2...f1 ♖ 3 ♖xf1 exf1 ♖ 4 ♖xf1 ♗c8 also requires accurate handling: 5 ♗c6 ♗d8 (5...♗b8 loses to 6 ♖f5 ♗g3 7 ♖b5+ ♗a7 8 ♖b7+ ♗a8 9 ♗b6) 6 ♗xd6 ♗e8 (after 6...♗c8 7 ♗e5 White wins the knight) 7 ♗e6 ♗g7+ (7...♗d8 8 ♖f8+ ♗c7 9 ♗e5 ♗g3 10 ♖f3 ♗e2 11 ♖e3 wins for White) 8 ♗f6 ♗f8 (8...♗h5+ 9 ♗g6 ♗g3 10 ♖g1) 9 ♖f3 ♗e8+ 10 ♗e6+ ♗g8 (10...♗g7 11 ♗e7 ♗c7 12 ♖f5 ♗a6 13 ♖b5 keeps the knight in the box) 11 ♗e7 ♗g7 12 ♖h3 ♗f5+ 13 ♗f6 and now we have reached one of the standard winning positions with ♖ vs ♗. The main lines leading to victory are:

1) 13...♗d4 14 ♖g3+ ♗h7 (14...♗f8 15 ♖d3 ♗c6 16 ♖d6) 15 ♖g7+ ♗h6 (15...♗h8 16 ♖d7) 16 ♖g4 ♗f3 17 ♖f4.

2) 13...♗d6 14 ♖d3 and now:

2a) 14...♗b5 15 ♖d8+ ♗h7 16 ♗f7 ♗h6 17 ♖d3 ♗c7 18 ♖c3 ♗d5 19 ♖c6+ ♗h7 20 ♖c5 ♗f4 21 ♖f5.

2b) 14...♗c4 15 ♖d4 ♗e3 (or 15...♗b2 16 ♖g4+ ♗h7 17 ♖g7+ ♗h6 18 ♖g2) 16 ♗g6 ♗f8 17 ♖f4+ ♗g8 18 ♖e4.

2c) 14...♗e4+ 15 ♗g6 ♗f8 16 ♖f3+ ♗g8 17 ♖e3.

2d) 14...♗e8+ 15 ♗e7 ♗g7 16 ♖d5 ♗h7 (16...♗h8 17 ♗f7 ♗h7 18 ♖g5 ♗h8 19 ♖g1) 17 ♗f8 ♗g6 (17...♗e6+ 18 ♗f7 ♗f4 19 ♖f5) 18 ♖d6+ ♗h7 19 ♖d7 ♗h8 20 ♗f7 ♗h7 (20...♗f5

21 ♖d1) 21 ♗f6 ♗h8 22 ♖d1 ♗h7 23 ♖h1+ ♗g8 24 ♖g1 ♗h8 25 ♗f7.

After the text-move, White should not chase Black's king any further, since 3 ♗c6? ♗d8 4 ♗xd6 fails to 4...e1 ♖.

**3 ♖xf2!**

Just at this moment White can safely take the pawn, since 3...e1 ♖ loses to 4 ♖f8+ ♗d7 5 ♗c6+ followed by 6 ♖e8+. However, Black has a cunning defence which throws the win into doubt.

**3...♗f4!**

Aiming to sacrifice the knight and d-pawn, so as to set up a stalemate if White plays to win the queen as in the previous note.

**4 ♖xf4**

White must accept since otherwise he would have to give up his rook for the e-pawn.

**4...d5**

The next step in Black's plan; ♖e4 is prevented, and White is lured into taking the d-pawn.

**5 ♖f1!**

5 ♖xd5? allows Black to execute his plan by 5...e1 ♖ 6 ♖f8+ ♗d7 7 ♗c6+ ♗e7 8 ♖e8+ ♗d6 9 ♖xe1 stalemate. 5 ♖f8+? ♗d7 and 5 ♖h3+? ♗d8 also fail. However, the ingenious text-move allows White to win the queen without capturing the d5-pawn, and so there is no stalemate.

**5...e1 ♖ 6 ♖f8+ ♗d7 7 ♖b5+ ♗d6 8 ♖d8+**

After 9 ♖e8+ White can safely capture the queen.

### 160) D. Gurgeneidze

2nd Pr., *Problem*, 1973

Material is roughly equal, but Black's a-pawn is about to promote with check. One factor operating in White's favour is that Black has two knights, so White need only give up his pieces for the black pawns in order to draw.

**1 ♖e1+ ♗c1**

1...♗c2 makes life easy for White: 2 ♖e2+ ♗d2 3 ♖e1 threatening ♖a1.

**2 ♖d4**

For the moment the a-pawn is halted, but Black can get it moving again by exploiting the awkward position of the white king.

**2...♗b6+**

Black aims to transfer his knight to the b2-square. Playing more slowly does not cause

White any particular problems; for example, 2...c5 3 ♖h8 ♖d6 4 ♜h1 ♖c4 5 ♜xc1+ ♖xc1 6 ♖b3.

3 ♖b4

3 ♖a3? is wrong since after 3...♖c4+ 4 ♖b4 ♖b2 Black really does win. White must force Black to jettison his c-pawn in order to get the knight to b2.

3...c5+! 4 ♖xc5 ♖a4+

Black's mission is evidently going to end in success. With the two knights blocking the approach roads to a1, it is hard to see how White is going to continue his resistance.

5 ♖b4!

As we shall see, White's king has to be in close proximity for the drawing idea to function, but at the same time White does not want Black to play ...♖b2 with check.

5...♖b2 6 ♜e7!!

A remarkable move. White not only allows Black to promote, he even unpins the c1-knight and allows it to check White's king. 6 ♖e3? loses to 6...♖bd3+.

6...a1♚

Giving a preliminary check doesn't help since 6...♖cd3+ 7 ♖b5 a1♚ is met by 8 ♜a7, winning the queen.

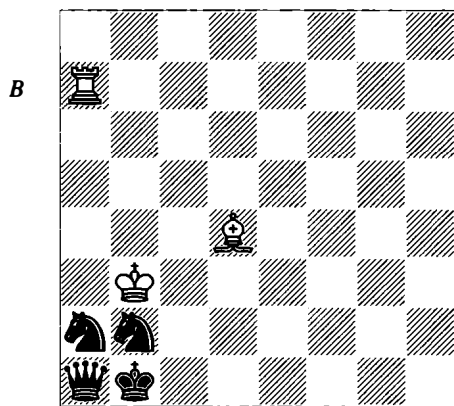
7 ♜a7

The queen cannot move, but a knight can interpose.

7...♖a2+

7...♖bd3+ transposes to the main line.

8 ♖b3 (D)



Now we can see why the white king had to come closer at move five; if Black could play 8...♖c2 here, then he would win. As we shall

see, Black cannot win if he is to play in the diagram. However, if White were to play, he would have to release the bind or else leave the rook unguarded, whereupon ...♖c1+ would win. Therefore this position is reciprocal zugzwang.

8...♖c1+

8...♖c1 9 ♜xa2 ♜b1 10 ♜xb2 ♜d3+ 11 ♖c3 ♜b5+ 12 ♖a3 is a comfortable draw, so Black repeats.

9 ♖b4 ♖bd3+

This is Black's only other try.

10 ♖c4

White must defend the bishop. Black's queen is still trapped, so the knight can only return.

10...♖b2+

10...♖e5+ 11 ♖d5 costs Black his queen.

11 ♖b4 ♖a2+ 12 ♖b3

Black cannot make progress. This study bears some resemblance to Manvelian's No. 130.

## 161) E. Asaba

1st Pr., *Molodoi Leninet*s (Kurgan), 1977

The material situation points to a draw, but Black's pieces are awkwardly placed with his knight in a sort of pin. White must not delay exploiting Black's predicament or Black will free himself and reach a draw.

1 ♜f1 ♖g2

The only move as 1...♖d2 2 ♖xd2 ♖xc6 runs into 3 ♜f6+.

2 ♜f8!

The only square on the f-file to win. 2 ♜f4? ♖g5 3 ♜f8 ♖g4, 2 ♜f5? ♖g3 and 2 ♜f7? ♖g5 all allow Black to escape.

2...♖g7 (D)

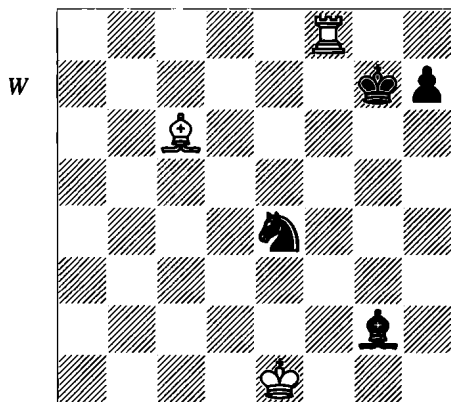
White was threatening 3 ♜e8 ♖f6 4 ♜e6 winning a piece. 2...♖g6 loses to 3 ♜g8+, thus the text-move is the only one to counter the threat.

3 ♜a8!!

It is astonishing that this is the only move to win. Playing the rook to the far corner threatens to win a piece by 4 ♜a4, but it is not clear why alternatives such as 3 ♜b8? are not equally good. However, the other squares all have some tactical flaw:

1) 3 ♜f5? ♖g3 4 ♜g5+ ♖f6 and Black saves the game.

2) 3 ♜f4? ♖f2! 4 ♖b5 (the only winning try, avoiding an exchange of bishops and covering



the fork on d3) 4...♙c6! (Black rescues his pieces with some neat tactics) and now:

2a) 5 ♙c4 ♚e4 6 ♜f7+ ♜h6! (6...♙g6? loses to 7 ♜c7 ♙a8 8 ♜a7) 7 ♜c7 ♙e8 8 ♜e7 ♙g6 and Black consolidates.

2b) 5 ♙f1 ♚e4 6 ♙g2 (once again it looks tricky for Black but for the second time he can exploit the fork on d3) 6...♚c5 7 ♙g4+ (White removes his rook from the fork with gain of tempo, but it doesn't help) 7...♜h8! 8 ♙xc6 ♚d3+ 9 ♜d2 ♚e5 (after this Black regains the bishop) 10 ♜e4 ♚xc6 11 ♜c3 ♜g7! (the only drawing move, as 11...♜g8? loses to 12 ♜e6) 12 ♜c4 ♜f6 and Black defends comfortably.

3) 3 ♜b8? (it turns out that this does not threaten much) 3...h5 (Black uses the free tempo to push his pawn; if it reaches h3 the knight will be unpinned) 4 ♜a8 (now this is too late, but 4 ♜b4 ♚c5! defends – the rook is vulnerable to a fork on b4, which explains why 3 ♜a8 is better than 3 ♜b8) 4...♙h1 (with the pawn on h5 there is no rook check on g4, and so Black can hold on) 5 ♜a4 ♚g3 6 ♙xh1 ♚xh1 7 ♜a3 h4 and the knight escapes.

4) 3 ♜d8? h5 4 ♜d4 ♜f6! (this move reveals the defect of 3 ♜d8? – on d4 the rook is exposed to attack by Black's king) 5 ♙xe4 ♜e5 draws.

3...♜h6

Or:

1) 3...h5 loses to 4 ♜a4.

2) 3...♜f6 is met by 4 ♙g8! (White drives the bishop into the corner by exploiting the position of Black's king on the f-file) 4...♙h1 5 ♙g1 ♙f3 6 ♜f1 winning a piece.

3) 3...♙h1 4 ♜a4 ♚g3 5 ♙xh1 ♚xh1 6 ♜h4 ♚g3 7 ♜g4+ and White wins.

4 ♜e8!

Now White can execute the threat behind his second move.

4...♚f6 5 ♙e6! ♙xc6 6 ♜xf6+

White wins a piece and the game.

## 162) R. Missiaen

2nd Pr., *Schakend Nederland*, 1974

In order to win, White must pick up one of Black's bishops. Since 1 ♜c8+? ♜b7 achieves nothing, White's first move is forced.

1 ♙f3+ ♜a7

After 1...♜b8 2 ♜b2 White wins a piece.

2 ♜c3!

Attacking the other bishop is wrong as 2 ♜c8? ♙d6 is only a draw.

2...♙e6

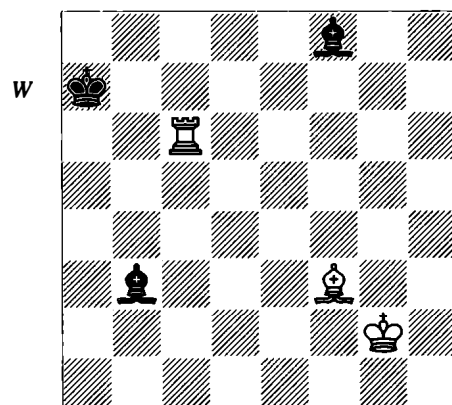
The light-squared bishop is short of squares. Other moves lose quickly; e.g., 2...♙a4 3 ♜c8 followed by ♜a8+, 2...♙f7 3 ♜c7+ or 2...♙g8 3 ♜c8.

3 ♜c6!

Extreme accuracy is required. The immediate 3 ♜h1? ♜b8 is only a draw.

3...♙b3 (D)

Once again, Black's move is forced since 3...♙d7 4 ♜c7+ and 3...♙f5 4 ♜f6 both cost him a piece.



We have now arrived at the key moment of the study. White can chase Black's bishop back and forth, but it is unclear how White can make progress. Black is very limited in his options (for example, Black to move could only play ...♙b4), but still White lacks an obvious killer blow.

4 ♜h1!!

An extraordinary move. Many years ago, when I first saw this study, I was reluctant to believe that this could be the only way to win. Only after considerable analysis did I convince myself that the study was correct. Nevertheless there remained a small element of doubt in my mind which persisted until very recently, when 6-man pawnless databases became available. Happily, the database confirms Missiaen's study as 100% correct. The point of the king move is to open up the g-file for White's rook. At the moment, Black's bishops can only just hold off White's rook, but the extra avenue of attack provides the small but essential extra ingredient required to break down Black's defence. The king cannot move to another square as this would give Black a vital bishop check at some point. Incredibly, this position is reciprocal zugzwang.

**4...♙b4**

A quick check shows that this is the only move which does not lead to the immediate loss of a piece; for example, 4...♙a3 5 ♖c3, 4...♙b8 5 ♖b6+, 4...♙a2 5 ♖c8, 4...♙a4 5 ♖c8 or 4...♙g8 5 ♖c8.

**5 ♖c1**

Now White threatens ♖b1, so one of the bishops must move.

**5...♙g8**

Again forced, as the alternatives lose quickly: 5...♙a2 6 ♖a1, 5...♙e6 6 ♖c7+, 5...♙d6 6 ♖a1+ ♙b6 7 ♖b1 and 5...♙a5 6 ♖a1 ♙a6 7 ♙e2+ ♙b6 8 ♖b1.

**6 ♖g1!**

White makes use of the open g-file to force the light-squared bishop to an inferior square.

**6...♙e6**

There is nothing better as 6...♙f7 7 ♖g7, 6...♙c4 7 ♖g4 and 6...♙b3 7 ♖b1 are all winning for White.

**7 ♖g7+ ♙b6**

7...♙b8 8 ♖b7+ is also winning for White.

**8 ♖g6**

White wins a piece.

### 163) G. Nadareishvili

1st Pr., Georgia-50 Anniversary Tny, 1970

White doesn't have much choice for his first move, since he must prevent Black from rolling his pawns up with ...b3 and ...b2.

**1 ♙c4!**

After 1 ♖b8? ♙b2 2 ♖xb4+ ♙a3 Black promotes the pawn, while 1 ♙c2? ♖c5+ 2 ♙b3 ♖c3+ 3 ♙xb4 ♙b2 4 ♖a8 ♖b3+ 5 ♙c4 ♖a3 6 ♖b8+ ♙c1 7 ♖e8 ♙d1 8 ♙e2+ ♙d2 9 ♙h5 ♖a4+ wins for Black.

**1...♖c5**

The alternatives 1...♙b1 2 ♖b8 ♖a4 3 ♙xa2+ ♙xa2 4 ♙c2 ♙a3 5 ♙b1 and 1...♙b2 2 ♖f2+ ♙b1 3 ♙d3+ ♙a1 4 ♙c2 cause White no problems.

The text-move forces White to move his bishop along the diagonal from c4 to g8, since 2 ♙xa2? ♙xa2 3 ♖a8+ ♙b2, 2 ♖f4? ♖xc4 3 ♖xc4 b3 and 2 ♖f3? ♖xc4 3 ♖b3 ♖h4 4 ♙c2 ♖h2+ 5 ♙c1 ♖h1+ 6 ♙c2 ♖b1 are all winning for Black. However, the correct square is not at all obvious.

**2 ♙g8!!**

The only move. 2 ♙f7? loses at once to 2...♙b2, but the difference between e6 and g8 is more subtle and will only become apparent later.

**2...♙b1**

2...♙b2 fails to 3 ♖f2+, so the text-move is the only chance for Black. However, it looks very strong since it seems that White will have to give up either his bishop or his rook for Black's a-pawn.

**3 ♖b8!**

White makes use of the confined position of Black's king to delay the a-pawn's promotion. 3 ♖f4? b3 4 ♖a4 ♖c3 and 3 ♙h7+? ♙b2 4 ♖f2+ ♙a3 allow Black to win without difficulty.

**3...♖c1+**

Black seeks to block the b-file check, and so transfers his rook to c2 with gain of tempo.

**4 ♙d2 ♖c2+ 5 ♙d1**

It is important to retain the pressure against Black's king.

**5...a1♚**

Black finally manages to promote without suffering an immediate disaster, but surprisingly White has enough counterplay to draw.

**6 ♖xb4+ ♖b2 7 ♖c4!**

This is the key move. White threatens mate on c1, and 7...♙a2+ is met by the cross-check 8 ♖c1+. Black's only other option is to move the rook.

**7...♖c2**

This is where the difference between 2 ♙e6? and 2 ♙g8! becomes apparent. If the bishop

were on e6 here, then Black could continue 7...♖b6! 8 ♖c1+ ♜b2 9 ♖xa1 ♖d6+, winning the bishop with check.

Instead of the text-move, 7...♖d2+ 8 ♜xd2 ♖a5+ 9 ♜e2 leads to a draw because Black cannot win the g8-bishop with queen checks; e.g., 9...♖h5+ 10 ♜f2 or 9...♖e5+ 10 ♜f3.

8 ♖b4+!

Not 8 ♖xc2? ♖d4+ 9 ♖d2 ♖g4+ winning the bishop, but White can force Black to return to b2.

8...♖b2 9 ♖c4

Black cannot win.

### 164) G. Zakhodiakin

1st Pr., *Shakhmaty v SSSR*, 1951

This position revolves around the struggle between White's extra material and Black's passed pawn, which is on the verge of promotion.

1 ♖h7+!

The only move, since 1 ♖h1? ♖c3+ followed by ...♖b1 and 1 ♖e5? a1♖ 2 ♖xe2 ♖f1 are immediate wins for Black.

1...♜e6!

Black must stay in touch with the f6-square, and 1...♜g6 2 ♖h1 ♖c3+ 3 ♜xa5 ♖b1 4 ♖h6+ followed by ♖f6 is an easy draw.

After the text-move, White must retreat to h1 or else Black can promote straight away.

2 ♖h1 ♖c3+

A key moment; where should the king move?

3 ♜a6!

The only square to draw. Not surprisingly, 3 ♜xa5? is bad because Black promotes with check after 3...♖b1 4 ♖e1+ ♜f7 5 ♖d6 a1♖+. However, the reason 3 ♜b6? is bad is more subtle and in order not to reveal too much too soon, I will explain why in the note to White's ninth move.

3...♖b1 4 ♖e1+!

Thanks to White's preliminary check on move one, he is now able to activate his rook without losing his bishop.

4...♜f7!

As before, Black must retain control of f6, and 4...♜f5? loses to 5 ♖f1+ ♜e6 6 ♖f6. After the text-move, White seems to be running out of resources; if he checks again, Black just takes the bishop, while otherwise White cannot prevent immediate promotion.

5 ♖d6!!

A remarkable move, setting up a barrage of checks along the e-file. White threatens 6 ♖e5, so Black must promote.

5...a1♖ 6 ♖e7+

It is not easy to escape from these checks.

6...♜g6

6...♜f6 7 ♖e5+ draws at once, while 6...♜f8 7 ♖e6+ ♜f7 8 ♖e7+ repeats the position, hence the black king must advance.

7 ♖e6+ ♜f5 8 ♖e5+ ♜f6

8...♜g4 is met by 9 ♖e4+, forcing the king back, so this is the only way to escape. Although the checks have come to an end, White still has one card left to play.

9 ♖xa5!

Black's queen can only move on the long diagonal, but then ♖e5+ forces a draw. Now we can see why 3 ♜b6? would have been wrong – in this position Black would have a check on b2 or d4 and would escape with a decisive material advantage.

9...♖d4 10 ♖e5+

Winning the queen.

### 165) V. Pachman

1st Pr., *Sachové Umenie*, 1980

White certainly has sufficient material to win, especially if one bears in mind that ♖+♖ vs 2♖ without pawns is in general a win. Unfortunately both his pieces are attacked, and in addition White has to worry about Black's h-pawn.

1 ♖a3

Setting up a battery so that if Black pushes the h-pawn White can pick it up with a discovered check. 1 ♖c7? is inferior due to 1...h2 2 ♖h7 ♖c3+ 3 ♜b2 ♖e4! (threatening 4...h1♖, and oddly enough the bishop has almost no safe squares along the a7-g1 diagonal) 4 ♖d4 (the only possible square) 4...♖f3 followed by ...♖g3, and the h-pawn will cost White his rook.

1...♖c4!

The only chance, since 1...♜b7 2 ♖gl picks up the pawn.

2 ♖a1!

White's rook is very limited in its movements. 2 ♖a2? and 2 ♖a4? lose to 2...♖c3+, while 2 ♖a6? is refuted by 2...♜b7.

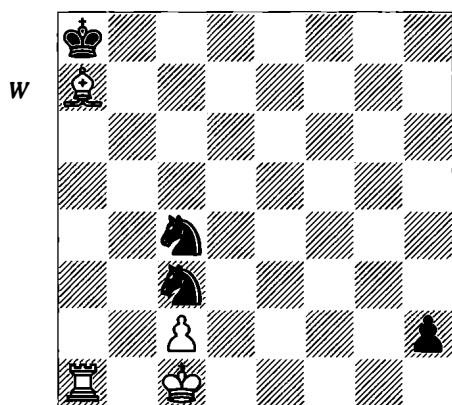
2...♖c3+

It might seem that Black should draw easily given the dreadful position of White's rook, but it is not so simple; for example, 2...♖b7 3 ♔d4 h2 (3...♕c3 is also met by 4 ♖a7+ followed by ♖h7, while 3...♖b8 loses to 4 ♖a6 followed by ♖h6) 4 ♖a7+ ♖c6 5 ♖h7 and White wins the pawn while keeping his material advantage.

2...h2 3 ♔g1+ ♖b7 (or 3...♖b8 4 ♔xh2+ ♖b7 5 ♖a2 and White's rook escapes) 4 ♔xh2 ♕c3+ 5 ♖c1 leads to the study's key reciprocal zugzwang position. Black to play must either move a knight, allowing the king to emerge, or move the king, allowing ♖a8. Either way White disentangles and eventually brings his material advantage to bear.

### 3 ♖c1 h2! (D)

Black makes a valiant attempt to reach the key reciprocal zugzwang with White to play. 3...♕e2+ 4 ♖d1 ♕c3+ 5 ♖e1 certainly doesn't help, so the only real alternative is 3...♖b7. However, in this case White gradually makes his material advantage tell; for example, 4 ♔f2 ♕e4 (4...♕b5 5 ♖b1 ♕cd6 6 ♖b3 and 4...h2 5 ♖a7+, followed by ♖h7, are easier for White) 5 ♔g1 ♕e5 (threatening 6...♕f3) 6 ♖a7+ ♖c6 7 ♖h7 ♕g5 8 ♖h6+ ♖d7 9 ♔e3 ♕g4 10 ♖h5! ♕xe3 11 ♖xg5 h2 12 ♖h5 ♕g4 13 ♖d2 and White wins.



### 4 ♔f2+!!

A subtle move. The obvious continuation is 4 ♔g1+? but then 4...♖b8! (not 4...♖b7? 5 ♔xh2) 5 ♔xh2+ ♖b7 leaves White to play in the reciprocal zugzwang (we already saw that Black to play loses in the note to Black's second move). The analysis of this situation is straightforward, as all White's moves lead to immediate

material loss. Note that other squares along the diagonal are inferior; e.g., 4 ♔e3+? ♖b7 5 ♖a7+ ♖c6 6 ♖h7 ♕xe3 draws while 4 ♔c5+? or 4 ♔d4+? would even lose to 4...♕a2+! 5 ♖xa2+ ♖b8.

The text-move leads to the key position with Black to play.

### 4...♖b8

After 4...♖b7 5 ♖a7+ followed by ♖h7 White wins easily, while here 4...♕a2+ loses to 5 ♖xa2+ as White can play either ♔g3+ or ♖a7+ next move.

### 5 ♔g3+ ♖b7

The final attempt to lose a tempo by 5...♖c8 fails to 6 ♖a8+ ♖b7 7 ♖b8+ followed by ♔xh2.

### 6 ♔xh2

It is Black to play in the reciprocal zugzwang, so White wins.

## 166) G. Kasparian

1st Pr., *Shakhmaty v SSSR*, 1939

White has some extra material and a strong passed pawn, but Black's two connected passed pawns, supported by his king, are also a major force.

### 1 ♔g5!

The only chance, as neither 1 ♖f5? ♖g1+ 2 ♖c2 b3+ 3 ♖c3 b2 4 f7 ♖c1+ 5 ♖d4 ♖c8 nor 1 f7? ♖f6 2 ♖d7 b3 3 ♔c3 ♖f1+ 4 ♖d2 a3 offers White any winning chances.

After the text-move, Black's rook is immobilized and White threatens simply 2 f7, so Black must press ahead with his counterplay.

### 1...b3

After 1...♖g8 2 ♖d2+! ♖b3 3 f7 ♖f8 4 ♖f2 a3 5 ♖b1 Black's counterplay is far too slow.

### 2 ♖d2+

Countering the threat of 2...b2+ with gain of tempo.

### 2...♖a1 3 f7

It is tempting to try to exploit Black's poor king position by 3 ♔e3?, but then Black draws comfortably with 3...a3.

After the text-move, it looks all over for Black but he comes up with a surprising defence.

### 3...♖xg5!

3...a3 loses to 4 ♖d1 ♖d6 5 f8 ♖b2+ 6 ♖c2+ ♖xd1 7 ♖xa3#.

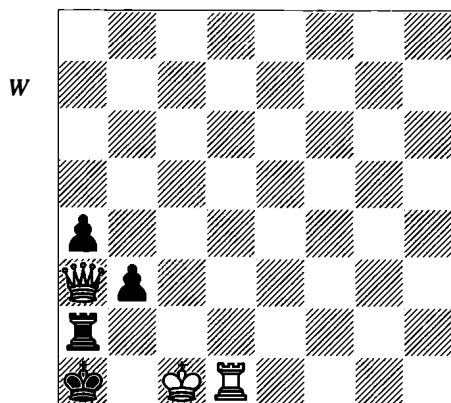
### 4 f8 ♖g1+ 5 ♖d1 ♖g2

This is Black's idea – it isn't easy for White to counter the threats of 6...♖c2# and 6...b2#. Note that 5...b2+ loses to 6 ♖c2+ ♜xd1 7 ♖a3#.

**6 ♖a3+**

Apart from 6 ♜d2, repeating, this is clearly the only move.

**6...♜a2 (D)**



But how should White continue now? After 7 ♖c5 ♜h2 (7...b2+ loses to 8 ♖d2+ b1♖+ 9 ♖e1) White has nothing better than to repeat moves by 8 ♖a3+ or 8 ♜d2 ♜h1+ 9 ♜d1.

**7 ♜d2!**

This is the key to the position. From being a queen up, White is prepared to go two pawns down!

**7...♜xa3**

Black has nothing better than to accept the offer. 7...b2+ loses to 8 ♖xb2+ ♜xb2 9 ♜xb2 a3 10 ♜b1+ ♖a2 11 ♜b8 ♖a1 12 ♖c2 a2 13 ♖b3 ♖b1 14 ♜h8 a1♙+ 15 ♖c3 ♖a2 16 ♜b8.

**8 ♜b2**

A remarkable situation. Black has only one legal move:

**8...♜a2 9 ♜b1#**

## 167) V. Korolkov

1st Pr., Trud, 1935

A rather confusing position. White is a rook up, and both sides have dangerous passed pawns. However, White cannot promote his own pawn by force, so he has to take some action against Black's passed pawns.

**1 d7**

1 ♜b1? e2 is dead lost and 1 ♜f7+? ♖xf7 2 ♙a6 is worse for White, so this is forced.

**1...♖e7**

1...f1♖ 2 d8♖+ ♖e5 3 ♖a5+ ♖d4 4 ♜d7+ gives White a winning attack, so Black must use his king to stop the pawn.

**2 ♜b8!**

After 2 d8♖++? ♖xd8 3 ♜b8 ♙xg3 4 ♜a8 (4 ♙xg3 f1♖ 5 ♙a6+ ♖c7 6 ♜c8+ ♖d7 draws) 4...♙b8! 5 ♙a6 ♖c7 6 ♖f3 f1♖+ 7 ♙xf1 ♖b7 Black draws easily.

However, the text-move stops Black promoting his pawn due to 2...f1♖ 3 d8♖+ ♖xd8 4 ♙a6+ ♖c7 5 ♜b7+ ♖c8 6 ♙xf1 ♖xb7 7 gxxh4, when the h-pawn is too fast.

**2...♙xg3!**

A cunning reply, removing a pawn and attacking the rook.

**3 ♜a8!**

The only possibility as 3 ♙xg3? f1♖ 4 d8♖+ ♖xd8 5 ♙a6+ ♖c7 6 ♜b7+ ♖c8 7 ♜xa7+ (7 ♜b6+ ♖c7 leads to a repetition) 7...♖b8 8 ♜b7+ ♖a8 forces a draw.

After the text-move, White is threatening to play 4 ♙a6, blocking the enemy pawns and remaining a rook up.

**3...f1♖**

After 3...♙c7 4 ♙a6 ♙b6 5 d8♖+ ♙xd8 6 ♜xa7+ ♖d6 it might take some time to finish Black off, but with his mighty passed pawns humbled by White's bishop there is no doubt about the eventual result. 3...♙b8 4 ♙a6 is even easier.

**4 d8♖+ ♖xd8 5 ♙a6+**

White will grab the new-born queen, but now Black reveals the point of his defence.

**5...♙b8!**

This bishop is invulnerable, so White's rook is cornered and liable to capture by Black's king.

**6 ♙xf1**

6 ♜xb8+? ♖c7 draws as in the note to White's third move.

**6...♖c7**

The threat is 7...♖b7 and White's bishop must stay on the f1-a6 diagonal to prevent ...e2, so there is only one move.

**7 ♙a6**

Keeping the enemy king at bay for the moment, but Black can use his other passed pawn to deflect the bishop.

**7...e2 8 ♙xe2 ♖b7**

Is the rook doomed?

**9 ♙f3!**

Yes, but the bishop comes to the rescue. The threat is 10 ♖xc6+.

9...♗xa8 10 ♖xc6#

### 168) G. Kasparian

1st Pr., *Tidskrift för Schack*, 1961

Material is equal, but White has a monster pawn on the seventh. Indeed, this pawn would guarantee an easy win were it not for the precarious position of White's king.

1 ♖f7!

Preparing to promote the pawn, but at this stage it is not at all obvious why White cannot play 1 ♖g6? or 1 ♖h5?.

1...♞b8+ 2 ♗a7 ♖d4+

Black must play actively to hold off White's promotion threat.

3 b6 ♖xb6+

The other important line is 3...♞xb6 4 e8♗+ ♗c7 (Black has various mating threats such as 5...♞b3+ followed by 6...♞a3#) 5 ♞a2!, when White prevents the possible mates along the a-file. Now it becomes clear why White had to play 1 ♖f7! and not another bishop move since if the rook were not defended by the bishop, Black would be able to play here 5...♞b2+ and 6...♞xa2#. The continuation might be 5...♞b8+ 6 ♗a6 ♞b6+ 7 ♗a5 ♖c3+ 8 ♗a4 ♞b4+ 9 ♗a3 and White escapes from the checks.

4 ♗a6

Black's checks have come to an end, but he has one shot left.

4...♖d8!

A good try, threatening 5...♞a8# and preventing e8♗ with check. White's king is caught in a box and drastic measures are necessary to prevent this mate.

5 ♖xc6+! dxc6 6 ♖e6+ ♗c7 7 e8♖#

A neat finish.

### 169) A. Guliaev

1st Pr., USSR Sports Committee, 1948

The e-file is the key battleground since both sides have dangerous passed e-pawns. In the end, it is the awkward position of Black's king which decides the game.

1 e7

The preliminary 1 ♞f5+? is a mistake as 1...c5! 2 e7 (2 ♞xc5+ ♗xa4 3 e7 ♖f7 also

draws) 2...♞e4 3 ♞xc5+ ♗xa4 4 ♞f5 (4 ♞c8 ♖f7) 4...♖f7! (4...b5? 5 ♞f4 ♞xf4 6 e8♗ e2 7 ♖c5 is winning for White, while 4...e2? 5 ♞f4 ♞xf4 6 e8♗+ b5 transposes) 5 ♞xf7 ♗b3 6 ♖h6 (6 ♞f4 ♞e6 7 ♞b4+ ♗a2 8 ♞b6 ♞e4 and 6 ♞f1 e2 7 ♞e1 ♗c2 are also drawn) 6...e2 7 ♖d2 b5 8 ♗b6 b4 9 ♗c5 e1♗ 10 ♖xe1 ♞xe1 enables Black to draw.

1...♞e4

After 1...♖xa4 2 ♞f5+ c5 3 ♞xc5+ ♗b4 4 ♞b5+! White promotes the pawn.

2 ♞f4!

The first rook deflection. 2 ♞f5+? c5! (White wins after 2...♗xa4? 3 ♞f4 or 2...b5? 3 ♞xb5+ ♗xa4 4 ♞b4+) 3 ♞xc5+ ♗xa4 transposes into the note to White's first move.

2...♞e6

Forced, as 2...♞e5 loses at once to 3 ♖g7, skewering the rook against a mate on c3.

3 ♞f5+!

3 ♞f6 ♞e4 leaves White with nothing better than retracing his steps with 4 ♞f4, but by forcing the king onto a different rank White gains new tactical possibilities.

3...♗xa4

Now 3...c5 fails to 4 ♞xc5+ ♗xa4 (4...♗b4 5 ♞e5) 5 ♞c8 e2 (Black can no longer play ...♖f7) 6 e8♗+ b5 7 ♗xe6 ♖xe6 8 ♞c1 ♗b3 9 ♗b6 ♗b2 10 ♞e1 and White wins with his extra material.

4 ♞f6!

The second deflection forces Black's rook onto a more vulnerable square. After 4 ♞f4+? ♖c4 5 ♞xc4+ ♗b3 Black defends.

4...♞e5

Black must avoid putting his rook on the same rank as his king because 4...♞e4 loses at once to 5 ♞f4.

5 ♞f4+

Now it seems that Black cannot avoid a fatal deflection, but he has a cunning defence.

5...♖c4!

5...♗a5 loses to 6 ♞f5, so Black offers his bishop to give his king some air.

6 ♞xc4+ ♗b3

6...♗b5 loses to 7 ♞c5+, so this move is forced. After the text-move, the position is the same as in the note to White's fourth move, except that Black's rook is on e5 instead of e6. The earlier line led to a draw, so White must somehow exploit Black's rook position.

**7 ♖c3+!**

This is the key. The new tactical idea is to try to force Black's king onto the same diagonal as his rook.

**7...♗a2**

7...♗xc3 loses at once after 8 ♖g7, while 7...♗b2 8 ♖c5 ♖e6 9 ♖e5! ♖xe5 10 ♖g7 only delays matters slightly. The other important line is 7...♗a4 8 ♖a3+ ♗b5 9 ♖d3 (threatening 10 ♖d5+) 9...c6 (9...♗c4 10 ♖d8 e2 11 e8♖ e1♗ 12 ♗a4+ and White wins) 10 ♖d8 e2 11 e8♖ e1♗ 12 ♖d5+! with a neat finish, exploiting two pins by the white queen.

**8 ♖c2+**

8 ♖a3+? ♗b1 9 ♖a1+ ♗c2 leads nowhere.

**8...♗b3**

Or 8...♗b1 9 ♖e2 c5 (9...♗c1 loses to 10 ♖xe3 ♖xe3 11 ♖h6) 10 ♗xb7 c4 11 ♗c6 c3 12 ♖e1+ ♗c2 13 ♗d6 ♖e4 (13...♖xe7 14 ♖xe7 ♗d2 15 ♖h1 c2 16 ♖g5) 14 ♖h6 e2 15 ♖f4 followed by ♖e5 and White wins.

**9 ♖b2+!**

For a second time, White exploits the long-diagonal motif. After 9 ♖e2 ♗c4 White has nothing better than to return to c2.

**9...♗c4**

After 9...♗a4 10 ♖e2! (10 ♖b4+? ♗a5 11 ♖g7 e2 12 ♖xe5 e1♗ 13 ♖c3 is a likely draw after 13...♗e3+ 14 ♗b8 ♖a6) 10...♗b5 (10...c5 11 ♗xb7 c4 12 ♗c6 c3 13 ♗d6 ♖e4 14 ♗d5 wins) 11 ♗xb7 ♗c4 12 ♖e1 ♗d3 (12...♗c3 13 ♖g7 and 12...e2 13 ♗xc7 ♗d3 14 ♗d6 ♖e4 15 ♖g7 ♗d2 16 ♖xe2+ followed by 17 ♖e5 are also lost for Black) 13 ♖d1+ ♗c2 14 ♖d8 e2 15 e8♖ e1♗ (15...♖xe8 16 ♖xe8 ♗d1 17 ♖b4) 16 ♗a4+ White has a decisive attack.

**10 ♖b4+!**

The fifth rook sacrifice is decisive because Black's king is forced onto the d-file, after which the rook transfer to d8 decides the game.

**10...♗d3 11 ♖d4+**

White also wins after the similar 11 ♖b5 ♖e6 12 ♖d5+ followed by ♖d8.

**11...♗c2 12 ♖d8 e2 13 e8♖ e1♗ 14 ♗a4+**

White mates in a few moves.

**170) A. Frolovsky**

*Kommunar*, 1973

White is a pawn down, but his advanced passed pawn is potentially a decisive asset. However,

first of all he must deal with the attack on his rook.

**1 ♖f3!**

White sets up a discovered attack against Black's rook and threatens an immediate win by 2 ♖d2+. Other moves are inferior:

1) 1 ♖d2? ♗b5 2 ♖c4 ♖b4 3 ♖xb4 cxb4 (3...♖a8 followed by ...♖xa7 also draws; the b3-pawn is too weak to avoid being lost or exchanged) 4 ♗xc7 ♗a6 5 ♖xb4 ♖f7+ and Black draws the rook and pawn ending.

2) 1 ♖h3? ♗b5 is a draw because there is no discovered attack on Black's rook.

**1...♗b5!**

Black races back to deal with the a-pawn. After most other moves White wins by playing 2 ♗xc7, while 1...♖a8 fails to 2 ♗c6! threatening 3 ♖d2#.

**2 ♖xd6!**

White uses the f-file line-up to demolish Black's pawn-structure. 2 ♗xc7? ♖f7+ is a simple draw.

**2...♖a8 3 ♖f8!**

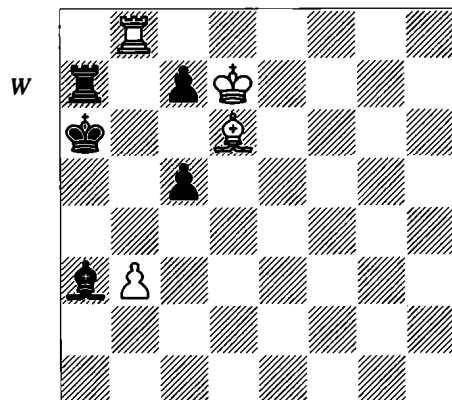
The a-pawn is doomed in any case, but White can use the time Black consumes in capturing it to switch to a new plan – a direct attack on Black's king.

**3...♖xa7**

3...cxd6 4 ♖xa8 ♗b6 5 ♖d8 ♗xa7 6 ♗c6 is an easy win for White, so this is forced.

**4 ♖b8+ ♗a6 (D)**

After 4...♗a5 5 ♖xc7+ ♗a6 6 ♗c6 White wins easily.



After the text-move, White has a problem: his bishop is *en prise*, but if it moves Black escapes from his troubles by means of ...♖b7; for

example, 5 ♖xc7? ♜b7 6 ♜a8+ ♖b5 7 ♜xa3 ♖b4 8 ♜a1 and now the most practical method of drawing is 8...♜xc7+ 9 ♖xc7 ♖xb3 10 ♜b1+ ♖c2, although 8...c4 is of course also adequate.

**5 ♖xc5!!**

This very surprising move is the answer. It is worth a piece to gain the tempo necessary to complete the cage around Black's king and rook.

**5...♖xc5**

Acceptance is forced, as both bishop and rook are under attack.

**6 ♖c6**

Surprisingly, this is a position of reciprocal zugzwang. With White to play, 1 ♖xc5 can be met by 1...♜b7, and 1 ♜b5 by 1...♖b6 2 ♜b4 ♜b7!, with a draw in both cases.

**6...♖b6**

6...♖a5 fails to 7 ♖xc5 c6 8 ♜b4 ♖a6 9 ♖xc6 so Black must move his bishop. However, 6...♖d4 7 ♜b4 and 6...♖d6 7 ♜b4 ♖e7 8 ♜b5 ♖xb4 9 ♜xb4 ♖a5 10 ♜b1 ♜a6+ 11 ♖c5 are hopeless for Black, which leaves only the text-move.

**7 ♜b4**

A second reciprocal zugzwang. Black must move the bishop and allow the rook to b5, but then White's attack is irresistible.

**7...♖g1 8 ♜b5 ♖b6 9 ♜a5+ ♖xa5 10 ♜b5#**

### 171) V. Korolkov

1st Pr., Erevan Chess Club Tny, 1947

Black's material advantage is sufficient to win, and in addition White's king is vulnerable to mate on the back rank or by ...♜e4+, so immediate action is essential.

**1 c7+ ♖a7**

This is the only move to cause difficulties for White:

1) 1...♖b5 2 ♖e2+ ♖a5 3 ♜a6+ ♖b4 4 ♜b6+ is perpetual check.

2) 1...♖a5 2 ♜a6+! ♖b5 3 ♖e2+ ♖b4 4 ♜b6+ leads to the same perpetual.

3) 1...♖b7 2 c8♜+! ♖xc8 3 ♖xg4+ ♖c7 4 ♜d7+ ♜xd7 5 ♖xd7 ♖xd7 6 ♖g1 is a drawn pawn ending; White defends just as if the h-pawns were not there.

**2 ♜a6+**

After 2 c8♜+? ♖b8 Black wins easily. The text-move aims to force Black's king onto the long diagonal.

**2...♖b7**

How can White continue now? If he plays 3 c8♜+? ♖xc8, then both 4 ♖xg4+ ♖b7 and 4 ♜a8+ ♖b7 are hopeless for White.

**3 ♖f3+!!**

This move appears complete madness. White offers his bishop for ... what?

**3...gxf3**

Black must accept, since after 3...♖c8 or 3...♖xc7 he loses his queen.

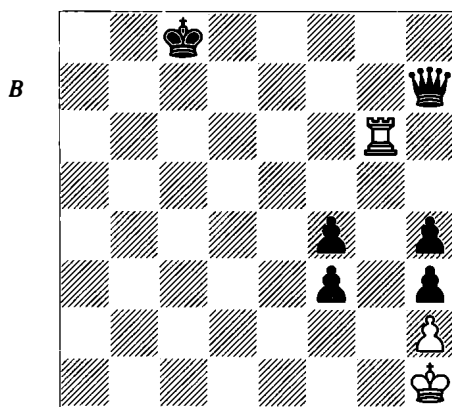
**4 c8♜+**

This further sacrifice forces Black's king onto the back rank. White must not play his moves in the other order since after 4 ♜g6? ♜d7 5 c8♜+ ♜xc8 6 ♜g7+ ♖b6 7 ♜g6+ ♖b5 Black easily escapes the checks. 4 ♜a7+? is also bad since 4...♖xa7 5 c8♜ ♜b1+ mates.

**4...♖xc8**

A draw appears almost unimaginable, but now White reveals the point behind his last two moves.

**5 ♜g6! (D)**



The rook cannot be taken because of stalemate, but White threatens to force a draw in any case by 6 ♜g8+ followed by 7 ♜g7+. Thanks to the clumsy position of Black's king and queen, it isn't easy to counter this threat.

**5...♜h5**

As an example of what happens if Black ignores the threat, 5...♖d8 6 ♜g8+ ♖d7 7 ♜g7+ ♖e6 8 ♜xh7 f2 9 ♜e7+ leads to a draw by perpetual check or stalemate. 5...f2 leads to a different perpetual check after 6 ♜c6+ ♖d7 7 ♜d6+ with checks along the sixth rank.

The text-move counters White's threat to give checks along the g-file, because Black can

simply approach the rook with his king; e.g., 6 ♖g8+? ♕d7 7 ♖g7+ ♕e6 8 ♖g6+ ♕f7.

**6 ♖g5!**

This is the correct approach. Black's queen is well placed on h5 and must be kicked away.

**6... ♖h6**

Moving the queen to the first or second rank leads to an immediate draw, so there are only two feasible moves. The other is 6...f2 but then White draws by perpetual check. Although the draw is not difficult, there are a few finesses because White must make sure he is never obliged to play ♖g3+, when Black can safely take the rook: 7 ♖c5+ ♕d7 (7...♕b7 8 ♖c7+ is a simple draw by checking along the c-file) 8 ♖c7+ (8 ♖d5+? ♖xd5#) 8...♕e6 9 ♖c6+ ♕f5 (after this White must take care) 10 ♖f6+ (10 ♖c5+? is wrong: 10...♕g4 11 ♖g5+ ♕f3 and Black wins) 10...♕e4 (10...♕g5 11 ♖f5+ draws by f-file checks) 11 ♖xf4+ (11 ♖e6+? is again wrong: 11...♕f3 12 ♖e3+ ♕g4) 11...♕e3 12 ♖e4+ ♕d2 13 ♖d4+ ♕e2 14 ♖e4+ ♕f1 15 ♖e1+ forcing stalemate.

**7 ♖g6!**

Once again, the immediate checks don't work as Black's king can approach the rook. Thus White must displace the queen.

**7... ♖h5 8 ♖g5**

Black can only avoid the perpetual attack on his queen by playing ...f2 or by playing his queen to one of the first two ranks. As we have seen, White can draw in either case.

## 172) A.I. Kotov

2nd Pr., 64 – *Shakhmatnoe Obozrene*, 1973

In view of the open position and the exposed white king, it seems that White must operate with checks in order to keep Black's queen at bay. Although this is true for the first few moves, a remarkable position then arises.

**1 h6+**

The only check to hold promise. 1 ♔c3+? ♕g8 is clearly wrong.

**1... ♕f8**

The toughest defence since 1...♕h8 2 ♔c3+ ♕g7 3 ♔xg7+ ♕g8 4 ♔f6 ♖a5+ (4...♕f8 5 h7) 5 ♕g4 ♖a4+ 6 ♕g3 ♖a3+ 7 ♕g2 ♖a2+ 8 ♕g1 leads to mate in a few more moves, while 1...♕g8 2 h7+ ♕h8 3 ♔c3+ transposes to the main line.

**2 ♔b4+**

Forcing Black's king to g8 in any case.

**2... ♕g8**

2...♕d6 3 ♔xd6+ ♕e8 4 g7 ♖a5+ 5 ♕g6 is hopeless for Black.

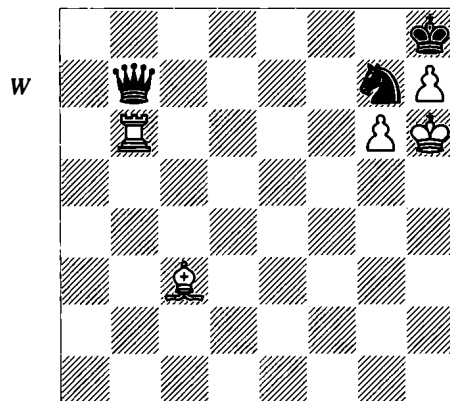
**3 h7+ ♕h8 4 ♔c3+ ♕g7**

Black has staved off the immediate attack, but now White can step up the pressure with a 'quiet' move.

**5 ♕h6**

This move is only relatively quiet, since it threatens mate in two by 6 ♖b8+. It also has the merit of preventing a queen check. If White wastes time then Black draws by activating his queen; for example, 5 ♔d4? ♖a5+ 6 ♕f4 ♖f5+ 7 ♕e3 ♖h3+, etc.

**5... ♖b7! (D)**



This stalemate defence is the only way of meeting White's threat. It is not only a defensive move, however, since 6...♖h1+ is a counter-threat.

**6 ♖c6!**

White must block the long diagonal, so this is the only move. White also renews the threat of mating by a rook check on the back rank.

**6... ♖c7**

Each player's move is forced and each one sets up a threat which forces the opponent's reply. The effect is that the queen and rook are drawn inexorably, square by square, towards the kingside.

**7 ♔d6 ♖d7 8 ♖e6 ♖e7**

Only at this point does the rhythm break down, because 9 ♖f6? would allow 9...♖e3+. Thus it would seem that the struggle has taken a turn in Black's favour. However, a second new

feature of the position tips the balance towards White: the diagonal from e7 to h4 can be blocked by the bishop as well as the rook.

**9 ♖f6!**

Now Black is helpless as the queen has too many duties.

**9... ♜f7**

A final attempt to confuse White. The threat is 10... ♜xg6+, but White's rook at last gets the chance to reach the back rank.

**10 ♖e8+ ♜xe8 11 ♖xg7#**

### 173) N. Kralin

2nd Pr., Chervoni Girnik, 1972

Black's a-pawn is on the verge of promotion and 1 ♖h1? loses to 1... ♖d5+, so White has no choice but to start checking.

**1 ♖h4+ ♜b5**

After 1... ♖c4 2 ♖xc4+ ♜b3 3 ♖c7 a1 ♜4 ♜xa7 White is in no danger of losing since playing ♖d6 leads to a position in which everything is defended.

**2 c4+!**

2 a4+? is wrong since 2... ♜b6 leaves White helpless.

**2... ♖xc4**

Black must accept, or else White will be able to play ♖h1.

**3 a4+**

This is the first point of White's play: Black will promote his pawn, but he will have to surrender his bishop in the process.

**3... ♜b6**

Forced, as 3... ♜a6? 4 ♖xc4 leads to mate.

**4 ♖xc4 a1 ♜**

The key position. It looks bleak for White, since Black is threatening to force mate by ... ♜h1+, and White has only one check.

**5 ♖c5+ ♜a6 6 ♖g1!**

The only move, blocking the first rank. However, it is not only defensive since White now threatens mate in one!

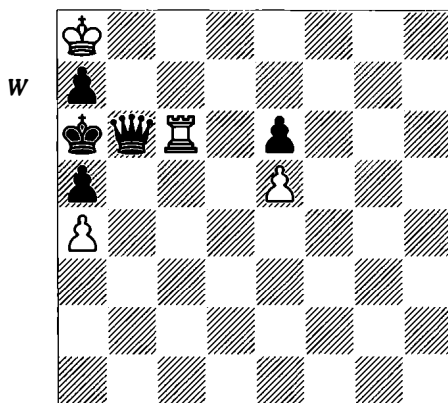
**6... ♜xg1**

Once again forced, since there is no way for the queen to cover c6. Now White can win Black's queen if he wants.

**7 ♖c6+ ♜b6 (D)**

**8 ♖c7!!**

But in fact he doesn't want to win the queen, since that would give Black a winning king and



pawn ending. Instead, he plays a paradoxical rook move. Not only does he unpin the black queen, but he generously offers his rook into the bargain.

**8... ♜d4**

Remarkably, Black has no good move. Taking the rook is stalemate, while after other queen moves White checks again on c6 and the position is repeated.

**9 ♖c6+ ♜b6 10 ♖c7**

Black cannot avoid the repetition.

### 174) A. Maksimovskikh and V. Shupletsov

1st Pr., Trans-Ural Ch., 1983-4

A win doesn't look very likely for White. Although he has two dangerous passed pawns, he is a piece down and Black has a passed pawn of his own. Moreover, the move ... ♜xg5 is available to help Black fight against the white pawns.

**1 e6**

White has to push his pawns quickly, so this is the only reasonable move. The threat is 2 ♖d6+, so Black has no time to take on g5.

**1... ♖c8**

1... ♜xg5 2 ♖d6+ ♜f3 3 ♖xc7 ♜xe6 4 ♖d6! ♜g5 5 ♖c6 is hopeless for Black, so he pins the bishop. Now the obvious move is 2 e7? but after 2... ♜xg5 3 ♖d4 (3 ♖d8? ♜f7+ 4 ♜g7 ♖xd8 5 ♜xf7 g5+ is even worse since the pawns are halted and Black wins) 3... ♜f7+ 4 ♜g7 g5 5 ♖xc4 ♜d6 6 ♖xc8 ♜xc8 7 f7 ♖xf7 8 ♜xf7 ♜xe7 Black liquidates the pawns and draws.

**2 ♖d8!!**

A very surprising move: it is worth a rook to gain a tempo for advancing the pawns.

**2...♖xd8 3 e7 ♜xg5!**

Black employs a tactical device of his own. Instead, 3...♖c8 4 f7 ♜xg5 5 e8 ♜ ♜xf7+ 6 ♜xf7 is lost for Black. Although he is not so badly off in purely material terms, White will unpin his bishop and then start a deadly attack with his pieces against the black king.

**4 exd8♜!**

This is certainly the only move, although with the black knight controlling f7 it does not seem likely to lead to a win. However, there is one major factor operating in White's favour – the h5-bishop is very poorly placed.

**4...c3**

In view of White's threat of 5 ♖h6, Black's best chance is to push his own pawn. Playing the bishop round is too slow; e.g., 4...♗f3 5 ♖h6 ♗d5 6 ♖xg5 c3 7 f7 ♗xf7 8 ♜xf7 ♜f3 9 ♜d6 ♜e2 10 ♜b5 c2 11 ♜d4+ ♜d1 12 ♜b3 and the pawn is stopped.

**5 ♖h6 ♜g4 6 ♖xg5 ♜xg5**

Now that the knight is eliminated, White can advance his own pawn.

**7 f7 c2**

Black does likewise.

**8 f8♜ c1♜**

The upshot is that both sides have promoted at the same time. Does that mean that White's efforts have been in vain?

**9 ♜h6+!**

Not at all! This queen sacrifice is decisive. 9 ♜e6+? ♜g4 leads to nothing.

**9...♜xh6 10 ♜f7#**

## 175) N. Kondratiuk

1st Pr., *Problemist Yuga*, 1997

White is a piece down, but has dangerous pawns on both sides of the board.

**1 b7**

1 ♜e8 ♜c5 (1...♖e1 loses to 2 ♖e5+! ♜xe5 3 gxh7) 2 b7 (not 2 gxf7? ♖xh5, however) is also possible and transposes to the main line.

**1...♜c5+**

Black must eliminate the pawn.

**2 ♜e8**

The king prepares to take part in an attack on his enemy counterpart.

**2...♜xb7**

2...♖b5+ 3 ♖xb5 ♖e1+ 4 ♜f8 ♜d7+ 5 ♜g8 fxc6 6 ♖d5 ♜e6 7 ♖d6+ ♜e7 8 ♖xd7+ ♜xd7 9

b8♜ ♖e8+ 10 ♜xe8+ ♜xe8 11 h6 wins for White.

**3 ♖b6+!**

The only winning try, since 3 gxf7? ♖xh5 and 3 gxh7? ♖xh5 offer no chances at all.

**3...♜d6+!**

Black tries to block the bishop's path to e5. Other moves:

1) 3...♜g7 4 ♖e5+ f6 5 ♖xb7+ ♜h6 6 gxh7 and the pawn promotes.

2) 3...♜f5 loses to 4 gxf7 ♖xh5 5 ♖b5+ ♜e4 6 ♖xh5.

**4 ♖xd6+**

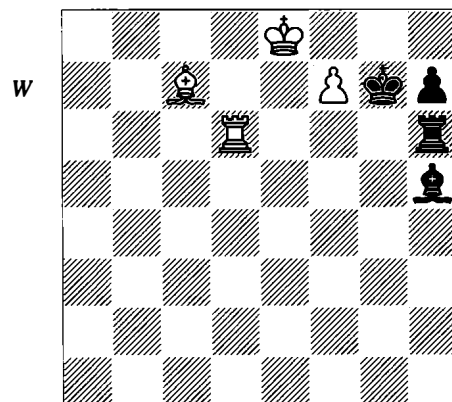
After 4 ♖xd6? fxg6 Black defends.

**4...♜g7 5 h6+!**

5 gxf7? doesn't work owing to 5...♖xh5; Black's rook must be deflected to h6 first.

**5...♖xh6 6 gxf7 ♖h5 (D)**

With the rook blocking h6, White has a stunning winning move.



**7 ♖g6+!!**

A quadruple sacrifice of the rook.

**7...♖xg6**

Otherwise White just promotes his f-pawn.

**8 ♖e5#**

## 176) L. Katsnelson

1st Pr., *Shakhmaty v SSSR*, 1968

In this natural position White is a piece down, but his pieces are very actively placed and he has a dangerous passed f-pawn.

**1 f7**

This move sets up the deadly threat of 2 ♖e8+. Black's defence is based on creating threats against the white king.

1...♔d8! 2 ♖e8 ♜b7!

Now if 3 ♜xh8?, then 3...♙b3 followed by 4...a6#. However, White can turn the tables and start to attack Black's king.

3 ♖e7+! ♜a8

3...♜c8 4 ♜c7+ ♜b8 5 f8♙ ♜xf8 6 ♜f7+ ♜c8 7 ♜xf8 is a technical win for White.

4 ♜a6

Now White is threatening mate in one. The reply is forced.

4...♙xc4+ 5 b5 ♔c6

5...♙xb5+ 6 ♜xb5 is hopeless for Black since he has no defence to 7 ♖e8. Therefore Black's only chance is to prepare to interpose on b8.

6 ♖e8+ ♔b8+ 7 ♙xb8

All this is forced, but Black's resources now appear to have come to an end since his rook is attacked, and White threatens to mate by making any move with his bishop. However, Black has an unexpected defence.

7...♙xf7!

The point is that after 8 ♜xh8? Black replies 8...♙g8! and White is unexpectedly in zugzwang (which is of course reciprocal) – every legal move apart from 9 ♜xh7 delivers stalemate. However, White's alternatives hardly look promising as he is two pawns down.

8 ♖e7!

An unexpected twist. White's positional advantage (very active rook and king) is so great that he can afford to enter a rook ending despite his material disadvantage. It might seem that Black has little more to say, because it is hard to imagine a better move than taking the bishop, but he has another surprising stalemate defence.

8...♙e6!

The obvious move is 8...♜xb8 but the ending after 9 ♜xf7 ♖e8 10 ♜xa7 is lost for Black: 10...♖e5 (Black must seek to remove at least one white pawn since passive defence by 10...♖e6 is hopeless: 11 ♜b7+ ♜c8 12 ♜xb6 ♖e1 13 ♜xh6 ♖e7 14 b6 ♜b8 15 ♜f6 ♖e8 16 ♜f7 h6 17 ♜h7 and Black loses his last pawn) 11 ♜xh7 ♜xh5 12 ♜xb6 ♜c8 13 ♜c6 ♜d8 14 b6 and the pawn promotes.

9 ♖xe6!

The only real alternative is 9 ♙xa7? but then Black develops some counterplay by 9...♙c8+ 10 ♜xb6 ♖e8! 11 ♜xh7 ♙g4 and the opposite-coloured bishops save Black. One line is 12

♜xh6 ♙xh5! 13 ♜xh5 ♖e6+ 14 ♜c7 ♜xa7 with a drawn rook ending.

9...♖e8!

Again playing for stalemate, Black hopes to activate his rook with gain of tempo. After 9...♜xb8 10 ♖e7 White wins just as in the note to Black's eighth move.

10 ♜xh6

White is confident that if Black takes the bishop, 11 ♜xh7 will result in a winning rook and pawn ending, but Black has something else in mind. Not 10 ♖e5? ♖xe5 11 ♙xe5 with stalemate.

10...♖e1!

Suddenly Black is threatening mate in one.

11 ♙xa7

The only move not to lose.

11...♖a1+! 12 ♜xb6 ♖a6+!

12...♜xa7 13 ♔d6 ♜b7+ 14 ♜c6 ♜b8 15 ♔d7 is an easy win for White, so Black makes his third attempt to force stalemate.

13 ♜c7!

White is able to sacrifice his rook.

13...♜xh6 14 b6 ♜xb6

Forced, and setting one final trap.

15 ♙xb6!

15 ♜xb6? h6 is a draw as White can only lift the stalemate by giving up his bishop.

White had to display great ingenuity to overcome Black's repeated stalemate defences.

## 177) A. Kazantsev

1st Pr., *Shakhmaty v SSSR*, 1953

With only a rook and three pawns for the queen, White is down on material, but one of the extra pawns is the passed pawn on a7 and this tips the balance in White's favour.

1 ♜b7!

The only move to avoid losing, since the rook was hanging and White cannot permit ...♙xd5+. The main threat is 2 ♙d1+ ♜a5 3 b4+ ♜a6 4 ♙e2+ followed by mate.

1...♙e5

A good move, preventing the check on e2 while at the same time stopping ♜b8. 1...♜a5 2 ♙d1 ♙e5 transposes to the main line, but other moves lose quickly; for example, 1...♙e1 2 ♜b8 ♙g3+ 3 ♜c8 mating or 1...♙xd5 2 ♙d1+ ♙b3 3 ♙xb3+ ♜a5 4 h7 ♙g7 5 ♙d1 and Black cannot meet all the threats.

**2 ♖d1!**

White plays to release his king from the prison on a8. Black draws comfortably after other moves:

1) 2 h7? ♙xd5 3 ♖d1+ ♘a5 4 b4+ ♘a6 5 ♙e2+ ♙xe2 6 h8 ♙ ♙xb7+ 7 ♘b8 ♙b5 8 ♙a1+ ♘b6 draws.

2) 2 ♙g6? renews White's threat, but after 2...♘a5! (2...♙xd5 is good enough for a draw) White would even be struggling for a draw.

3) 2 ♙f3? ♙xd5 3 ♙xd5 ♙xd5 4 h7 ♙e5 offers White no winning chances.

**2...♘a5 3 b4+ ♘a6 4 ♙e2+!**

White is prepared to sacrifice his bishop in order to free his king and unleash the power of the a-pawn.

**4...♙xe2 5 ♘b8 ♙e5+**

5...♙e8+ 6 ♘c7 transposes to the main line.

**6 ♘c8**

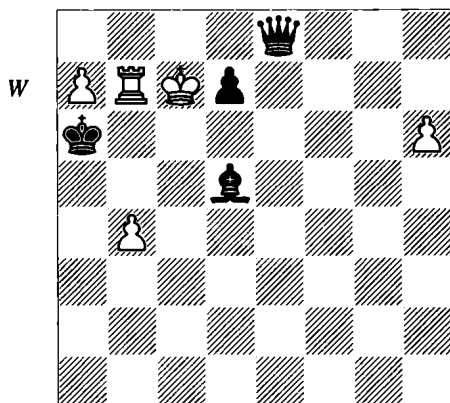
Not 6 ♙c7?? ♙xd5, when Black wins.

**6...♙e8+ 7 ♘c7**

Although Black's queen is now covering the promotion square, White has the powerful threat of 8 a8 ♙+! ♙xa8 9 ♙b6+ ♘a7 10 ♙b5, when Black would have to give up his queen to prevent mate on a5.

**7...♙xd5 (D)**

The best chance. White wins easily after 7...♙e5+ 8 d6 ♙xd6+ (8...♙c3+ 9 ♘b8 mates) 9 ♘xd6 ♘xb7 10 a8 ♙+ ♘xa8 11 ♘c7 or 7...d6 8 a8 ♙+ ♙xa8 9 ♙b6+ ♘a7 10 ♙b5 ♙xd5 11 ♙xd5 ♙xd5 12 h7.

**8 a8 ♙+!**

Once again the key idea is to deflect Black's queen into the corner.

**8...♙xa8 9 ♙b6+ ♘a7**

Now White cannot play 10 ♙b5? because Black has a check on c6, but he has an alternative method of threatening mate on a6.

**10 b5 ♙b7**

Stopping one mate but running into another. 10...♙d8+ 11 ♘xd8 ♘xb6 12 h7 promotes.

**11 ♙a6+! ♙xa6 12 b6#****178) N. Elkies**

2nd Pr., 'Saratov' blitz, 39th WCCC, Tel-Aviv 1996

White has an impressive array of passed pawns, but on the other hand Black is a queen up and has dangerous threats against the white king.

**1 ♙c8+!**

The threat of 1...♙xf6+ can only be met by eliminating the e8-knight, but it is first necessary to drive Black's king to an inferior square. The reason for this is quite subtle and only appears near the end of the study. Other moves lose:

1) 1 ♙e7? ♙f7 2 ♙c8+ ♘d3 3 ♙c5 ♙xc5 mates.

2) 1 g8 ♙? ♙xf6+.

3) 1 ♘g6? ♙e4+ 2 ♘f7 ♙c4+ 3 ♘g6 ♙g4+ 4 ♘f7 ♙h5+ and mate next move.

4) 1 ♙xe8? ♙e4+ 2 ♘h8 (the alternative 2 ♘g8 loses to 2...♙xe8 3 f7 ♙e6 4 h5 ♙a8 5 h6 ♙xa7) 2...♙xh4+ 3 ♘g8 ♙xe8 4 f7 ♙c4 wins for Black when the king is on c3.

**1...♘b3**

It transpires that b3 is an unfortunate square for the king, but Black has little choice:

1) 1...♘d3 2 a8 ♙ ♙h5+ (2...♙xf6+ fails here because after 3 ♘g6 there is no check on d3) 3 ♘g6 ♙f5+ 4 ♘f7 ♙xf6+ 5 ♘xe8 ♙e5+ 6 ♘d7 ♙f7+ 7 ♘c6 and White draws.

2) 1...♘b2 (this allows White to move his bishop with gain of tempo, freeing the f8-square for the king) 2 ♙a3+ ♘b3 3 a8 ♙ ♙xf6+ 4 ♘g6 ♙d3+ 5 ♘f7 ♙d7+ 6 ♘f8! ♙h7+ 7 ♘g8 ♙f6+ 8 ♘f8 and White draws.

3) 1...♘d2 (this continuation is similar to 1...♘b2) 2 ♙b4+! ♘e2 3 a8 ♙ ♙xf6+ 4 ♘g6 ♙d3+ 5 ♘f7 ♙d7+ 6 ♘f8! again with a draw.

**2 ♙xe8!**

White should take the knight while the black king is on the poor square b3 since if he continues checking, Black's situation improves. The alternatives are:

1) 2 a8♚? ♘xf6+ 3 ♖g6 (3 ♖h6 ♘g4+ mates) 3...♚d3+! 4 ♘f7 ♚d7+ 5 ♖g6 (5 ♙e7 ♚e6+6 ♖g6 ♘d5+) 5...♚f5+ 6 ♘f7 ♚h5+ and mate next move.

2) 2 ♖b8+? ♖c2! 3 ♜c8+ ♖d1! 4 ♜xe8 ♚e4+ and Black wins just as after 1 ♜xe8?.

3) 2 ♜c5? ♘xf6+ 3 ♖g6 ♚d3+ 4 ♘f7 ♚d7+ 5 ♖g6 ♚e8+ mates next move.

2...♚e4+!

2...♚h5+ 3 ♖g6 ♜xh4 4 ♜e5! ♚d3+ (4...♚xe5 5 g8♚+ favours White) 5 ♘f7 ♚c4+ leads to a draw.

3 ♖h8!

3 ♖g8? ♜xe8 4 f7 ♜a8 5 h5 ♚e6 6 h6 ♜xa7 7 h7 ♚xf7 8 ♖h8 ♚e5 9 ♖g8 ♜f5 leads to a rapid mate.

3...♚xh4+

Black must check on the h-file because White was threatening to promote with check on g8. 3...♚h5+ 4 ♖g8 ♚xe8 5 f7 is also a draw after 5...♚c8 (5...♚e4?! 6 ♙e7 ♚h7+ 7 ♖f8 ♚e4 and Black just draws) 6 a8♚ ♚xa8 stalemate.

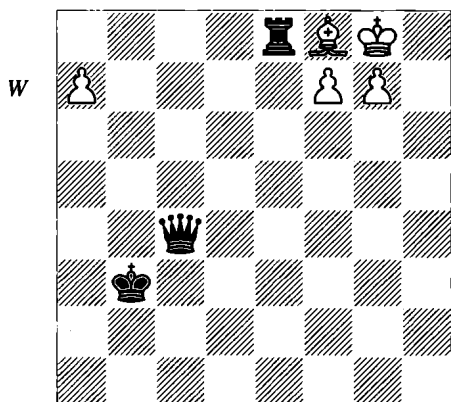
4 ♖g8 ♚c4+

4...♜xe8 5 f7 ♜c8 (5...♚c4 transposes to the main line) 6 a8♚ ♜xa8 is another stalemate.

5 f7!

5 ♖h7? loses to 5...♚e4+ 6 ♖h8 ♚h1+! 7 ♖g8 ♜xe8 8 f7 ♜d8 9 a8♚ ♚xa8!.

5...♜xe8 (D)



Black appears to have everything under control, but White has a remarkable defence.

6 ♖h8! ♚xf7

There is nothing better.

7 a8♚!

Not 7 g8♚? ♜xf8 8 a8♚ ♚xg8#.

7...♜xa8

Now 8 g8♚? loses to 8...♜xf8, but White need not promote to a queen.

8 g8♙!

This move also explains the preliminary 1 ♜c8+ to force Black's king to b3. Without the pin along the g8-a2 diagonal, White would lose.

8...♜xf8

Stalemate.

## 179) A. Manvelian

1st Pr. (section for draws), Kasparian Memorial Tny, 1996

Where should the white king go?

1 ♖b3!

Not 1 ♖a3? ♘xd5, when Black will win on material, since the d-pawn will cost White his rook.

1...♙a2+

This is now forced, since 1...♘xd5 2 ♜a7+ leads to the capture of Black's bishop and knight with check.

2 ♖a3

Thanks to the deflection of Black's bishop to a2, White has a useful check on c1.

2...♘xd5

Black of course grabs the bishop. 2...d2 3 ♙f3 ♙d5 4 ♙e2 is not dangerous for White, since he is quite happy to give up his bishop for the d-pawn.

3 ♜c1+

Transferring the rook to the first rank with gain of tempo.

3...♙b1

White still faces a problem because Black threatens ...d2 and ...d1♚, reaching a winning position with three minor pieces against one.

4 ♘f5

White's knight tries to join the battle, but will it be too late?

4...d2 5 ♘d4

The knight starts to interfere with Black's plans. White is threatening mate on b3, and Black must take time out to meet this threat.

5...♘c4+

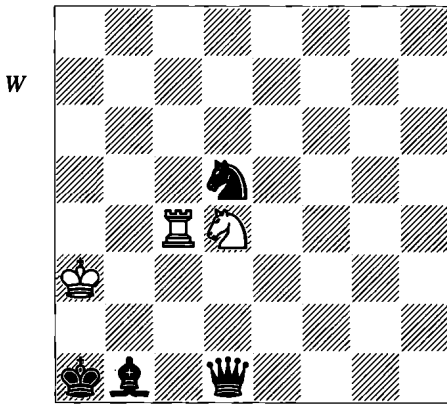
5...dxc1 ♘ is the alternative, but then 6 ♘c2+ forces 6...♙xc2 stalemate.

6 ♜xc4

White must take, for if he moves his king the mate is gone and Black can just take the rook.

6...d1♚ (D)

Black appears to have won the battle since he has a queen and bishop for a rook.



### 7...Rc2!!

The obvious 7 Qb3+? Rxb3+ 8 Qxb3 loses to 8...Ra2+. However, the ingenious text-move renews the mating threat and gives rise to a remarkable position in which Black cannot win despite his large material superiority.

### 7...Rc2

All the obvious moves lead to stalemate; for example, 7...Rxc2 8 Qxc2+ Rxc2 or 7...Rxd4 8 Ra2+ Rxa2.

### 8 Qb3+ Qb1

8...Rxb3 is stalemate.

### 9 Qd2+ Qc1

9...Rxd2 is the final stalemate.

### 10 Qb3+

It is either perpetual check or stalemate.

## 180) G. Nadareishvili

=1st Pr., Zaria Vostoka, 1970

White is two pieces ahead, but his poorly-coordinated forces will struggle to halt Black's passed pawns.

### 1 Qd2

The best way to cope with the first enemy, Black's e-pawn. 1 Rxc4+? Qf3 2 Re4 may stop one pawn, but after 2...h2 the other one will promote.

### 1...Qf3

Threatening 2...Rd5+ and 2...Bg1. Alternatives present no problems; e.g., 1...e1 R+ 2 Qxe1 Bg1+ (2...h2 3 Rxc4+) 3 Qf2 Bg2+ 4 Qf1 Rxa2 5 Rxc4+ or 1...h2 2 Rxc4+ Qf3 3 Rh4 with an easy draw in both cases.

### 2 Rxc4

The obvious way to meet Black's threats: White covers d5, attacks e2 and brings the bishop into play. However, 2 Qf5? is an interesting try which requires precise handling: 2...Qf2! (2...h2? 3 Qd4+ Qg2 4 Rh6 Rd5 5 Qxe2 Rxd4 6 Qe3! Rd3+ 7 Qe2 Rh3 8 Bg6+ Bg3 9 Rh6 is a draw, while 2...Rxf5? fails to 3 Rxc4) 3 Re6 c3+ 4 Qxc3 e1 R+ 5 Rxe1 Qxe1 6 Qd4 Qf2 7 Qb1 h2 8 Qe4 Bg2 and Black wins.

### 2...e1 R+

Black draws the king to e1 so that he can promote his other pawn with check. 2...Re5 is met by 3 Qe4! (3 Rxe2+? loses to 3...Rxe2+ 4 Qd3 Re6!) 3...Rxe4 (after 3...e1 R+ 4 Qxe1 Rxe4+ 5 Qd2 White draws easily) 4 Bf6+ followed by Rxe2 and White has no problems.

### 3 Qxe1 h2

Black does not improve his chances by checking first since after 3...Re5+ 4 Qd2 h2 White can defend with 5 Qf7! h1 R 6 Qxe5+ Qe4 7 Qd3+ (amongst many other moves) 7...Qxe5 8 Rxc4.

### 4 Qe2+

White's only hope is to start checking, but 4 Qd5+? fails to 4...Rxd5 5 Rxc3+ Qg4 6 Rxc4+ Qh5.

### 4...Qg2

After other moves White defends with a rook check.

### 5 Qf1+ Qg1

Now it seems that White's resources are exhausted. He has no more checks and, although Black is no longer threatening to promote with check, White's pieces do not seem active enough to cause Black any real problems.

### 6 Qg2!!

Surprisingly, the solution to White's difficulties is to give away his bishop.

### 6...Rxc2

Forced, since 6...Qxg2 7 Rxc2+ Qg1 8 Rxc2 and 6...Re5+ 7 Qd1 Qxg2 8 Rxc2+ Qg1 9 Rxc2 Qxh2 10 Qc2 are easy draws. Now, however, the g2-rook blocks in the queen on h1 and this gives White the chance for a miraculous draw.

### 7 Qf5!

Not 7 Qf7? h1 R 8 Rh6 Re2+! 9 Qxe2 Qe4+ 10 Qd2 Qd5+ winning the knight.

### 7...h1 R

7...Bg5 8 Rh6 Rxf5 9 Bg6+ is also a draw.

### 8 Rh6

This is the point: Black's queen is almost trapped.

**8...♖h2**

Black has various ways of giving up material, but none of them win:

1) 8...♖xh6 9 ♘xh6 is a draw; for example, 9...♙g5 10 ♖e2 ♘g2 11 ♖e3 ♘g3 12 ♖e4 followed by ♘f5.

2) 8...♙e2+ 9 ♖xe2 ♗g2+ (or 9...♗e4+ 10 ♘e3) 10 ♖d3 (10 ♖e3? loses to 10...♗g4!) 10...♗d5+ 11 ♘d4 with a draw.

**9 ♙g6+**

Forcing the rook back.

**9...♙g2 10 ♖h6**

Black cannot escape from the repetition.

### 181) D. Gurgenedze

1st Pr., *Intellectualnie Igri*, 1994

White is well down on material, and Black has two pawns on the seventh rank, so White's only hope is to play for a mating attack.

**1 ♙e2**

Setting up a mate on d1. Black has two countermeasures: checking with his rook and playing ...♙d4. Black's best chance is to delay ...♙d4 for as long as possible.

**1...♙a7+**

1...♙d4 2 ♙xd4 ♙a7+ 3 ♖b2 ♙b7+ 4 ♖c1 transposes to the main line.

**2 ♖b1!**

An accurate choice of square. White must force Black to give up his bishop on d4, because White's rook needs to be on the fourth rank. Thus 2 ♖b2? is wrong due to 2...♙a3+! 3 ♖b1 ♙b7+ 4 ♖a1 ♙b2+ 5 ♖a2 ♙a7+ 6 ♖xb2 ♙b7+ with a draw, because with the rook on d5 White does not have the option of blocking a c-file check by ♙c4.

**2...♙b7+ 3 ♖c2**

Again, White must avoid a bishop check. Now Black is forced to give up his bishop.

**3...♙d4! 4 ♙xd4 ♙c7+**

The only possibility of avoiding perpetual check is to play ♙c4 at some point, but White must first transfer his king to c1 in order to leave c2 free for his rook at a later stage. Note that the white king cannot advance up the board because then Black can stop the mate by playing his rook to the first rank.

**5 ♖b1 ♙b7+ 6 ♖c1! ♙c7+ 7 ♙c4**

With three different threats of mate in one. The reply is forced.

**7...♙xc4+ 8 ♙xc4 h1♖**

8...♙gl 9 ♙e4+ ♖f1 10 ♙d4 mates, while 8...♙h1 also does not last long after 9 ♙e4+ ♖f1 10 ♙e3 ♖gl (10...♙gl 11 ♙d3) 11 ♙g3+ ♖f1 12 ♖d2 ♙gl 13 ♙a3.

**9 ♙c2!**

Now it becomes clear why White needed to transfer his king to c1. Two mates in one are threatened, and 9...♙gl fails to 10 ♘d3+ ♖f1 11 ♙xf2#.

**9...♗f3**

Black can prevent both, but...

**10 ♙e2+!**

...mate follows after a final sacrifice by White.

**10...♗xe2 11 ♘g2#**

A simple but elegant study.

### 182) G. Kasparian and A. Gurvich

1st Pr., USSR Physical Culture and Sport Tny, 1955

Even the first move is quite hard to find, as there are a number of possibilities.

**1 ♙d4+!**

Other moves are inferior:

1) 1 ♖e2? hxg2.

2) 1 ♙xf2? ♘xf2 2 gxh3 (2 ♖xf2? h2 and Black is better) 2...♘xh3 3 ♙xh6 ♖d5 4 ♖f3 (4 ♘b3 ♖e5 5 ♘d4 ♖f6 6 ♘f3 ♖g6 7 ♙f8 ♘g5) 4...♖e5 5 ♖g3 ♘gl 6 ♖f2 ♘h3+ and in order to avoid a repetition White must let the knight escape, with a draw.

3) 1 ♘b3+? ♖b4 doesn't help White.

4) 1 ♘b7+? ♖c6 2 ♘d8+ ♖d7 3 ♙d2+ ♖c8 4 ♙xf2 ♘xf2 5 gxh3 ♘xh3 followed by ...♘g5 and the knight escapes.

5) 1 ♙c2+? ♖b5 2 ♙xf2 ♘xf2 3 gxh3 ♘xh3 and again the knight slips away.

**1...♖d5**

Black must keep the bishop under observation; for example, after 1...♖b5 2 ♖e2 h2 3 ♙a1 ♘g3+ 4 ♖xf2 h1♖ 5 ♙xh1 ♘xh1+ 6 ♖f3 ♖xa5 7 g4 ♖b5 8 ♙e3 ♖c4 9 ♙xh6 White removes Black's last pawn and then rounds up the trapped knight.

**2 ♖e2!**

Now Black faces difficulties; for example, 2...hxg2 3 ♙xf2, 2...♖xd4 3 gxh3 or 2...♘g3+

3 ♖xf2 h2 4 ♖a1 h1 ♖5 ♖xh1 ♖xh1+ 6 ♖e3; in all cases White wins without trouble.

### 2...h2

This is stronger, attempting to promote on h1 rather than g1.

### 3 ♖a1

This is the only effective way to prevent 3...♖g3+ followed by 4...h1♖, since 3 ♖xf2? ♖xf2 4 ♖a1 h1♖ 5 ♖xh1 ♖xh1 6 ♖f3 h5 followed by ...h4 is safe for Black.

After the text-move, 3...♖g3+ 4 ♖xf2 wins easily, but Black has a better continuation.

### 3...f1♖+!

Now White is forced to block the first rank with his king, since 4 ♖xf1? loses to 4...♖g3+.

### 4 ♖xf1 ♖xd4

After 4...♖g3+ 5 ♖f2 h1♖ 6 ♖xh1 ♖xh1+ 7 ♖e3 White wins as before, so Black first of all eliminates the bishop, leaving the threat to promote the h-pawn in reserve.

### 5 g4

Other moves only lead to a draw:

1) 5 ♖b3+? ♖e3 draws.

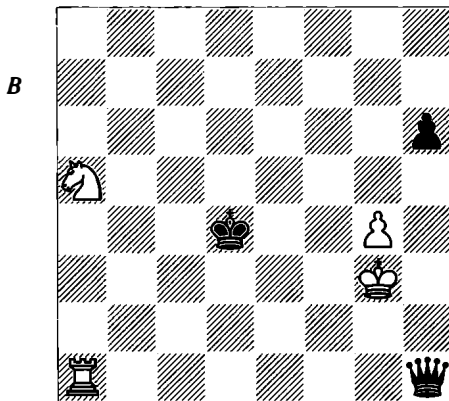
2) 5 ♖a4+? ♖e5 6 ♖h4 ♖g3+ 7 ♖f2 h1♖ 8 ♖xh1 ♖xh1+ 9 ♖f3 h5 is again a draw.

3) 5 ♖c6+? ♖e3 6 ♖a3+ ♖d2 7 ♖h3 ♖g3+ 8 ♖f2 h1♖ 9 ♖xh1 ♖xh1+ 10 ♖f3 ♖e1 extracts the knight.

### 5...♖g3+ 6 ♖g2 h1♖+

Now the obvious 7 ♖xh1? ♖xh1 8 ♖xh1 allows Black to eliminate White's last pawn by 8...♖e4 9 ♖g2 ♖f4 10 ♖h3 ♖g5 followed by ...h5, but what else can White play?

### 7 ♖xg3!! (D)



The star move of the study. Amazingly, the black queen is dominated by the rook and knight

on an almost open board. I have shown this study to several strong players, and it is curious how many reach the position after 6...h1♖+, see that taking the queen leads to a draw and then go back to look for a better move earlier. Sometimes I take pity on them and give them a hint, but sometimes I am really mean and just leave them to get on with it.

### 7...♖xa1

Other moves also lose the queen: 7...♖e4 8 ♖a4+, 7...♖d5 8 ♖d1+ and 7...♖a8 8 ♖b3+.

### 8 ♖b3+ ♖e5 9 ♖xa1 ♖f6 10 ♖h4

Black cannot exchange the last pawn, so White wins.

## 183) Z. Birnov

2nd Pr., *Shakhmaty v SSSR*, 1951

White has an extra piece, but he has only one pawn left and three of his units are under attack.

### 1 ♖d6+!

1 ♖e7+? ♖f6 2 ♖b4 ♖xb4 and 1 ♖d1? ♖xa3 2 ♖xg1 ♖xc3 allow Black to escape, in the latter case because rook and minor piece vs rook (without pawns) is normally drawn.

### 1...♖f7

Or 1...♖e7 2 ♖a6+, and now:

1) 2...♖e8 3 ♖b4 ♖c5 (after 3...♖d4 4 ♖e6+ ♖f7 5 ♖c6 White retains the extra piece) 4 ♖a5! (4 ♖xc5? ♖xc3 draws thanks to the threats of 5...♖xc5+ and 5...♖h3+) 4...♖a3 5 ♖g3 and White can disentangle himself.

2) 2...♖d7 3 ♖b4 ♖c5 4 ♖a5 (4 ♖xc5? ♖xc3 5 ♖g1 ♖h3+ 6 ♖g4 ♖xh1 7 ♖a1 ♖e6 draws – see the note to White's eighth move) 4...♖d6 5 ♖f2 ♖e5 6 ♖e4 and White consolidates and wins.

### 2 ♖b4 ♖c5!

Once again Black uses this defence. This time the rook is also attacked, so White cannot play ♖a5.

### 3 ♖xc5

Both 3 ♖d7+? ♖e8 4 ♖xc5 ♖xc3 5 ♖e7+ ♖d8 and 3 ♖f6+? ♖xf6 4 ♖xc5 ♖b5 lead to a draw.

### 3...♖xc3

Just as in the note to Black's first move, White faces the threats of 4...♖xc5+ and 4...♖h3+. However, with Black's king on f7 White has an additional tactical idea.

### 4 ♖f6+!

At some point White will be forced to sacrifice his knight and it is essential to optimize the position of his rook beforehand. The immediate 4 ♖g1? fails because after 4...♞h3+ 5 ♖g4 ♞xh1 6 ♞d1 ♖g6 White is unable to make progress. It is essential for his rook to be on the right-hand side of Black's king, hence the preliminary check on f6. 4 ♞d7+? ♖e8 5 ♞e7+ ♖d8 is also a draw.

4...♖e8

4...♖g7 5 ♖d4 and 4...♖g8 5 ♞f8+ ♖h7 6 ♞h8+ are easy wins for White, so this is forced.

5 ♖g1!!

This is the right moment for White to try trapping the rook on h1. A further check would ruin everything: 5 ♞f8+? ♖d7 6 ♖g1 ♞h3+ 7 ♖g4 ♞xh1 8 ♞f1 ♖e6 and White cannot win as Black's king is too far up the board. 5 ♞e6+? ♖d7 6 ♞e7+ ♖d8 is also a draw.

5...♞h3+

Black must take the knight or White wins on material.

6 ♖g4 ♞xh1 7 ♞f1!

Now White's strategy is revealed. Black cannot move his king to a dark square, since then a bishop check wins the rook. Therefore Black's king can gradually be forced to the a-file by repeated zugzwangs. Interpolating 7...h5+ 8 ♖g3 doesn't change the situation.

7...♖d7 8 ♞e1!

It is important not to allow Black's king to go back a file because then it can move onto a diagonal which allows it later to attack White's rook; e.g., 8 ♞c1? ♖e6! 9 ♞f1 ♖d5 10 ♞e1 ♖c4 11 ♞d1 ♖b3 and White cannot win since 12 ♞c1 is met by 12...♖b2.

8...♖c6 9 ♞d1

The procedure is repeated.

9...♖b5 10 ♞c1 ♖a4 11 ♞b1

Now Black's king is trapped against the edge of the board and must move to a dark square.

11...h5+ 12 ♖g3

Black's rook cannot be saved.

### 184) V. Kondratiev

2nd Pr., *Chervoni Girnik*, 1984

Numerically speaking, the two sides are roughly equal, but White's rather scattered forces and Black's dangerous e-pawn make it clear that it is White who is fighting for a draw.

1 ♞d4+

1 ♖xe2? ♞a6+ costs White his rook, so it must be removed from the vulnerable d3-square with gain of tempo.

1...♖b5

The only square. After 1...♖c5 (1...♖a5 is the same) 2 ♞a4+ ♖b5 3 ♖xe2! (not 3 ♞xa3? e1♞, winning a piece) White draws easily, while 1...♖c3 allows White to take the pawn with check.

2 ♖xe2

Not 2 ♞xd5+? ♖c6 with a quick mate. After the text-move, White's pieces are secure from queen forks, so Black plays for mate.

2...♖c6

This looks catastrophic, as Black threatens mate on a8 and f8, while 3 ♖b8? ♞f8+ 4 ♖a7 ♞e7+ only delays the end by a couple of moves.

3 ♞b4!!

A remarkable move which serves several purposes. Firstly, it stops the two threatened mates; secondly, White now threatens mate in one himself, and thirdly it clears d4 for the white knight. The only defect, and it is apparently a large one, is that the rook is *en prise*.

3...♞xb4

Black has to take because only White can be better after 3...♞a8+ 4 ♞b8 ♞a6+ 5 ♖d8.

4 ♖d4+ ♖d6 5 ♖h2+ ♖c5

Black's moves are forced, but now White has run out of checks.

6 ♖g1!

A very calm move, but it turns out that the black queen has no safe squares – all the light squares are covered directly, while the dark squares are vulnerable to a discovered check.

6...♞xd4

The last chance, since now 7 ♖xd4+? would lose to 7...♖xd4.

7 b4+!

This small finesse saves the day.

7...♖c4 8 ♖xd4 ♖xd4

White draws easily; for example, 9 ♖c7 ♖c4 10 ♖c6 d4 11 b5.

### 185) H. Aloni

2nd Pr., *Israel Ring Tny*, 1988

White is a rook up, but his perilous king position and Black's dangerous e-pawn mean that he is struggling for a draw.

**1 ♖e3!**

The best move, stopping promotion, at least for the moment. Other possibilities:

1) 1 ♖d2? ♖xf5 2 ♜f3 ♜fd4 and the e-pawn promotes.

2) 1 ♖d2? ♜xf5 2 ♜h2 ♜fd4 3 ♖c3 ♜e3 followed by ...♜d1 and ...♜f2#.

3) 1 ♜f2? e1♖ (1...♜f3? 2 ♜xf3 e1♖ 3 ♜h2 ♖xc1 4 ♜f1+ ♖xf1+ 5 ♜xf1 ♜d4 6 ♜d2 and White can eliminate the g5-pawn before he is mated) 2 ♜h2+ ♖g1 3 ♜d2 ♜e3! (the only move to win) 4 ♜f3+ ♜xf3 5 ♖xe3+ ♖xe3 6 ♜h1+ (6 ♜f2 ♜e1 mates quickly) 6...♖f2 7 ♜f1+ ♖e2 8 ♜f2+ ♖d3 and Black wins.

**1...♜xe3**

The only troublesome move, since the alternatives fail:

1) After 1...♜xf5? 2 ♜xc2 White even wins.

2) 1...e1♖ 2 ♜f1+ ♖xf1+ 3 ♜xf1 ♜f3 4 ♖xg5 disrupts the mating-net.

3) 1...♜e1 2 ♜f1+ exf1♖+ 3 ♜xf1 ♜df3 4 ♖xg5 and again White draws.

**2 ♜f2!**

Another accurate move, avoiding the inferior alternatives:

1) 2 ♖d2? ♜exf5 3 gxf5 ♜f3! 4 ♖c3 ♜e5 5 f6 ♖g1 followed by ...♖f1 and ...e1♖, winning the bishop while leaving the knight on the excellent e5-square.

2) 2 ♖xe3? ♜xf5 3 ♖d2 ♜e3 4 ♖a5 ♜d1 5 ♖e1 ♖g1 and mate next move.

**2...♜f3!**

Black does his best to make trouble. After the obvious 2...e1♖ White draws by 3 ♖xe3 ♜f3 (3...♖xe3 4 ♜f1+ ♖g1 5 ♖xg1+ ♖xg1 stalemate) 4 ♜xf3 ♖a1 5 ♖d4 ♖b1 6 ♜f5 and White can always prevent Black's queen from reaching the h-file.

**3 ♜xf3**

White must accept the sacrifice, or he will be mated.

**3...e1♖**

3...e1♖ 4 ♖xe3 transposes to the note to Black's second move.

After the text-move, White faces an awkward situation: the knight covers both e3 and d2, so there is no direct way of stopping the pawn.

**4 ♖d2!**

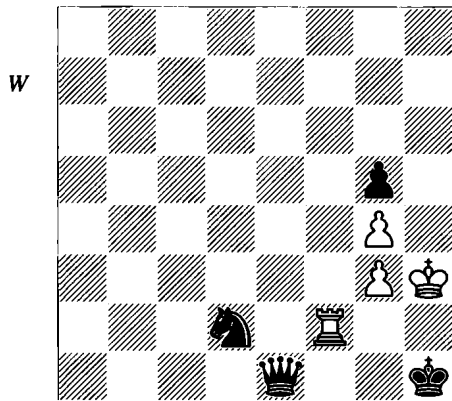
White is going to play for stalemate, so he needs to get rid of his bishop.

**4...♜xd2 5 ♜f2**

After 5 ♜a3? ♖g1! Black wins the rook without allowing a stalemate, while 5 ♜e3? ♜f3 6 ♜xf3 e1♖ 7 ♜f5 (7 ♜f2 ♖g1 mates) 7...♖g1 8 ♜xg5 ♖f2 leads to mate on h2.

**5...e1♖ (D)**

5...♜f3 6 ♜h2+ ♖g1 7 ♜xe2 defends.

**6 ♜g2!**

This is the remarkable position White has been aiming for. He threatens to force stalemate by 7 ♜g1+ and there is very little Black can do to stop it. 6 ♜h2+? is wrong as 6...♖g1 7 ♜g2+ ♖f1 8 ♜g1+ (8 ♜xd2 loses to 8...♖e4) 8...♜f2 gives Black an easy win.

**6...♜f3**

6...♖f1 is immediate stalemate.

**7 ♜h2+**

White can no longer force stalemate by ♜g1+, but now that h2 is covered White has an alternative method.

**7...♖g1 8 ♜g2+ ♖f1 9 ♜f2+**

It is perpetual check or stalemate.

**186) D. Gurgeneidze**

2nd Hon. Men., *Canadian Chess Chat*, 1980

White is a piece up but Black has a very dangerous pawn on a2. In addition, both White's pawns are vulnerable to attack.

**1 ♜e3+!**

The most effective check, aiming simply to take on d1 and then a2, with a potentially winning rook ending as the upshot. The alternative checks are inferior; for example, 1 ♜e5+? ♖c2 2 ♜c6 ♜xc3 (not 2...♖b1+? 3 ♜b4+ ♜xb4+ 4 cxb4+ and White wins) 3 ♜b4+ ♖b2 4 ♜xc3

♟xc3 5 ♞xa2+ ♟b2 6 a4 ♞g1 7 ♟e6 ♞g6 with an easy draw for Black.

1...♟a4

If Black plays 1...♟b2 then White's plan succeeds: 2 ♞xd1+ ♞xd1 3 ♟xa2 ♟xa2 4 a4 and the a-pawn is too strong. 1...♟xa3 2 ♞c2+ ♟b2 3 ♞xa1 ♟xa1 4 ♟xa2 ♟xa2 5 c4 ♟b3 6 ♞c8 is also an easy win for White.

2 ♞xd1!

This move is surprising, because it allows Black to promote his pawn. However, White can now switch plans and aim for a direct attack on the king. 2 ♞c4+? is tempting, but Black can just about defend: 2...♟a5 3 ♞c8 (after 3 ♞c2 ♞b1+ 4 ♟a7 a1 ♞5 ♞xa1 ♞xa1 White's pawns are too weak) 3...♞xc3 4 ♞c5+ (4 ♞c4+ ♟b5 5 ♞d6+ ♟a4 doesn't alter the situation) 4...♟a4 5 ♞c4+ ♟a5 6 ♞b4 (threatening mate in two) 6...♞b1! 7 ♟b3 ♟a6! (the only way out) and now Black draws because 8 ♞c4 may be met by 8...♞xb3 9 ♞xb3 ♞a4.

2...♞b1+ 3 ♟a7

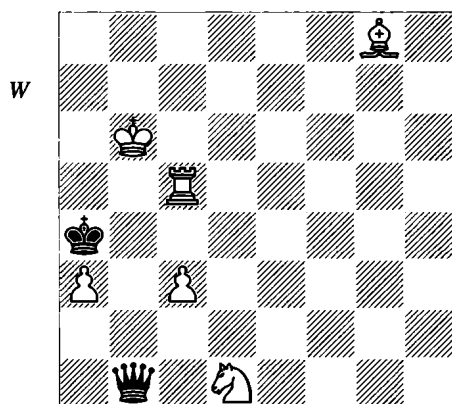
White will need his king in the attack.

3...a1 ♞4 ♟a6

Threatening mate in one. Black has no queen checks, so the reply is forced.

4...♞b6+! 5 ♟xb6 ♞b1+ (D)

Black cannot take on d1 because mate is still threatened on a5, but this preliminary check alters the situation.



6 ♞b2+!

The knight sacrifice is the only chance since 6 ♟a6? is met by 6...♞g6+ while after other king moves Black can simply take the knight.

6...♞xb2+

6...♟xa3 7 ♞a5+ costs Black his queen.

7 ♟a6

White renews the mate threat on a5. Now 7...♞e2+ is met by 8 ♟c4 but Black still has one resource left.

7...♞xc3!

Covering a5 and playing for stalemate. At first sight this is a serious blow, but White has a tactical stroke in return.

8 ♟b3+! ♞xb3

8...♟xb3 9 ♞xc3+ ♟xc3 10 ♟b5 promotes the a-pawn.

9 ♞a5#

## 187) Y. Afek

2nd Pr., *Tidskrift för Schack*, 1972

White has an extra piece but is hard-pressed to avoid losing it straight away.

1 ♞xb5+!

A spectacular sacrifice which forces Black's king into a potential mating-net at the edge of the board. The other possibility is 1 ♞e5? but then 1...♟xb6 2 ♞d7+ ♟c7 3 ♞xf8 b4 4 a4 (4 ♟h3 bxa3+ 5 ♟xa3 ♟d6 6 ♞h7 ♟e5 7 ♞xg5 ♟xg4 also draws) 4...♟xg4 5 ♟c4 (5 ♞h7 ♟d1 6 ♟b5 g4 is similar) 5...♟d6 6 ♞h7 ♟d7 7 ♟b3 g4 8 ♞f6 ♟f5 9 ♞h5 ♟e5 gives Black an easy draw. White cannot hold back the g-pawn while hanging on to his own a-pawn.

1...♟xb5 2 ♞e5+ ♟a4

This looks dangerous, but if Black returns the rook, then White will eventually win on material; for example, 2...♟c5 3 ♞d7+ ♟d6 4 ♞xf8 ♟e5 (4...♟xg4 5 ♞h7) 5 ♟h3 ♟f4 6 ♞e6+ ♟g3 7 ♞xg5 ♟e2 (an ingenious defensive try, which forces White to surrender a piece in order to free his kingside pieces; however, White can win provided he takes steps to activate his king) 8 ♟c3 ♟b5 (8...♟h4 9 ♞e6) 9 ♞f7 ♟xh3 10 g5 ♟c6 11 g6 ♟d5 12 ♞h6 and wins.

3 ♞d7

Preventing the check on b8 and threatening two different mates in one. It looks all over for Black, but he has a spectacular defence.

3...♟e2!

Playing the moves in the other order by 3...♞b8+ 4 ♞xb8 ♟e2 fails to 5 ♟g2 and the stalemate is lifted.

4 ♟xe2 ♞b8+

Attempting to force stalemate.

**5 ♖b5+!**

A beautiful counterblow. Other moves fail: 5 ♖a2? ♖b2+ draws at once, while 5 ♖c3? ♖b3+ 6 ♖c4 ♖xa3 and 5 ♖c2? ♖b2+ 6 ♖d3 ♖xa3 are easy draws as the passed a-pawn is rather dangerous.

**5...♗xb5+**

Black must accept.

**6 ♖a2**

This position is a full-point reciprocal zugzwang. With Black to play, his rook is dominated by White's knight.

**6...♗b7**

Black also loses after 6...♗d5 7 ♖b6+ or 6...♗b3 7 ♖c5+.

**7 ♖c5+**

White wins.

**188) Y. Roslov**

1st Pr., Troitsky Memorial Tny, 1990

The first few moves are rather forced, but they lead to a remarkable position.

**1 ♖c8+**

White is material down and his king is in an unenviable position, so he must play for the win of Black's queen.

**1...♕g8!**

Black aims for stalemate.

**2 b7**

The only move, as Black was even threatening to win with 2...♗xa6.

**2...♗xc8**

2...♗xa6 3 ♖xg8+ mates, so Black must take the rook.

**3 bxc8♕!**

Promoting to a queen or rook is stalemate, while 3 bxc8♖? is met by 3...♕c4! 4 ♖xg3 (4 ♕xc4 is again stalemate) 4...♕xa6 followed by ...f1♗ with a dead draw.

**3...♕c4!**

If the knight stays on the board, then Black is dead lost, since the g3- and f2-pawns will fall, whereupon White wins by (for example) playing the knight to f7 or sacrificing it on h6. Thus, in order to have drawing chances Black must eliminate the knight. However, he must not waste time; after 3...♕d5, for example, White wins by 4 ♖xg3 ♕xg2 5 ♕f1 ♕f3 6 ♕f5 ♖g8 7 ♕e4 ♕d1 8 ♖h1, etc.

**4 ♖d2!**

The reason for not playing 4 ♖xg3? only becomes clear later. However, 4 ♖e3! is just as good as the text-move.

**4...f1♗ 5 ♖xf1 ♕xf1 6 ♕xf1**

Black has eliminated the knight, leaving White with just his two light-squared bishops. The position is certainly very close to a draw and if, for example, the pawns on g2 and g3 were not there then the position would be a dead draw. In that case Black could just oscillate with his king between g8 and h8. White's only hope would be to force Black to play ...h5, so that White could convert his g-pawn into an h-pawn by gxh5. Unfortunately this doesn't work, because the only way to force ...h5 is to stalemate Black's king, but then ...h5 cannot be met by gxh5, because that would really be stalemate. The plan to force ...h5 fails even if the g2-pawn is still on the board, so any winning idea by White must involve the enemy g3-pawn, which explains why White refused to take it at move four. It also follows that White cannot just activate his king and then decide what to do next. Moving the king away from the h-file involves taking the g3-pawn, which kills any winning chances.

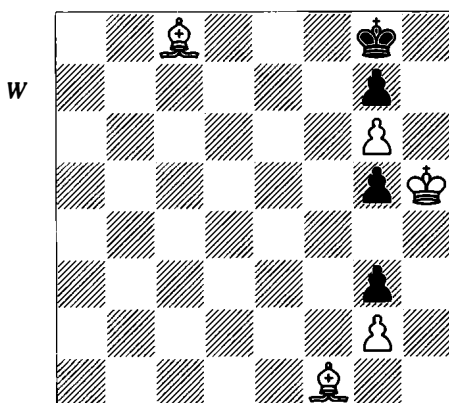
In fact the only winning idea is to play g5, forcing ...hxg5, and then play a bishop to h3. By stalemating Black's king with the other bishop on d5, ...g4 and ...gxh3 can be forced. White will reply gxh3, when ...g2 can be answered by ♕d5xg2, lifting the stalemate.

**6...♖g8 7 g5!**

It turns out that Black is on the threshold of a draw, and White must not waste a single tempo putting his plan into action. For example, 7 ♕d3? ♖f8 8 g5 hxg5 9 ♕h3 ♖e7 10 ♖g4 ♖f6 (Black is just in time to prevent the winning move ♖f5; since White can't take the g3-pawn, he can only extract his king by ♖f3 but he cannot win with his king in such a passive position) 11 ♕e4 (11 ♖f3 g4+ 12 ♖e3 ♖g5 13 ♕e4 ♖f6 is similar) 11...♖e5 12 ♖f3 g4+ 13 ♖e3 ♖f6 and this position is a draw. Black oscillates with his king between g5 and f6; this can only be prevented by White's king, but as soon as the king advances to the fourth rank Black plays ...gxh3 followed by ...g2. This wins the g6-pawn and leads to a draw thanks to the wrong bishop + h-pawn combination. Play might run 14 ♖f4 gxh3 15 gxh3 (15 ♖xg3 hxg2 is also

drawn) 15...g2 16 ♖xg2 ♜xg6 with a dead draw.

7...hxg5 (D)



8 ♖h3!!

The only winning move. If Black is allowed to play ...g4 with the bishop not on h3 then the position is a draw. Even 8 ♖g4? is a draw, because the king blocks the route to h3, and as soon as the king moves Black plays ...g4.

It might seem that White could still play for the same idea, but with his bishop on f3 instead of h3. However, that doesn't work because after a later ...gxf3 gxf3 Black can play ...g2 and this pawn cannot be captured by a bishop on d5 because the f3-pawn is in the way.

8...♟f8 9 ♖g4 ♟e7 10 ♟f5!

The extra tempo is decisive. White prevents ...♟f6 and can now gradually force Black's king back into the h8-corner.

10...g4

Once Black's king is stalemated he will have to play this in any case.

11 ♖e5 ♟f8 12 ♖d6 ♟g8 13 ♖e7

Now everything runs smoothly.

13...♟h8 14 ♖e8 ♟g8 15 ♖c4+ ♟h8 16 ♖d5 gxh3 17 gxh3 g2 18 ♖xg2

Now White wins easily.

## 189) V. Bron

2nd Pr., Magyar Sakkélet, 1959

This is not the most natural position in the book, but in compensation the play is spectacular. White has only two minor pieces for the queen, so his only chance is to launch an immediate attack against Black's king.

1 ♖a4+!

This sacrifice is the only way forward. 1 ♖xe7? loses to 1...axb4.

1...bxa4 2 ♖xe7

White must get his moves in the right order. 2 ♖d3? is wrong because of the spectacular 2...♟d4!! (the only move; 2...♖d6? 3 ♖xe7 transposes to the main line, while 2...cxd3? 3 ♖xe7+ d6 4 ♖g5 mates) 3 cxd4 cxd3 4 exd3 (4 ♖xe7+ d6 5 exd3 ♖e6 picks up the bishop) 4...♖e6 and Black wins with the extra exchange.

After the text-move, White threatens mate by various methods, including 3 ♖xd7+ and 3 ♖g5.

2...♖d6!

The only way to avoid a quick mate; for example, 2...♟b6 3 ♖d3+ d6 4 ♖g5 and the threat of ♖c1+ is too strong. The text-move is based on stalemate ideas.

3 ♖d3!!

A truly spectacular reply. White must ignore the *en prise* rook since the tempting 3 ♖xd6? ♟b6! 4 ♖b3+ (4 ♖e4+ ♟xd6 5 ♖xd6 stalemate) 4...♟xd6 5 ♖d4 ♟g6! (the only way to cover c2) 6 f3 (this looks awkward since White can apparently advance his kingside pawns freely) is met by the stalemate defence 6...d5! 7 h4 (7 e4? loses to 7...♟xg2) 7...♟b1+ 8 ♟xb1. It is apparent from this line that d4 is the wrong square for White's knight since it takes away the move ...d4 and so makes it easier for Black to arrange a stalemate.

3...♟c5!

Black unpins his rook with this neat move exploiting White's weak back rank. 3...♟b8 is inferior as 4 ♖g5 leads to a quick mate.

4 ♖b2!

Setting up a new threat: 5 ♖xd6 followed by 6 ♖xc4#. The reply is forced.

4...♖d1+! 5 ♖xd1 ♟xe7 6 ♖e3!

Thanks to White's subtle third move, he has a position analogous to that after 3 ♖xd6?, but with his knight on e3 rather than d4. This is a better square not so much because of the twin mating threats (at c2 and c4) but because on e3 the knight does not block Black's d-pawn.

6...♟e4

The only way to cover c2 and c4. Once Black has played ...d5, it will no longer be necessary to defend c4, but the queen will still be restricted to moving along the b1-h7 diagonal,

since there is no other way to defend c2. However, White is also quite limited and in fact the only unit he can move is his h-pawn.

### 7 h3!!

Only this wins. 7 h4? is wrong because after 7...d6! 8 h5 d5 White has to push his h-pawn again, but then he loses control over the vital square g6. In this case Black would even win after 9 h6 ♖g6 10 f3 (if White moves the g-pawn, then Black mates by playing ...♞e4-h1) 10...♞h7 11 g3 ♖g6 12 g4 ♞h7 13 g5 ♖g6. In fact the position with ♠h3 vs ♠d7 is a full-point reciprocal zugzwang.

### 7...d6

Now it is Black who is in zugzwang. After 7...d5 8 h4 ♞h7 (8...♖g6 9 f3 ♞h7 10 h5) 9 f3 ♖g6 10 g4 ♞h7 11 h5 White wins in the same way.

### 8 h4 d5 9 h5

Black has run out of tempo moves with the d-pawn and must move his queen.

### 9...♞h7

When the queen is not on e4, White can safely play f3, controlling another square on the b1-h7 diagonal.

### 10 f3

It's mate in a few more moves.

## 190) A. Manvelian

1st Pr. (section for wins), Kasparian Memorial Tny, 1996

White is a piece up and is attacking the b6-knight. However, his own a1-knight and rook are under attack, and Black has a passed pawn on the seventh rank. Since White's material advantage is not enough to win by itself, White must either gain some further material or play for mate.

### 1 ♠b4+!

1 ♠xb6? ♞xe5 2 ♠b4+ ♖c1 lets Black escape.

### 1...♠b2

After 1...♖c1 2 ♠d3+ ♖d2 (2...♖d1 3 ♠xb6) 3 ♠f4 White has too many threats; for example:

1) 3...♞e8+ 4 ♖c7 ♠a8+ 5 ♠d7 ♞el (5...♞f8 6 ♠d4+ mates in a few moves) 6 ♠d4+ ♖c3 7 ♠d5+ ♖b2 8 ♠d2+ ♖xa1 9 ♠c3 with a quick mate to follow.

2) 3...♞el 4 ♠b2+ ♖c3 5 ♞c2+ ♖b4 6 ♠d3+ and White wins.

3) 3...♠d7+ 4 ♖c7 ♞el 5 ♠d4+ ♖c3 6 ♠d5+ ♖b2 7 ♠d2+ ♖a3 8 ♠d4 with a decisive attack.

### 2 ♞e4!

Threatening mate in one, but surprisingly allowing Black a range of discovered checks. e4 is the only square for the rook, since 2 ♠d4? ♠a4+ 3 ♖a8 ♠c3 and 2 ♞f4?? ♠d5+ are clearly wrong.

### 2...♠a4+!

The only move not to lose quickly. The knight must be ready to move to b2 and 2...♠c4+ (2...♠d5+ is also met by 3 ♖a7) loses to 3 ♖a7 ♖xa1 (3...♞g2 4 ♞el+ ♖b2 5 ♠d4+) 4 ♠xc4, winning at least a rook.

### 3 ♖a8!!

A very subtle choice of square. It is wrong to play the king to the c-file because Black has a saving check later: 3 ♖c7? ♖xa1 4 ♞el+ (4 ♠d4 ♖b1 5 ♞el+ ♖c2 6 ♞xh1 ♠c3 draws) 4...♞b1 5 ♠d4+ ♠b2 6 ♞e2 ♞c1+ and now White cannot win:

1) 7 ♖b6 ♠g3 8 ♞f2 (8 ♞xb2 ♠f5) 8...♠f5 9 ♠xb2+ ♖b1 10 ♠d3 ♠d1 draws.

2) 7 ♠c6 ♠g3 8 ♞f2 ♠f5 9 ♠h8 ♞h1 (there is an alternative draw by 9...♠e7 10 ♖b7 ♠xc6 11 ♞xb2 ♠a5+ 12 ♖b8 ♠c4 13 ♞b7+ ♠b2 14 ♞xb2 ♞c8+) 10 ♠xb2+ ♖b1 and the a-pawn promotes.

It is harder to spot why 3 ♖a7? fails, as the difference only becomes apparent several moves later. See the note after White's ninth move for an explanation.

### 3...♖xa1 4 ♞el+

4 ♠d4? ♖b1 5 ♞el+ ♖c2 6 ♠xb2 ♖xb2 is only a draw. White should concentrate on his attack rather than worry about immediate material gain.

### 4...♞b1 5 ♠d4+ ♠b2 6 ♞e2

Black's options are now very limited since he must deal with White's threat of 7 ♠d3.

### 6...♠g3

Rook moves fail:

1) 6...♞c1 7 ♠c4 and mate in two more moves.

2) 6...♞f1 7 ♞xb2 costs Black too much material.

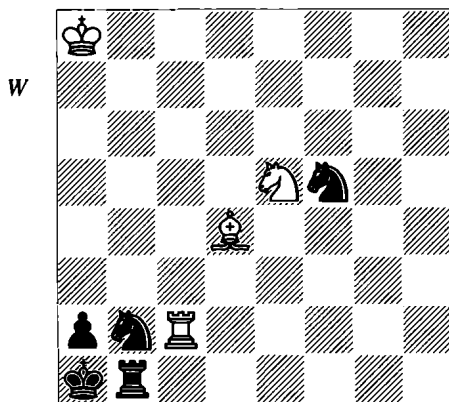
3) 6...♠d1 7 ♠d3! ♠g3 8 ♞c2! and the attack is too strong; e.g., 8...♠e4 (8...♠f5 9 ♠e5 is the same) 9 ♠e5 ♠c5 (9...♠d6 10 ♞xb2) 10 ♠xc5 ♠d8+ 11 ♖a7 and wins.

### 7 ♞c2!

The only square to win; as we shall see, the rook needs to cover c1 later on.

7...♘f5 (D)

7...♞d1 8 ♘c4! mates.



However, the text-move looks like an effective defence. Now the natural 8 ♘c3? leads to a draw after 8...♘e3 9 ♞d2 ♞d1 10 ♘xb2+ (10 ♞xb2?! ♘d5 11 ♞xa2+ ♘xa2 would be worse for White although the position is in fact still drawn) 10...♘b1 and Black's a-pawn promotes. However, White has a stunning continuation.

8 ♘d3!!

An extraordinary move: White sacrifices the bishop that has provided most of his pressure over the last few moves.

8...♘xd4

After 8...♞d1 9 ♘e5 White wins in the same manner as in the case of 6...♞d1 (above), so Black may as well accept.

9 ♘c1

Suddenly Black is in (reciprocal) zugzwang and must allow mate next move (9...♘xc2 10 ♘b3#, 9...♞xc1 10 ♞xc1# or 9...♘a4 10 ♞xa2#). Had White played 3 ♘a7?, then Black would be able to continue 9...♘c6+ 10 ♘a8 ♘d4 here, and it would be White to play in the reciprocal zugzwang, resulting in a draw.

### 191) D. Petrov

1st Pr., *Biulleten Tsentralnovo Shakhmatnovo Kluba SSSR*, 1958

The ending of ♞+♘ vs ♞ is in general drawn, so with both bishops attacked White has no choice regarding his first move.

1 ♞d8 a2!

The trickiest defence, although 1...♞f4+ also demands a precise reply:

1) 2 ♘e5? a2 3 ♞a8 (3 ♘xa2 ♞a4 4 ♘b3 ♞b4!) 3...♞f5+ 4 ♘e6 ♞f8 5 ♞a4+ (of course White can play 5 ♞xf8, but ♞+2♘ vs ♞ is in general a draw – see *Secrets of Pawnless Endings* [2nd edition], p. 366 for details) 5...♘h3! 6 ♘f7 a1 ♞ forces a draw.

2) 2 ♘e3! ♞a4 (2...♞f3+ 3 ♘e2 and 2...a2 3 ♞a8 ♞f8 4 ♞a4+ followed by 5 ♘xa2 are easy wins for White) 3 ♘f6 and White wins easily since he not only prepares to blockade the pawn but also threatens to force mate starting with 4 ♘e6+.

2 ♘xa2 ♞f4+ 3 ♘e3

3 ♘e5? ♞a4 transposes to the note to Black's first move.

3...♞a4

Once again both the white bishops are under fire. If 3...♞f3+ 4 ♘e2 ♞a3, then 5 ♞d4+ defends the h4-bishop with gain of tempo.

4 ♘b3 ♞b4

4...♞a3 is met by 5 ♞d4+ followed by ♞b4, when White wins with his material advantage. However, after the text-move White seems to have run out of resources as there is no way to defend both bishops. The solution to White's dilemma is truly astonishing.

5 ♞d4+!!

Incredibly, White can offer his rook.

5...♞xd4 6 ♘e7!

Amazing. On a completely open board, the black rook is dominated by the two white bishops.

6...♞f4

Black cannot avoid shedding a whole rook. 6...♞d7 is met by 7 ♘e6+.

7 ♘e6+ ♘g3

Or 7...♞f5 8 ♘e4.

8 ♘d6

White wins the rook.

### 192) Y. Bazlov

2nd Hon. Men., *Thèmes-64*, 1978

White has ample material to win, but he has to cope with both the threats to his pieces and Black's dangerous c-pawn.

1 ♞g5

The white rook is currently well placed behind the c-pawn, but unfortunately it has to

move away in order to avoid immediate material loss.

**1...♖a1+**

These checks both drive the white king away and help to advance the pawn.

**2 ♖f2 ♖a2+**

After 2...c2 3 ♙xc2 ♖a2 4 ♙d6+ followed by ♖c5+ White keeps his extra material.

**3 ♖g3**

It looks odd to block in the h2-bishop, but it is important that the king does not get stuck on the first rank. After 3 ♖g1? c2 4 ♙d6+ (4 ♖g4+ ♖c5 draws) 4...♖a4! 5 ♙e8+ ♖b3 6 ♖g3+ (or 6 ♙f7+ ♖a4) 6...♖c4 7 ♙f7+ ♖b5 8 ♖b3+ ♖a4 Black's advanced c-pawn will cost White a piece.

**3...c2**

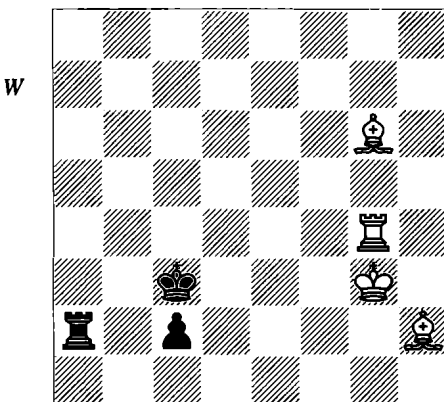
Black must act quickly; if White could play ♖h3 and get his other bishop into play, the c-pawn would be easily stopped.

**4 ♖g4+!**

An important check which forces Black's king into an awkward position.

**4...♖c3 (D)**

If White gets his rook to c4 then he wins; for example, 4...♖b3 5 ♙f7+ ♖b2 6 ♖b4+ ♖c3 7 ♖c4+ ♖d2 (7...♖b2 8 ♖xc2+) 8 ♖f3 ♖a3+ 9 ♖f2 followed by ♙f4+ or 4...♖b5 5 ♙e8+ ♖c5 6 ♙g1+ ♖d5 7 ♖d4+ ♖e5 8 ♖c4.



After the text-move, White cannot stop the c-pawn without losing a piece, but remarkably he can allow the pawn to promote and launch an attack on the black king. For this to succeed, White needs all his men in play, so a king move is indicated to release the h2-bishop. This leaves a choice between 5 ♖f3, 5 ♖h3 and 5 ♖h4. The

reason why only one of these moves works is quite subtle and will become clear later.

**5 ♖h4!!**

This is the unique winning move. It is essential to put the king on the same rank as the white rook in order to avoid a sideways check from Black's rook later on.

**5...c1♚**

Black must try this, because if the dark-squared bishop enters the game, the c-pawn will not get a chance to promote.

**6 ♙e5+**

Two bishops and a rook can form a dangerous attacking force, but even so their effectiveness in this position is rather surprising.

**6...♖b3**

Or 6...♖d2 7 ♙f4+ ♖d1 8 ♖g1+ winning.

**7 ♙f7+ ♖a3**

7...♖c2 loses to 8 ♖c4+ ♖b1 9 ♖xc1+.

**8 ♙d6+**

Not 8 ♖g3+? ♖b4 9 ♙xa2 because the ending of ♖+2♙ vs ♚ is generally drawn.

**8...♖b2 9 ♖b4+!**

This is the correct check. 9 ♖g2+? ♖c3 and 9 ♙e5+? ♖b1 10 ♖b4+ ♖b2 11 ♙g6+ ♖a2 are not enough to win.

**9...♖a1**

9...♖c2 loses to 10 ♖c4+ followed by ♖xc1. Black's king has been driven into the corner and the end is close.

**10 ♙e5+ ♚b2**

Instead, 10...♖b2 loses to 11 ♖a4+! ♖b1 12 ♙g6+ ♚c2 (12...♖c2 13 ♖a1#) 13 ♙xc2+ ♖xc2 14 ♖a1#.

After the text-move, White cannot win by taking on b2, but he has a killer quiet move.

**11 ♙g6!**

Putting Black in zugzwang. Now we can see why h4 was the right square for the king at move five. If the white king were on the third rank in this position, then Black would be able to play ...♖a3+ followed by ...♚xe5. As it is, he is absolutely helpless.

**11...♚xe5 12 ♖b1#**

### 193) V. Kirillov and N. Riabinin

2nd Pr., Cheliabinsk Festival, *Uralskye Skazy*, 1991

This is a battle of activity against material. White's pieces are extremely well placed for an

attack, but Black has weight of numbers on his side.

**1 ♖f8+**

The dark-squared bishop is the least active of White's pieces, so he brings it into play with gain of tempo.

**1...♙a2 2 ♜c2!**

White's king closes in. Other moves are inferior:

1) 2 ♖f7+? ♙a1 3 ♖a7+ (not 3 ♜c2? ♖h7+ and Black wins) 3...♙b1 4 ♖b7+ ♖b4! 5 ♖xb4+ ♙c1 6 ♙xe2 f1♖+ 7 ♙xf1 ♖h1+ with perpetual check.

2) 2 ♖a7+? ♙b1 3 ♖b7+ ♖b4! 4 ♖xb4+ ♙c1 5 ♖c4+ ♙b1 6 ♖b4+ and White has nothing better than a draw.

**2...♖h7+**

Giving up the queen is the only way to prevent mate, since 2...♖a5 loses to 3 ♖f7+ ♙a1 4 ♖b1#.

**3 ♖xh7 ♖a5**

White was still threatening mate on a7, but this move is possible now that the rook is not on the b-file. The loss of Black's queen was a blow, but with two connected passed pawns on the seventh rank Black need not give up hope.

**4 ♖f7+**

After 4 ♖h3? White threatens mate on a3, but 4...e1♙+ 5 ♙c1 ♙d3+ disrupts the mate, and Black wins by promoting his f-pawn.

**4...♙a1**

Black's king is bottled up in the corner, but there is no immediate mate for White.

**5 ♖a3!**

The text-move is a brave decision as it allows Black to promote both his pawns, but in return White's attack is revived. 5 ♖h4? e1♙+ 6 ♙c1 ♙d3+ 7 ♙c2 ♙e1+ is a draw.

**5...e1♙+**

Or 5...♖c3 6 ♖c4 (threatening 7 ♖b2+ ♖xb2 8 ♖a7+ followed by mate) 6...e1♙+ 7 ♙xc3 and Black can only delay mate for a few moves.

**6 ♙b3**

6 ♙c1? loses to 6...♙d3+, covering the b2-square.

**6...f1♖**

Black has restored his material advantage, but now White attacks from another direction.

**7 ♖b2+ ♙b1 8 ♖g6+ e4!**

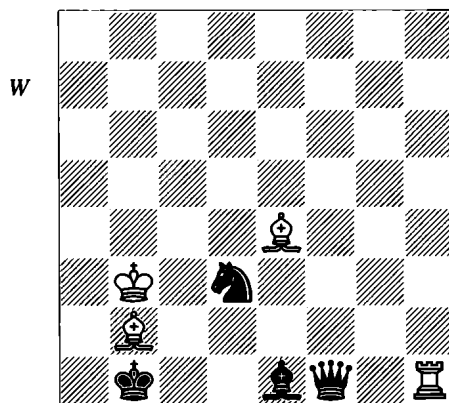
Black is playing for stalemate and so jettisons his mobile pawn. 8...♙d3 loses at once to

9 ♖h1, while after 8...♖d3+ 9 ♖xd3+ ♙xd3 10 ♖h1+ ♖e1 11 ♖c3 ♙c1+ 12 ♙c4 ♖f2 13 ♖d2 White wins on material.

**9 ♖xe4+ ♙d3 10 ♖h1**

This looks like the end since White threatens both 11 ♖xd3# and 11 ♖xf1+.

**10...♖e1! (D)**



Black meets both threats with an ingenious defence, aiming for a stalemate with two black pieces pinned. However, the final finesse belongs to White.

**11 ♖g6!**

Black was threatening 11...♖f7+, so this is the only move (11 ♙a3? loses to 11...♖f8+). However, it is a very strong one as Black is now in zugzwang.

**11...♖e2**

There is nothing better.

**12 ♖xe1+ ♖xe1 13 ♖xd3#**

## 194) G. Kasparian

1st Pr., Szachy, 1959

White has a piece for three pawns, but the real battle is between the advanced g2-pawn and White's threats against the black king.

**1 ♖b2!**

The best move, threatening the deadly 2 f7+. Other moves:

1) 1 ♖g7? ♖h7+ 2 ♙c1 ♖xb1 3 ♖xg2 ♖e4 4 ♖g7 (4 ♖f2 ♖g6 and Black can give up his bishop on f7) 4...♖d5 5 ♖b2 ♖f8 6 f7 ♖c8+ 7 ♙d2 ♖xf7 and Black secures the draw in a ♖vs ♖+♖ ending.

2) 1 ♖xd8? g1♖ 2 f7 ♖f2+ 3 ♙c1 ♖fl+ is a draw.

3) 1 f7? ♖c8+ 2 ♜d2 ♙xf7 3 ♙b2+ ♜g8 4 ♙d4 is also drawn.

1...♖c8+!

Black's only chance, as 1...g1 ♖2 f7+ ♜h7 3 fxg8 ♖++! ♜xg8 4 ♙a2+ ♜f8 5 ♙a3+ ♜e8 6 ♖e7+ ♜f8 7 ♙e1+ leaves White two pieces up.

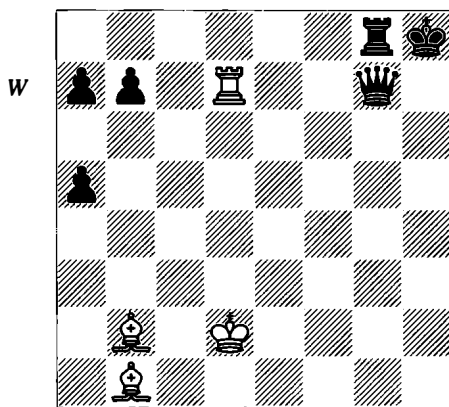
2 ♜d2!

A precise choice. 2 ♜d3? is met by 2...♙f7! (2...g1 ♖? 3 f7+ ♖g7 4 f8 ♖ mates) 3 ♙d4 g1 ♖ 4 ♙xg1 ♙g6+ 5 ♜d2 ♙xb1 6 ♙d4 ♜g8 and Black escapes with a draw.

2...g1 ♖

After 2...♙f7 3 ♙d4 ♜g8 4 ♙e4 White picks up the g2-pawn, after which he has a simple win on material.

3 f7+ ♖g7 4 fxg8 ♖+ ♖xg8 (D)



A curious position has arisen. If we for the moment ignore the threat of taking on b2 with check, we can see that Black is paralysed apart from his pawns. Any queen move along the diagonal would be met by ♖h7#, while a rook move would leave Black's queen *en prise* with check. However, White doesn't have unlimited time to achieve his aims, since the advance of Black's queenside pawns will eventually disrupt White's bind. It quickly becomes apparent that White cannot achieve anything without the use of his king, and one possible plan is to play ♙g6, march the king to g5 and then play ♖xg7 followed by ♜h6, winning the pinned rook. However, during this process the white king has to be kept safe from rook checks (because a rook check would allow Black to take the dark-squared bishop without allowing mate on h7). Moreover, White must prevent Black from taking the dark-squared bishop with check.

5 ♙a1!

This is the right first move, tucking the bishop out of the way so that at no stage on the march ♜e3-f4-g5 is Black able to take the bishop with check. Note that it is wrong to start with 5 ♙c2 because this bishop will be needed on e4 to shield the white king on the e-file.

Another plan is to try to blockade the queenside pawns using the king, so that Black is eventually in zugzwang. However, this plan proves impossible to execute because the white king must stay off the long diagonal; e.g., 5 ♙f6? b5 6 ♙d3 (freeing the rook for ♖c7, when White can cross the c-file with his king) 6...a6 7 ♖c7 b4 8 ♜c2 b3+ 9 ♜b1 a4 and White cannot stop the march of the pawns because he is unable to play ♜b2.

5...b5 6 ♙e4!

6 ♙d3? looks tempting, with the idea of taking the a7-pawn, but it fails to 6...b4!, when there is no reasonable defence against the threat of 7...♖c3+.

6...a4

6...b4 is met by 7 ♜e3, when Black must decide whether to save his a-pawn: 7...a4 (7...a6 leaves Black a tempo down over the main line, because he will later have to play ...a5) 8 ♖xa7 (without the rear a-pawn, Black will eventually end up in zugzwang on the queenside and White no longer needs to march his king to g5) 8...a3 9 ♙e5 b3 10 ♙f6 b2 11 ♖e7! (preventing ...b1 ♖ followed by ...♖e8+) and Black can only delay a fatal zugzwang by giving up his queenside pawns.

It follows that the text-move is best. At the moment White cannot take on a7, so Black is able to save his a-pawn with ...a5, saving a tempo over alternatives which involve ...a6.

7 ♜e3! a5 8 ♖f7!

Other moves lose time which White cannot afford, because his plan succeeds by just a single tempo. The text-move provides a shield on the f-file so that White can play ♜f4.

8...b4

8...a3 9 ♜f4 will transpose to the main line.

9 ♜f4 a3 10 ♙g6!

The bishop and rook alternate in their duty of shielding the white king.

10...b3

Black threatens ...b2, so the bishop must move up the long diagonal. Since White must

not allow Black to take the bishop with check, the choice of square is forced.

**11 ♖c3 a4**

If Black plays 11...b2 then his queenside pawns lose their flexibility and he will soon fall into zugzwang; e.g., 12 ♖f5 a4 13 ♖g6 ♜c8 14 ♖xg7+ ♜g8 15 ♜b7! winning easily.

**12 ♜g5 a2 13 ♜xg7 ♜xg7 14 ♜h6 a3**

Threatening ...a1♚ followed by ...b2, but White is just in time.

**15 ♖xg7+ ♜g8 16 ♖d3 a1♚**

16...♜f7 17 ♖c4+ costs Black all his pawns.

**17 ♖c4#**

### 195) V. Bron

1st Pr., Assiac Jubilee Tny, EG, 1972

This is clearly going to be a battle between Black's material advantage and White's threats against the black king.

**1 ♜c8+!**

Already a surprise, but something special was necessary since 1 cxb6+? ♖xb6 2 ♖xb6+ ♜d6 lets the king slip away, after which the b-pawn will provide Black with a decisive material advantage.

**1...♜xc8 2 cxb6**

Threatening mate in one.

**2...♚a6+!**

Black responds with vigorous play of his own. Other moves are hopeless: 2...♜d8 3 b7+ ♜e7 4 b8♚! b1♚ (4...♚xf2+ 5 ♜xa8) 5 ♚e5+ ♜f8 6 ♚f6+ ♜e8 7 ♚f7# is mate, while the lines 2...♖xb6 3 ♖xb6 ♚a6+ 4 ♜xa6 b1♚ 5 ♜a7 and 2...♚xf2 3 ♜xa8 cost Black too much material.

**3 ♜xa6 ♖c7+!**

This is the point of the queen sacrifice; Black starts checking with his knight, and if White takes on c7, the threat of b7+ has disappeared.

**4 ♜a7!**

It is important to transfer the king to a8 before capturing the knight.

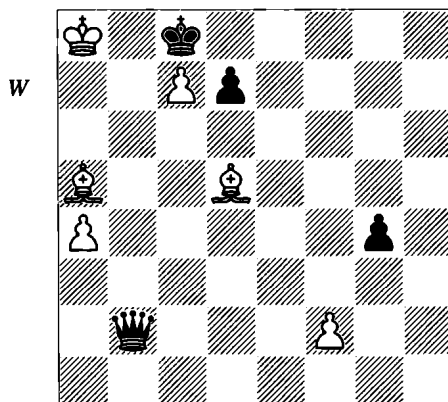
**4...♖b5+ 5 ♜a8! ♖c7+ 6 bxc7 b1♚**

Black's queen must stay on the b-file to cover the mate on b7, but it is not at all clear how White can win this position. The first step is to counter the threat of ...♚b5.

**7 a4**

Forced, as is Black's reply.

**7...♚b2 (D)**



The dark-squared bishop cannot move, so White is reduced to manoeuvring with his light-squared bishop and, in some situations, his king. However, the bishop can only control one of the three squares b1, b2 and b3, so Black's queen will always have two squares available and can never be forced into zugzwang. Clearly, another idea must be introduced for White to succeed; this is the plan of ♜a7 and ♖b6, followed by mate on b7. At the moment 8 ♜a7? is not possible because of 8...♚d4+, so some preparation is necessary. White needs to transfer the move to Black, which would force him to play ...♚b1, whereupon ♜a7 would win. However, accurate play is necessary to lose a tempo.

**8 ♖h1!!**

Moving to h1 is correct because White retains the option of moving to e4 or g2 according to Black's reply. 8 ♖g2? loses to 8...g3, while 8 ♖e4? ♚b3! is a full-point reciprocal zugzwang. If White is to move and he plays his bishop to g2 or h1, there is no longer a mate on f5 and so Black wins by ...d5. The only other option is 9 ♜a7, but Black again wins after 9...g3 followed by ...♚e3+.

**8...♚b1!**

8...d6 loses to 9 ♖e4, while 8...♚b3 9 ♖e4 transposes to the main line.

The text-move puts up the maximum resistance. White wants to meet ...♚b2 by ♖d5 and ...♚b3 by ♖e4, so Black chooses b1 instead. However, now there is no pin along the second rank, so White gains a new waiting move.

**9 ♖g2!**

9 ♖d5 ♚b2, repeating, loses time.

After the text-move, Black has to move to b2 or b3.

9...♖b3

After 9...♖b2 10 ♕d5 Black loses one move more quickly.

10 ♕e4!

Now it is Black to move in the reciprocal zugzwang.

10...♖b2

The only square.

11 ♕d5!

White has transferred the move to Black. The end is near.

11...♖b1 12 ♖a7!

Black no longer has a check on d4 and so he has no defence against White's plan.

12...♖b2 13 ♕b6

Mate is unavoidable.

### 196) G. Kasparian

1st Hon. Men., Isenegger Memorial Tny,  
Basler National Zeitung, 1966-7

White has just two minor pieces for the queen, not enough to draw in itself, especially if one takes into account the totally exposed position of his king. Thus White must make the most of his temporary initiative and attacking chances.

1 ♖d7+

1 ♕e4? is not vigorous enough; Black wins by 1...♖g3 2 ♖d1 ♖a3+ 3 ♖b1 ♕a2+ 4 ♖c2 ♖h2+! 5 ♕xh2 (5 ♖d2 ♕b1+) 5...♖xc5+ 6 ♖b2 (6 ♖d3 ♕c4+) 6...♖f2+ and White ends up with only a rook for the queen.

1...♕g8

Forced, or else ♖e5+ wins the queen. Once again, White must not waste time. If Black manages to bring his numerically superior forces into play, White will have no chance.

2 f7+! ♕xf7 3 ♖f6+ ♕g7

3...♖f8 can be met by 4 ♕c5+ ♕g7 5 ♕d4, transposing to the main line.

4 ♕d4

Setting up a dangerous battery. 4 ♖d7? loses to 4...♖h4!.

4...♖d3!

The only way to play for a win – Black moves his queen to an active central square and sets up various threats. 4...♖h4 is met by 5 ♕e4! ♖xe4 6 ♖xe4+ ♖f8 7 ♕c5+ ♖e8 (7...♕g8 8 ♖g1) 8 ♖d6+ and White takes the bishop with check, while 4...♖h2 5 ♕e4 ♖a2+ 6 ♖b1 traps Black's queen.

5 ♖g1+!

Not 5 ♖e8++? ♖h6 6 ♕g7+ ♖g5 7 ♖g1+ ♖f4 8 ♕xh8 ♖a6+ 9 ♖b2 ♖b6+ and the loose rook falls.

5...♕g6

5...♖h6?! 6 ♕e3+ ♖xe3 7 ♖g4+ would even leave White a piece up.

6 ♖xg6+!

A surprising sacrifice which draws the black queen into an inferior position.

6...♖xg6

It does not help Black to decline the offer; e.g., 6...♖f7 7 ♕d5+ ♖xg6 (7...♖e7? 8 ♖g7+ ♖d8 9 ♕b6+ ♖c8 10 ♖c7+ ♖b8 11 ♖d7#) 8 ♕e4+ with a draw.

7 ♕e4!

A remarkable position. If the black queen moves to g3, g5 or h6 then a discovered check wins it, so f7 is the only safe square. Black has various rook checks, but they don't change the situation.

7...♖h1+

7...♖a8+ 8 ♖b2 ♖b8+ 9 ♖a1 ♖f7 10 ♕d5 is the same.

8 ♖b2

After 8 ♕xh1? ♖d3 Black picks up a minor piece, which is sufficient to win the game in view of the poor coordination of White's remaining pieces.

8...♖h2+ 9 ♖a1 ♖f7 10 ♕d5!

The position is reflected; Black can only return to g6.

10...♖g6 11 ♕e4

With a perpetual attack on the queen.

### 197) L. Olmutsky

1st Pr., Sotsialistichna Kharkivshina, 1963

Two rooks against two pawns is normally an easy win, but matters are certainly far from clear when both pawns are on the seventh rank. In this position, White can only win with very accurate play, in the course of which he allows Black to promote both his pawns.

1 ♖a3+

During the first few moves, White uses a series of checks to get his rooks behind Black's pawns.

1...♖b4 2 ♖ab3+!

Perhaps surprisingly, 2 ♖hb3+? throws away the win, because White can no longer get the

right-hand rook behind the d3-pawn: 2...♙c4 3 ♖c3+ ♙b4 4 ♖ab3+ ♙a4 5 ♖d3 (or else White can only repeat moves) 5...d1 ♙ 6 ♖xd1 ♙xb3 with an easy draw.

After the text-move, Black has to play his king to the c-file, which allows White to transfer the h3-rook to d3 with gain of tempo.

2...♙c4

2...♙a4 loses to 3 ♖bg3! b1 ♙ (3...d1 ♙ 4 ♖h4+ ♙b5 5 ♖g5+ ♙c6 6 ♖h6+ ♙d7 7 ♖g7+ and White wins) 4 ♖h4+! (not 4 ♖g4+? ♙b5 5 ♖h5+ ♙c6 and there is no check on g6) 4...♙b5 5 ♖g5+ ♙c6 6 ♖h6+ ♙d7 7 ♖g7+ and White mates.

3 ♖hc3+!

Again the correct rook, since 3 ♖bc3+? ♙d4 4 ♖hd3+ ♙e4 makes it impossible for White to put a rook behind the b-pawn with gain of tempo. After 5 ♖b3 b1 ♙ 6 ♖xb1 ♙xd3 Black draws easily.

3...♙d4 4 ♖d3+ ♙c4

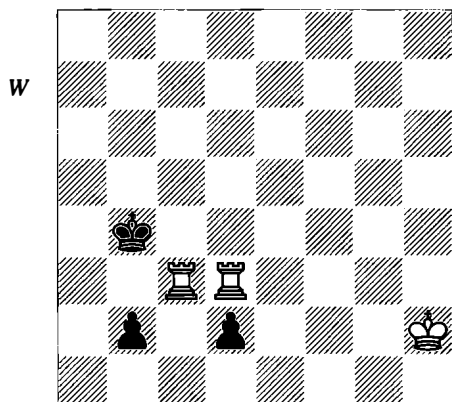
White has achieved the optimum position for his rooks, but how can he avoid repeating the position? Black is threatening to draw by promoting either pawn.

5 ♖bc3+!

This is the start of a surprising winning manoeuvre which depends on White having his rooks on c3 and d3 and Black's king on b4. Had White made an incorrect choice on move two or three then he would not have been able to arrive at this formation.

5...♙b4 (D)

After 5...♙b5 6 ♖d8 ♙a4 7 ♖c7 b1 ♙ 8 ♖a8+ White wins easily.



6 ♖c7!

At first sight pointless, because 6...b1 ♙ 7 ♖b7+ ♙c4 8 ♖xb1 ♙xd3 is a draw.

6...b1 ♙ 7 ♖d8!!

This second quiet move is the real point behind White's play. Black has no queen checks, and White threatens mate in two. Note that the choice of c7 and d8 was not by chance. If either rook were on the sixth rank then there would be no mating threat, so Black could just promote his other pawn, while with the rooks the other way round, on c8 and d7, Black could prevent the mate by playing ...♙e4 here.

7...d1 ♙

There is no defence; e.g., 7...♙e4 8 ♖b8+ ♙a3 9 ♖a7+ ♙a4 10 ♖xa4 ♙xa4 11 ♖d8 and White wins, or 7...♙f1 8 ♖b8+ ♙a5 9 ♖a7+ ♙a6 10 ♖xa6+ ♙xa6 11 ♖d8.

8 ♖b8+ ♙a3 9 ♖a7+ ♙a4

Now White wins both queens.

10 ♖xa4+ ♙xa4 11 ♖xb1

White is a rook up.

## 198) Y. Hoch

2nd Pr., Suomen Shakki, 1976

In the battle of White's rooks against Black's passed pawns, one thing operates in White's favour: Black's king is in front of his pawns and obstructs their advance.

1 ♖cc3

Lining up against the e3-pawn. Black draws if the rook moves elsewhere along the c-file; e.g., 1 ♖c8? ♙e2 2 ♖c2 ♙e5 3 ♙b4 ♙d3+ 4 ♙c3 ♙f2 5 ♙d4 ♙f1 and White has to concede the half-point.

1...♙e5

White has ruled out 1...♙e2, and 1...e2? allows mate in one, so Black's only chance is to bring his knight into play. 1...♙f4 loses to 2 ♖xe3 ♙e2 3 ♖a1+ ♙c1 4 ♖c3 followed by ♖cxcl.

2 ♖xe3!

It is correct to grab this pawn, even though Black can now fork the rooks. If White plays more slowly Black draws easily by 2...♙g4 followed by ...♙e1 or ...♙e2 as appropriate.

2...♙c4

The only move, as 2...♙g4 offers no real resistance. One possible win is 3 ♖a1+ ♙c2 4 ♖e2 ♙d3 5 ♖g2 ♙e3 6 ♖a3+.

3 ♖a1+

If Black manages to take one of the rooks, then his d-pawn will ensure the draw, so this is the only move.

**3...♙c2 4 ♖e2**

Again forced, as if the rook moves elsewhere Black draws by simply promoting the d-pawn.

**4...♙d3!**

The best chance, both attacking a rook and unpinning the pawn. Slower moves offer no hope; for example, 4...♙b2 5 ♖h1 ♙c2 6 ♙b4 or 4...♙b2+ 5 ♙a3 ♙d3 6 ♖xd2+.

After the text-move, no win seems possible because wherever the e2-rook moves Black continues 5...♙b2+ followed by ...d1♙, apparently forcing a clearly drawn ♖ vs ♙ position. In fact White has a subtle finesse, but he has to position his rook accurately for it to work.

**5 ♖h2!**

As we shall see later, 5 ♖g2? is wrong.

**5...♙b2+ 6 ♙b3**

6 ♙a3 wins the same way.

**6...d1♙+ 7 ♙xb2!**

This is the point of White's play: he refuses the queen, and takes the knight instead. Amazingly, Black's queen is trapped. It was necessary to play the rook to h2 at move five in order to prevent the queen from fleeing to h5 in this position.

**7...♙g4 8 ♖a3+**

White will win Black's queen by 9 ♖a4+.

## 199) D. Gurgeniidze

1st Pr., 'Blitz' Tny, 18th WCCC, Tbilisi 1975

The situation looks grim for White. Black has two advanced pawns, one of which is already on the seventh rank, and in addition White's rook is under attack.

**1 ♖xa3**

This capture is the only chance, although it allows Black to promote his pawn. Other moves lose: 1 ♖xe2? ♖xb3! 2 ♖a2 ♙c1 3 ♙c5 ♙b1 4 ♖h2 a2, 1 ♖d3+? ♖d2 or 1 ♖h3? e1♙.

**1...♖d2+**

Black can't promote immediately due to 2 ♖a1+, but he can transfer his rook to c2 with gain of tempo, ready to interpose on c1.

**2 ♙c7!**

It is clear that White can't go to the e-file, for then Black promotes with check, but it is not at all obvious which is the best square on the c-file.

It turns out that White needs his king on d8 in the position after his fifth move, and therefore he has to start moving in the right direction straight away. Other squares are inferior; for example, 2 ♙c6? ♖c2+ 3 ♙d7 (3 ♙d5 e1♙ 4 ♖a1+ ♖c1 5 ♖aa2 ♙h1+ and 3 ♙d6 e1♙ 4 ♖a1+ ♖c1 5 ♖aa2 ♙b4+ are more obviously incorrect) 3...e1♙ 4 ♖a1+ ♖c1 5 ♖aa2 (this looks tempting, because Black has no check) 5...♖b1 with a position of reciprocal zugzwang. White is to move and so loses; for example, 6 ♖g2 ♙e3, 6 ♖h2 ♙e4 or 6 ♙d8 ♖b8+ 7 ♙c7 ♙e5+.

The text-move is superior because White needs to triangulate with his king via d8 to reach d7 with the right player to move.

**2...♖c2+ 3 ♙d8!!**

3 ♙d7? and 3 ♙d6? transpose into the note to White's second move.

**3...e1♙**

There is no point in further delay.

**4 ♖a1+ ♖c1 5 ♖aa2!**

This manoeuvre reveals the basic idea behind White's strategy. If the queen moves along the rank, White has perpetual check by ♖ad2+, while if the queen loses control of f1 then a check on that square will win Black's queen. Thus so long as the rook remains on f2, Black's queen is immobilized. This leaves Black with only his rook to move, and a move along the file allows ♖a1+, repeating the position. This process of elimination implies that Black has only one viable move, namely ...♖b1. It is worth noting that the position after 5 ♖aa2 is reciprocal zugzwang.

**5...♖b1**

Threatening 6...♖b8+.

**6 ♙d7!**

This second position of reciprocal zugzwang is the key to the study, since the wrong choice at move two would have led to it arising with White to play. Here, however, Black is to play and it turns out that he cannot escape from the bind. His queen is still immobilized, and apart from 6...♖c1 7 ♙d8 and 6...♙c1 7 ♖ac2+ ♙d1 8 ♖a2, repeating the position, Black has only one feasible move...

**6...♖b7+ 7 ♙c8! ♖b1**

7...♖a7 8 ♖xa7 ♙xf2 9 ♖a1+ costs Black his queen, so the rook must return.

**8 ♙d7! ♖c1 9 ♙d8!**

Black cannot make progress. An alternative version of this study was proposed, with the following position: w♔d6, ♚d8, f2; b♘d2, ♛e3, ♖a2, e2. The intended solution was 1 ♚a8 ♘d1 2 ♚xa2 ♚d3+ 3 ♘c7! ♚c3+ 4 ♘d8 e1 ♚5 ♚a1+ ♚c1 and then as above. However, this version is incorrect since White can also draw by 3 ♘c5 ♚c3+ 4 ♘d4 e1 ♚5 ♚ae2!.

**200) D. Gurgenzidze and V. Kalandadze**  
1st Pr., for Tel-Aviv Chess Olympiad, 1976

Black's main threat is 1...♚b1+ followed by 2...a1♚, so White has a limited choice. He is not able to stop promotion directly, so he has to play for perpetual check after Black has promoted.

**1 ♚f7+!**

The alternative is 1 ♚xf2? but this loses to 1...♚b1+:

1) 2 ♘c7 ♚c1+ 3 ♘b6 (3 ♘b7 a1♚ 4 ♚e2+ ♘d6 5 ♚d2+ ♘c5) 3...a1♚ 4 ♚e2+ ♘d8 5 ♚d2+ ♘c8 and Black wins.

2) 2 ♘a8 a1♚+ 3 ♚a2 ♚f6 and White's checks are eventually exhausted: 4 ♚he2+ ♘d7 5 ♚ed2+ (or 5 ♚a7+ ♘d8 6 ♚d2+ ♘e8 7 ♚e2+ ♘f8) 5...♘c7 6 ♚a7+ ♘c8! (but not 6...♘c6? 7 ♚a6+ ♚b6 8 ♚xb6+ ♘b6 9 ♚d6+! ♚xd6 nor 6...♘b6? 7 ♚b7+ ♘c6 8 ♚c2+ ♘d5 9 ♚d2+ ♘c4 10 ♚xb1 ♚f8+ 11 ♘b7 ♚f3+ 12 ♘c7 ♚f7+ 13 ♚d7, with a draw in both cases) 7 ♚c2+ ♘d8 8 ♚d2+ ♘e8 9 ♚e2+ ♘f8 10 ♚f2 ♚b8+ (10...♚xf2? 11 ♚f7+ forces stalemate) 11 ♘b8 ♚xf2 and Black wins.

**1...♘e6!**

The only winning try, since 1...♘xf2 2 ♚xf2+ ♘e6 3 ♘a6 and 1...♘d6 2 ♚h6+ ♘e5 3 ♚a6 ♚b1+ 4 ♘c6 offer Black no winning chances, while 1...♘e8 2 ♚f8+ repeats the position.

**2 ♚f6+!**

White must repeat the same motif, since 2 ♚xf2? ♚b1+ 3 ♘a8 (3 ♘c6 ♚c1+ 4 ♘b6 a1♚ 5 ♚e2+ ♘d7 6 ♚d2+ ♘c8) 3...a1♚+ 4 ♚a2 ♚g7! is again winning for Black; e.g., 5 ♚h6+ ♘f5 or 5 ♚he2+ ♘d5 6 ♚ed2+ ♘c4.

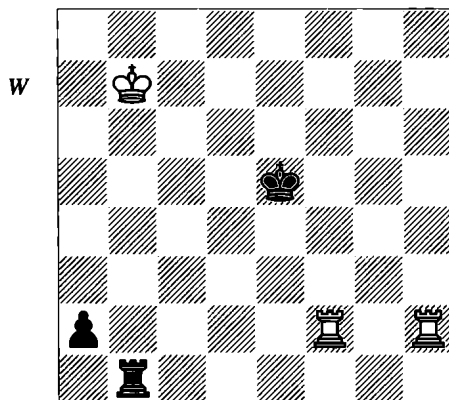
**2...♘e5**

2...♘d5 3 ♚h5+ ♘e4 4 ♚a5 offers Black no chances, so he must occupy the key square e5. This restricts the activity of the potential queen on a1, and allows White to put the second part of his plan into effect.

**3 ♚xf2!**

Not 3 ♚hxf2? ♚b1+ 4 ♘c7 a1♚ 5 ♚2f5+ ♘d4 6 ♚f4+ ♘c3 7 ♚f3+ ♘b4 8 ♚3f4+ ♘a5 and the checks run out.

**3...♚b1+ (D)**



**4 ♘a8!!**

This is the only move to draw, even though retreating to the corner and allowing Black to promote with check makes it seem the least likely square for the king. Other squares lose:

1) 4 ♘c6? is wrong because Black's king easily evades the checks, while any attempt to play ♚a2 is foiled by the check on c3; for example, 4...a1♚ 5 ♚e2+ ♘d4 6 ♚d2+ ♘c4 (6...♘c3? 7 ♚a2 draws) 7 ♚c2+ ♘b3. It follows that White's king must move to the a-file.

2) 4 ♘a7? clearly fails due to 4...a1♚+ 5 ♚a2 ♚d4+. However, it is not so easy to decide between a6 and a8.

3) 4 ♘a6? loses because it is too close to the black king. After 4...a1♚+ 5 ♚a2 ♚c3! 6 ♚he2+ ♘d5 7 ♚ad2+ (7 ♚ed2+ ♘e4 8 ♚e2+ ♘d3) 7...♘c6! Black is able to set up a mating threat which decides the game (8 ♚c2 fails to 8...♚al+).

**4...a1♚+ 5 ♚a2**

Thanks to the position of the king on e5, Black's queen is restricted to two squares and neither is satisfactory.

**5...♚c3**

5...♚d4 6 ♚ae2+! (6 ♚he2+? loses to 6...♘f4 7 ♚f2+ ♘g3 8 ♚g2+ ♘f3) 6...♘f5 7 ♚ef2+ is a draw. If the king moves to the g-file White has perpetual check with the h2-rook, while if the king stays on the e- and f-files White just keeps checking with the other rook. The king cannot

move to e4 or f4 due to ♖h4+, nor to the d-file due to ♚d2. Thus there is no escape.

### 6 ♖he2+!

6 ♖ae2+? ♜d6 7 ♚d2+ ♜c7 is an easy win for Black, but checking with the other rook works. The strategy is to check with the right-hand rook while the king is on the e- to h-files (with the exception of e3 and e4) or on d6, d7 or d8. If the king moves to e3, e4, d4 or d5 then White checks with the other rook. Why? If it were not for the position of the white king then it would be easy: White would draw by checking with the left-hand rook at the first opportunity (i.e., whenever Black's king first moves to the left). Unfortunately, this simple method fails here because Black can play his king to d6 and c7, meeting an eventual ♚c2 by ...♚a1+. So White has to be more subtle and only check with the left-hand rook when Black's king is too far up the board to make a quick rush towards c7. Readers may confirm that in the list given above, whenever it is recommended that a check be given with the left-hand rook, Black's king cannot reach c7. It follows that any such check with the left-hand rook forces an immediate draw; for example, 6...♜f4 7 ♚f2+ ♜e4 is met by 8 ♖ae2+ ♜d5 9 ♚d2+, when a move to the c-file loses the queen to ♚c2, while a move to the e-file allows an immediate perpetual from the right-hand rook. While Black's king is near the c7-square, White continues to check with the right-hand rook. If the king then moves up the board, White always has time to switch to the other rook; for example, 6...♜d6 7 ♚ed2+ ♜e5 8 ♖e2+ ♜f4 9 ♚f2+ and White is ready with his other rook if the king should move to e3 or e4.

Thus the position is a draw. A sample line is 6...♜d6 (6...♜d5 7 ♚ad2+) 7 ♚ed2+ ♜e5 8 ♖e2+ ♜f4 9 ♚f2+ ♜g4 10 ♚g2+ ♜f5 11 ♚gf2+ ♜e4 12 ♖ae2+ ♜d5 13 ♚d2+ ♜e6 14 ♚fe2+.

## 201) H. Rinck

=1st Pr., *La Stratégie*, 1916

This is a good example of some excellent analysis which was later fully confirmed by computer databases. 2♚ vs ♚ is in general a draw, so White's only hope lies in the poor position of Black's king and queen. In particular, White must not allow the enemy queen to escape from the back rank.

### 1 ♖h7+

There are several false paths; for example:

1) 1 ♚f7? ♚d6! and Black will be able to start checking.

2) 1 ♚e7? ♚g8! with unavoidable checks.

3) 1 ♜e1? ♚g8 2 ♜f1 ♚f8+! 3 ♚f7 ♚d6!.

4) 1 ♚a7? ♚e8+! 2 ♜f2 (or 2 ♜d2 ♚g8) 2...♚f8+ 3 ♜g2 ♚g7+! forcing stalemate. This defence occurs in several lines and shows that when Black's king is on h8, White cannot escape from the checks by marching his king to the h-file.

White's basic plan involves playing ♚f7, but first the rook on b7 must be transferred to another square. It requires considerable manoeuvring to achieve this.

### 1...♜g8 2 ♖he7!

Now that Black has been deprived of ...♚g8, playing the rook to e7 is effective. Once again, other moves fail (or lose time):

1) 2 ♚hc7 ♚e8+ 3 ♜f2 ♚f8+ and now White can only win by retracing his steps, for example by 4 ♜e1 (4 ♜g1? throws the win away due to 4...♜h8!, when ...♚g7+ is coming) 4...♚e8+ 5 ♚e7 ♚f8 6 ♜e2.

2) 2 ♚hd7 is similar: White still wins following 2...♚e8+ 3 ♜d2 ♚f8 4 ♜e1 ♜h8 5 ♚h7+ ♜g8 6 ♖he7 ♜h8 7 ♚bc7 ♜g8 8 ♜e2, but only after considerable loss of time.

### 2...♜h8

White wins immediately if Black loses control of f7 and g7; for example, 2...♚c8 3 ♚g7+ ♜h8 4 ♚h7+ ♜g8 5 ♚bg7+ ♜f8 6 ♚h8+.

### 3 ♚bc7!

A very subtle move. The idea is to cover c4, so that when Black's queen is on g8, White can play ♜f1 without allowing a queen check. Other moves (with the exception of the time-wasting 3 ♚h7+) throw the win away: 3 ♚bd7? ♚g8! 4 ♜f3 ♚a8+, 3 ♚a7? ♚g8! 4 ♜f2 ♚f8+ 5 ♜e1 ♚g8! or 3 ♜e1? ♚g8! with a draw in every case.

### 3...♜g8

Black is completely tied up and can only wait. 3...♚g8 loses to 4 ♜f1! (this is where the position of the rook on c7 is used) 4...♚f8+ 5 ♚f7 ♚g8 6 ♜f2 and now Black must surrender control of h7 and g7.

### 4 ♚a7

A waiting move. White must avoid the b7-square (because then ...♚d6 becomes possible) but 4 ♚cd7 ♜h8 5 ♚f7 also wins.

4...♖h8 5 ♖f7

White is finally ready for this decisive move. With the rook on a7, Black's queen must stay on the back rank.

5...♜e8+

5...♜g8 6 ♖f3 is winning for White.

6 ♖f2! ♜g8

6...♜g8 7 ♖f3 is again a win.

7 ♖g7+ ♜f8! 8 ♜h7 ♜g8 9 ♖ag7+ ♜f8 10 ♜h8+

Black finally loses his queen.

## 202) V. Kondratiev

=1st Pr., *Molodoi Leninet*s (Kurgan), 1985

There isn't much White can do to prevent one of the black pawns from promoting, but two rooks can provide a considerable amount of counterplay. Will it prove sufficient?

1 ♖e4+

The correct check as 1 ♜h7+? ♜g5 2 ♜g7+ ♜f6 3 ♜g1 ♜xb6+ 4 ♜c7 c2 is hopeless for White.

1...♜g5

The only winning chance because 1...♜g3 allows 2 ♖e3+ ♜f4 3 ♜xb2 with an immediate draw.

2 ♖a5+ ♜f6

The lateral checks have come to an end, so White switches to vertical checks.

3 ♖f4+ ♜e6 4 ♖e4+ ♜d7!

An accurate choice. 4...♜d6 would allow White an alternative, simpler, draw by 5 ♜h4 (threatening mate in three) 5...♜xb6+ 6 ♜c8 ♜b8+ (or 6...♜c6+ 7 ♜d8 ♜c5 8 ♜h6+ ♜d5 9 ♜h5+ ♜d4 10 ♜h4+) 7 ♜xb8 b1♜+ 8 ♜c8 ♜e7 9 ♖c4 followed by ♖ac5.

5 ♜d4+!

White must take care to give the correct check. The alternatives are:

1) With the king on d7, 5 ♜h4? loses to 5...♜xb6+.

2) 5 ♖a7+? ♜d6 6 ♖ae7 b1♜ 7 ♖7e6+ ♜c5 is also a simple win.

3) 5 ♜d5+? is harder to refute. Black must continue 5...♜c6 6 ♜d1 ♜xb6+! (6...♜xb6? 7 ♜c4! ♜b5 8 ♜c7 ♜b4 9 ♜c8 looks like a draw) 7 ♜a7 (7 ♜c8 ♜c5 8 ♖e5+ ♜c4 9 ♖e4+ ♜b3 10 ♖e3 ♜c2 wins for Black) 7...♜b5 and his king can make its way up the board to support the pawns; for example, 8 ♜a6 (8 ♖e8 ♜b7+ 9

♜a6 c2; 8 ♖e6+ ♜c5 9 ♖e8 ♜c4 10 ♖e4+ ♜b3 11 ♖e3 ♜c2 and Black wins) 8...c2 9 ♖e6+ ♜c5 10 ♖e5+ ♜c4 11 ♖e4+ ♜c3 12 ♖e3+ ♜b4 13 ♜d4+ ♜c5 and promotion cannot be further delayed.

5...♜c6

Now White only has one more check.

6 ♖c4+ ♜xb6

It seems as though the end has come; the checks are exhausted and promotion cannot be prevented.

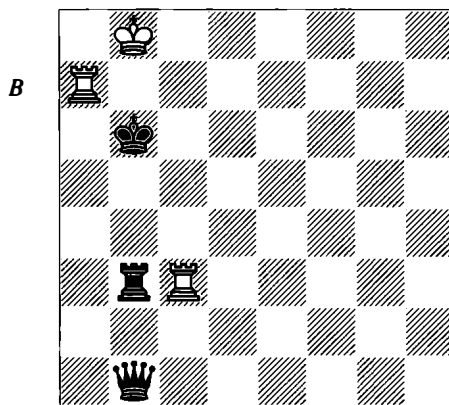
7 ♖a7!

Threatening to win the rook with 8 ♖b7+, so Black is forced to promote.

7...b1♜

White's plan is still not obvious, as 8 ♖b7+? ♜a5 pins the rook.

8 ♖xc3! (D)



This is the point. Black has no checks, and White threatens both 9 ♖xb3+ and 9 ♖b7+.

8...♜b5

The only chance.

9 ♖b7+ ♜a5 10 ♖c5!

Black's poor rook is pinned from two directions simultaneously and now Black cannot avoid a draw.

## 203) V. Kovalenko

1st Pr., *Komsomolskaya Pravda*, 1968

For a moment it seems as though White should be quite grateful to reach a draw from this position. The threat is 1...♜b1, and if White plays either rook to the first rank to prevent this, then Black reaches a rook ending with an extra pawn by playing 1...c1♜++.

**1 ♖c1!**

This is the only move, but it is a strong one. White is aiming for a total liquidation on c2, when he will have a winning king and pawn ending.

**1...b3!**

Black appears to be falling in with White's plan, but he has a hidden resource. 1...♙a1 causes fewer problems after 2 ♜xc2 ♜b1+ 3 ♙d2 b3 4 ♜c6! ♜b2+ 5 ♙c3 ♜xh2 6 ♙xb3 ♜h3+ (6...♜h6 7 ♜c1#) since Black's king is so poorly placed that capturing the f6-pawn will guarantee a winning ending; the finish might be 7 ♙c4 ♜h6 8 ♙d5 ♙b2 9 ♙e6 ♙b3 10 ♙f7 ♜h7+ 11 ♙g6 ♜h1 12 ♜c8 and Black's king is hopelessly cut off.

**2 ♜xc2**

The only move to avoid defeat, but now it seems that White has achieved his aim.

**2...♙a1!**

This stalemate trick throws the result into doubt. 2...♜xc2+ 3 ♜xc2+ bxc2 4 ♙xc2 and 2...bxc2 3 ♜xc2 ♙a1 4 ♜c6 ♜a2 5 ♜xf6 (once again, there are not even technical problems) 5...♜a8 6 ♜c6 ♙a2 7 ♙c2 ♙a3 8 ♙c3 ♙a4 9 ♙c4 ♙a5 10 f6 are straightforward wins for White.

The text-move even threatens to win for Black by 3...♜b1+ 4 ♙d2 bxc2, so White has to take action. However, there aren't many feasible moves because White's rooks are pinned against each other.

**3 ♜c2!**

Only this square wins. 3 ♜cf2? ♜xf2 4 ♜xf2 b2+ is a draw because the rook is too far away from White's king to allow a pin along the first rank, while 3 ♜cd2?? would be an unfortunate move in view of 3...♜b1#. The text-move strikes a happy medium: close, but not too close.

**3...♜c2+!**

Black offers his rook to make another bid for stalemate. 3...♜xe2 4 ♜xe2 b2+ 5 ♙d2 b1 ♜ 6 ♜e1 is a winning king and pawn ending since Black cannot save the f6-pawn.

**4 ♜xc2 b2+ 5 ♙d2!**

5 ♙d1? b1 ♜+ 6 ♜c1 ♜xc1+ 7 ♙xc1 is a draw.

**5...b1 ♜**

White must do something immediately before Black starts checking.

**6 ♜h1!**

White too knows how to sacrifice a rook. This destroys the stalemate that thwarts White in the line 6 ♜c1? ♜xc1+ 7 ♙xc1.

**6...♜xh1 7 ♜c1+**

Now White can liquidate to a winning king and pawn ending.

**7...♜xc1+ 8 ♙xc1 ♙a2 9 ♙c2**

White wins.

**204) D. Gurgenidze**

1st Pr., Saratov-400 Anniversary Tny, 1989

There is quite a collection of passed pawns on the board, but Black has one more than White and this gives him the edge.

**1 f7**

White has to act quickly and make the most of his main asset, the passed f-pawn.

**1...♜a7+**

Black seeks to eliminate the pawn straight away. After 1...♜f5 2 ♜a6+ ♙b7 3 ♜xa2 ♜xf7+ 4 ♙e8 Black cannot do more than reach a drawn ♜+♙ vs ♜ position by 4...♙h5.

**2 ♙d6!**

A difficult move to spot, since the king not only moves away from the f7-pawn, but also lands on a square which allows the d-pawn to promote with check. It is natural to use the king to defend the f7-pawn, but that would lose: 2 ♙e6? ♜xf7 is decisive because White's king is on a light square, which gives Black a check with his bishop.

**2...♜xf7**

White's f-pawn has vanished, but the time gained enables him to set up threats of perpetual check.

**3 ♜a6+ ♜a7**

3...♙b7 only leads to a draw: 4 ♜xa2 ♜d7+ 5 ♙c5 ♜d5+ 6 ♙xd5 (6 ♙b4 also leads to a draw) 6...♙b3+ 7 ♙c5 d1 ♜ 8 ♜e7+ ♙b8 9 ♜e8+ with perpetual check.

**4 ♜c6!**

This even threatens mate starting with 5 ♜e8+ ♙b7 6 ♜e7+, so Black has no time for quiet moves. 4 ♜b6? fails to 4...♙h5.

**4...♜d7+!**

Black tries to deflect the white king to a light square. Both 4...a1 ♜ 5 ♜e8+ and 4...♙h5 5 ♜c8+ ♙b7 6 ♜c7+ ♙b6 7 ♜c6+ ♙b5 8 ♜c5+ lead to immediate draws by perpetual check.

**5 ♙xd7**

Forced, because if White declines the rook Black can just promote his a-pawn.

5...♙g4+

5...a1♙ 6 ♖e8+ ♖b7 7 ♖c7+ ♖b6 8 ♖b8+ ♖a6 9 ♖a8+ costs Black his queen.

6 ♖xg4

Black has achieved his ambition and cleared the way for the d-pawn with gain of tempo. It now seems that he is free to promote both pawns, gaining a decisive material advantage. However, during the earlier play White's king has been edging closer to Black's, and this gives White enough counterplay to draw.

6...d1♙+ 7 ♖c7 a1♙!

Black is alert and denies White an easy draw after 7...a1♙ 8 ♖g8+ ♖a7 9 ♖a8+! ♖xa8 10 ♖a6+ ♙xa6 with stalemate. 7...♖a7 8 ♖b4, setting up perpetual check on b7 and b8, is also drawn.

8 ♖g8+

Black was threatening 8...♖a7+, so White forces the black king to a7.

8...♖a7 9 ♖b8!

Threatening perpetual check on b7 and b8.

9...♙d5 10 ♖b7+ ♖a8 11 ♖b8+

Draw.

## 205) G. Nadareishvili

1st Pr. (section for wins), Tsereteli-150 Memorial Tny, 1990

Both sides are about to promote, but Black's pawn will promote with check. Fortunately, White is able to drive the black king in front of the pawn with gain of time.

1 ♖a8+

1 e8♙? b1♙+ 2 ♖d1 ♖f1+ 3 ♖xf1 ♙xd1+ 4 ♙e1 leads only to a draw.

1...♖b1

1...♖a4 loses to 2 ♖xa4+ ♖xa4 3 ♖xb2 ♖e4+ 4 ♖e2, so this is forced.

2 e8♙!

Or:

1) 2 ♖e2? ♖fe4 3 e8♙ ♖xe8 4 ♖axe8 ♖b7 is a positional draw. Black is not actually threatening anything, but White cannot make progress. If the white king emerges, then Black starts checking, but otherwise Black just moves his rook up and down the b-file. The continuation might be 5 ♖d8 ♖b6 6 ♖d1 ♖b7 7 ♖d2 (now there is a threat to play 8 ♖e1+ ♖a2 9

♖a8+ ♖b3 10 ♖e3+, but with the king on d2, blocking the second rank, Black can afford to move his rook to another file) 7...♖a7! 8 ♖b8 ♖a1! 9 ♖e1+ ♖a2 10 ♖c3 ♖c7+ drawing.

2) 2 e8♙? is a fairly silly move, and after 2...♖c1 3 ♖ac8+ ♖fc4 4 ♖xc4+ ♖xc4 5 ♖d2 ♖b4! 6 ♖c8+ ♖b1 Black reaches the same type of draw as in line '1'.

2...♖fe4+

Now White must take care to avoid the positional draw mentioned in the previous note.

3 ♖d2!

After 3 ♖d1? ♖xe8 4 ♖xe8 ♖b7 Black arrives at the familiar draw, while the tempting 3 ♙xe4+? ♖xe4+ 4 ♖d2 (4 ♖f2 ♖b4 is the same draw again) allows Black a stalemate defence by 4...♖h4! 5 ♖e2 ♖h2.

3...♖bd4+

The difference between 3 ♖d2! and 3 ♖d1? is that after the former Black has no time to take on e8, because of mate by 4 ♖h1+.

4 ♖c3

White can only escape from the checks by playing his king to a3, but then Black can hope to take the queen.

4...♖c4+ 5 ♖b3 ♖b4+

Capturing the queen still runs into mate: 5...♖xe8 6 ♖xb2+ ♖c1 7 ♖a1#.

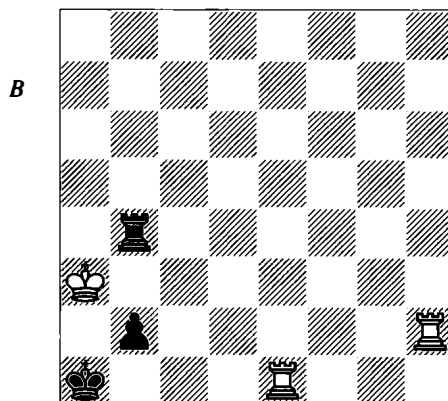
6 ♖a3 ♖xe8

At last Black can consider this.

7 ♖xe8 ♖a1!

The only chance as White was threatening both 8 ♖xb4 and 8 ♖e1#.

8 ♖e1+ (D)



Or else Black can promote his pawn in safety. If now 8...b1♙, then 9 ♖a2#.

**8...b1♗+!**

A witty final resource. Black plays for stalemate...

**9 ♖xb1+!**

...but to no avail.

**9...♗xb1**

Or 9...♗xb1 10 ♖xb4.

**10 ♖a2#**

A mate with minimal material.

## 206) D. Gurgenzidze

1st Pr., Birnov Memorial Tny, 1987

Promoting the b-pawn will leave White a rook up, but should he check first or not?

**1 ♖a4+!**

This is the correct move. 1 b8♗? allows an immediate draw by 1...♖h1+ 2 ♖xb2 ♗d2+ 3 ♖c2 ♗d4+ 4 ♖c3 ♗d2+, while 1 ♖c4+? leads to play similar to the main line, but with the crucial difference that after 1...♗h5 2 b8♗ ♗g1+ 3 ♖xb2 ♖b7+! 4 ♗xb7 ♗g7+ 5 ♖c1 ♗xb7 (the alternative 5...♗g1+ also draws) 6 ♖c5+ ♗g4 7 ♖a4+ ♖f3 8 ♖c3+ ♖e2 9 ♖a2+ ♖e1 White's rooks are the wrong way round. If White now checks on e3 then he leaves his king exposed to checks along the c-file.

**1...♗h5!**

An excellent defence, preparing a stalemate. After 1...♖f3 the simplest win is by 2 ♖c3+ followed by 3 b8♗.

**2 b8♗ ♗g1+**

After 2...♗f5+ 3 ♖xb2 ♗f2+ 4 ♖c2 ♗f6+ 5 ♖c3 ♗f2+ 6 ♖a3 the checks come to an end and White wins with his extra rook.

**3 ♖xb2 ♖b7+!**

Preparing the stalemate. White wins quite easily after 3...♗g2+ 4 ♖a1 ♗h1+ 5 ♗b1 or 3...♗g7+ 4 ♖b3 ♗f7+ 5 ♖ac4 ♗f3+ 6 ♖b4.

**4 ♗xb7 ♗g7+**

White can only avoid the stalemate by giving up his queen for nothing.

**5 ♖c1!!**

Nevertheless, that is precisely what White does! Other squares fail because all the ranks apart from the first have to be kept open for White's rooks.

**5...♗xb7**

Any attempt to keep the checks going is doomed to failure; for example, 5...♗g1+ 6 ♖c2 ♗f2+ 7 ♖b3 ♗f3+ 8 ♖a2 ♗g2+ 9 ♗b2 or

5...♗g5+ 6 ♖b1 ♗f5+ (6...♗g1+ 7 ♖c1 ♗g6+ 8 ♖e4) 7 ♖a1 ♗e5+ 8 ♗b2.

**6 ♖a5+**

Now it is White's turn to take over the initiative. First of all, Black's king is checked to the first rank.

**6...♗g4 7 ♖c4+ ♖f3 8 ♖a3+ ♖e2 9 ♖c2+ ♖e1**

In contrast to the position in the note to White's first move, here one rook can both control the second rank and shield the white king, while the other rook is free to pursue the attack.

**10 ♖e3+!**

Avoiding the final trap: 10 ♖d3? ♗f3! 11 ♖xf3 stalemate.

**10...♖f1 11 ♖d3**

Black must give up his queen to avoid mate.

## 207) V. Kalandadze

=1st Pr., Sagaredzho Tny, 1984

With Black's h-pawn on the verge of promoting with check, it seems as if resignation by White would be fully justified. However, White can draw, although he must sacrifice both his rooks to achieve this.

**1 ♖a2+!**

The alternative sacrifice 1 ♖c2+? fails to 1...♖xc2 2 ♖a1 ♖b1 3 ♖a2+ ♖b2 4 ♖a1 gxf6, when Black is three pawns up in the rook ending.

**1...♖xa2 2 ♖c2+ ♖b2**

Otherwise White draws the rook ending easily.

**3 ♖xh2! ♖xh2 4 hxf7**

The upshot of White's sacrificial spree is that he has acquired a dangerous passed pawn of his own. Black must play his rook back to the first rank to stop it promoting.

**4...♖e2+ 5 ♖f4!**

The king is heading for h6 to support the pawn.

**5...♖e8 6 ♖g5**

Otherwise Black wins the pawn by ...♖g8 and ...♖xg7.

**6...♖g8**

Suddenly Black's plan becomes clear: after 7 ♖h6 ♖xg7 8 ♖xg7 h5 he forces a won ending with queen against pawn on g7. Is it finally time for White to give up?

**7 ♖h6 ♖xg7 8 g5!**

An amazing resource. White is a rook and a pawn down and has no passed pawn, but still the position is a draw. If Black keeps the h7-pawn it is stalemate, but if he plays ...g8 he loses both pawns, whereupon White draws with a pawn against a rook. 8 ♖xg7? loses to 8...h5 9 g5 h4 10 ♖xg6 h3.

8...g8 9 ♖xh7 ♖a8 10 ♖xg6 ♖b3 11 ♖f7  
White draws easily.

## 208) A. Wotawa

*Deutsche Schachzeitung*, 1960

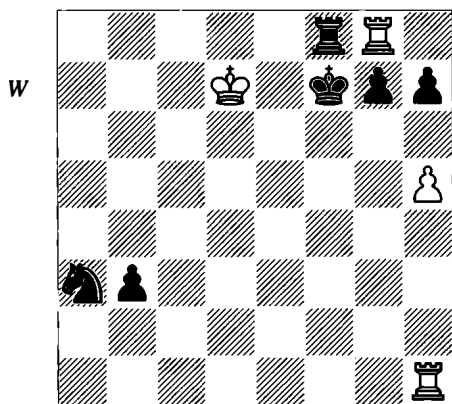
### 1 f8♚

The only reasonable try, because 1 gxf5+? ♖xf7 2 ♖a8 ♖c4 gives Black a clear advantage.

### 1...♖xf8 2 gxf5+

Not 2 ♖xf8? ♖f6+ followed by ...b2, when it is White who has to play for a draw.

### 2...♖f7 (D)



There hasn't been much choice for White up to here, yet after the obvious 3 ♖xf8+? ♖xf8 4 ♖f1+ ♖g8 Black can draw; for example:

1) 5 ♖e7 h6 6 ♖f8+ ♖h7 7 ♖b8 ♖c4 8 ♖xb3 ♖e5 (Black's aim is to get his knight to g5 or f6) 9 ♖g3 (9 ♖e6 ♖g4 10 ♖b5 ♖f6 11 ♖f7 ♖e4 is also a draw) 9...♖g8 (preparing ...♖f7-g5) 10 ♖e6 ♖f7 11 ♖g1 ♖g5+ 12 ♖e7 ♖h7 and White cannot make progress.

2) 5 h6 gxf6 6 ♖e7 h5! (or else White mates with ♖g1+ followed by ♖f7) 7 ♖g1+ ♖h8 8 ♖f7 h6 9 ♖g6 (9 ♖g6 b2 and 9 ♖g8+ ♖h7 10 ♖g7+ ♖h8 11 ♖g6 b2 are immediate draws) 9...♖h7 10 ♖b6 ♖c4 11 ♖xb3 ♖d6+ 12 ♖e6 ♖e4 13 ♖f5 ♖g5 14 ♖b7+ ♖g8 and White's advantage is not enough to win.

It hardly seems possible that there is a better move than 3 ♖xf8+?, but there is a hidden resource.

### 3 ♖h8!!

An absolutely incredible idea which is very easy to overlook. White gently nudges his rook into the corner, threatening mate in one. If Black does not want to lose his rook for nothing, then he has to accept the sacrifice.

### 3...♖xh8

Now, however, White has a forced mate in five moves.

### 4 ♖f1+ ♖g8 5 h6

White must prevent ...h6.

### 5...gxf6

After other moves White mates by ♖e7, followed by either ♖f8# or ♖g1#.

### 6 ♖e7 ♖g7

There is no escape.

### 7 ♖g1#

## 209) D. Gurgenidze

2nd Pr., *Nordisk Postsjakkblad*, 1978

White is the exchange up, but is faced by two monster passed pawns.

### 1 ♖a3

White's first task is to hold up the a-pawn.

Other moves are hopeless:

1) 1 ♖a3? loses to 1...♖e6 2 f5 ♖b1.

2) 1 ♖h8+? ♖g4 2 ♖a3 ♖e6 3 f5 ♖d5 4 c4 (or 4 ♖h7 ♖g1 5 f6 a1♚ 6 ♖xa1 ♖xa1+ 7 ♖b5 g2) 4...♖xc4 5 ♖b4 ♖f7 6 ♖h7 ♖b1+ 7 ♖c5 a1♚ 8 ♖xa1 ♖xa1 9 ♖xf7 ♖a5+ followed by ...♖xf5, and Black wins.

### 1...♖xc2+

The start of an ingenious manoeuvre which frees the a-pawn to advance. The alternative is 1...♖e6 but then 2 f5 gives White enough counterplay to draw:

1) 2...♖f7 3 ♖b4+ ♖h5 (3...♖h3 4 c4) 4 ♖xg3 ♖b1 5 ♖a3 returns in time to give up the rook for the a-pawn.

2) 2...♖xf5 3 ♖h8+ ♖g4 4 ♖g8+ ♖f4 5 ♖gxg3 ♖xc2+ 6 ♖b4 and Black can do no better than ♖+♖ vs ♖.

3) 2...♖b1 3 ♖h8+ ♖g4 4 fxe6 a1♚ 5 ♖xa1 ♖xa1+ 6 ♖b5 is an easy draw.

### 2 ♖a5 ♖b3!

Black is willing to sacrifice his bishop in order to draw the b8-rook onto an inferior square.

**3 ♖bxb3!**

After 3 ♖axb3? ♖gl 4 ♖h8+ ♔g4 5 ♖g8+ ♔xf4 6 ♖b4+ (6 ♖f8+ ♔g5 is similar) 6...♔f5 7 ♖f8+ ♔g6 the checks run out, whereupon the a-pawn promotes. 3 ♖h8+? ♔g4 4 ♖xb3 ♖gl transposes to this line.

**3...♖b1!**

The point. Black intends to pick up a rook for the a-pawn, whereupon his g-pawn will ensure an easy win in the single-rook ending. Playing ...♖b1 didn't work when the rook was on b8, because White could reply ♖h8+ followed by ♖xa2, but here the b3-rook cannot move away with check.

**4 ♖xg3!**

A surprising move, since after 4...a1 ♖5 ♖xa1 ♖xa1 + Black wins both the white rooks.

**4...a1 ♖5 ♖h3+**

White starts checking, but can this really be perpetual check? It seems that Black only has to march his king to c4 to evade the checks, since a further check on c3 could be met by ...♖xc3+.

**5...♔g4**

Black must keep his king on the fourth rank because if he is not attacking the right-hand rook, White can simply play ♖xa1.

**6 ♖g3+ ♔xf4 7 ♖f3+ ♔e4 8 ♖e3+ ♔d4**

Black seems on the verge of escaping from the checks, but now White reveals the hidden defensive resource which saves the game.

**9 ♖b3!**

Just at this moment, when the king is on d4, White returns to b3, trapping the queen on a1. Not 9 ♖d3+? ♔c4, when he really does lose.

**9...♔c4**

The only way to prevent the immediate capture of the queen, but after...

**10 ♖b4+**

...the queen is lost in any case.

**210) N. Riabinin**

3rd Pr., *Shakhmatny Vestnik*, 1993

Despite his extra pawn White is in trouble due to the poor position of his king and Black's threat of 1...g1 ♖. At this stage it is hard to imagine that White will have to underpromote two of his three pawns in order to draw.

**1 e7**

The only move, because 1 ♖g3? ♖a1, 1 ♖e1? ♖a3 and 1 ♖f7+? ♖xf7 2 exf7 ♖a8! 3 ♖e8

♔xf7 4 ♖e1 ♖h8+ 5 ♔g5 ♖h1 are hopeless for White.

**1...♖g8!**

An excellent move, which helps to confine the white king to the h-file. After other moves along the back rank, play proceeds in similar fashion except that White generally has an easier time of it; for example:

1) 1...♖e8 2 d5 ♖a6 3 ♖e1 g1 ♖4 ♖xg1 ♖a3 5 ♖f1+ ♖f3 6 ♖xf3+ gxf3 7 d6 ♔e6 (7...f2?! 8 d7 f1 ♖9 dxe8 ♔+ ♔e5 10 ♔g6 leaves Black fighting for the draw) 8 ♔g5 ♔xd6 9 ♖f7 leads to a draw.

2) 1...♖fa8 2 d5 ♖a6 3 ♖e1 g1 ♖4 ♖xg1 ♖a3 5 ♖h1 ♖h3+ 6 ♖xh3 gxh3 7 ♔h5 ♖g8 (trying to keep the king trapped on the h-file, but now we can see why it is better to play the rook to g8 at move one) 8 e8 ♖ ♖xe8 9 ♔g4 and White draws.

**2 d5!**

2 ♖e1? ♖a3 and 2 ♖g3? ♖a1 are still hopeless, so White's only chance is to set up his own mating threat of 3 ♖e6+ ♔f5 4 ♖f7#.

**2...♖a6!**

2...g3? prevents the mate, but after 3 ♖e6+ ♔f5 4 ♖f7+ ♔g4 5 ♖g7+ ♖xg7 6 e8 ♖ White wins.

**3 ♖e1**

3 ♖g3? loses to 3...♖a1, so this is forced. However, it seems an effective move as Black's a6-rook cannot move along the file because of the possible mate with ♖e6+.

**3...g1 ♖!**

Black is willing to give up his most prized asset to free the rook from a6.

**4 ♖xg1 ♖a3!**

The mate threat on h3 is especially awkward as the g8-rook is well placed to confine the white king.

**5 c3!**

White gives up the c-pawn not, as one might imagine, to set up a future stalemate, but because he needs all the files open for a coming barrage of checks. 5 ♖h1? drew with the rook on a8 rather than g8, but here it loses after 5...♖h3+ 6 ♖xh3 gxh3 7 ♔h5 h2 8 e8 ♔+ ♔e5 9 ♖e7+ ♔d4 10 ♖e1 ♖gl.

**5...♖xc3 6 ♖f1+**

6 ♖h1? loses as before, so White is obliged to exchange rooks on f3.

**6...♖f3 7 ♖xf3+ gxf3 8 d6 f2**

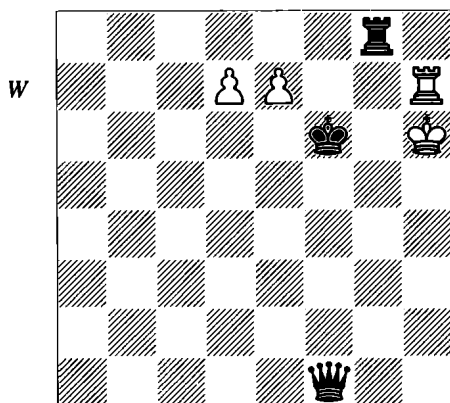
8...♙e6 9 d7 ♖xd7 10 ♜f7 draws.

9 d7

The past few moves have been forced.

9...f1 ♖ (D)

9...♜g6+? loses to 10 ♖h5 f1 ♖ 11 ♜f7+ ♖xf7 12 e8 ♖+ but the text-move appears very strong as White cannot afford to let Black have a check.



10 e8 ♖+! ♙e6

The best try. Not 10...♙e5? 11 ♜e7+ and White wins after 11...♖d4 12 d8 ♖+ or 11...♖f4 12 ♜f7+, while 10...♜xe8 11 dxe8 ♖+ ♙e6 12 ♖g7+ ♙e5 13 ♖h5 is a safe draw for White.

11 d8 ♖+!

A second pawn promotes to a knight, giving rise to a very odd position. Black's king cannot go to the f-file and White's rook is able to give checks on e7, d7, c7 and b7. Thus Black's only hope to evade the checks is to play the king to a6. Note that if White had not given away his c-pawn at move five, Black's king could now escape the checks by running up the board and hiding on c1.

11...♖d5 12 ♜d7+ ♙c5 13 ♜c7+ ♙b6 14 ♜b7+ ♙a6

14...♙a5 15 ♜a7+ does not help Black.

15 ♖c7+

The rook checks driving the king across the board have ended, but now the poor king is chased up the a-file instead.

15...♙a5 16 ♖c6+ ♙a4 17 ♜b4+ ♙a3 18 ♖b5+ ♙a2 19 ♖c3+ ♙a1

It's the end of the road for the king, but now Black loses his queen.

20 ♜b1+ ♖xb1 21 ♖xb1

Draw.

## 211) A.I. Kotov and V. Razumenko

1st Pr., Hero-Towns, 1995

There's no way to prevent Black from winning a rook with his kingside pawns, so White must play for a breakthrough on the queenside.

1 a5!

1 c5? is ineffective: 1...axb5 2 cxb6+ ♙a6 3 a5 ♜xb4 breaks up any mating-net on the queenside, and then the pawns run through with at least a draw for Black.

1...axb5

Forced, as other moves lead to immediate mate.

2 axb6+ ♙a6 3 c5

Sealing in Black's king, and threatening mate by ♜d8-a8.

3...g1 ♖!

A remarkable defence in which Black gives away one of his main assets in order to set up a stalemate. 3...♜xb4 no longer works, as 4 ♜g8 mates next move, while 3...h2 loses quickly to 4 ♜d8 h1 ♖+ 5 ♖g7, followed by mate.

4 ♜xg1

White cannot play for mate straight away by 4 ♜d8? as Black has 4...♖e3+ with a draw.

4...h2 5 ♜h1!

The only move to win, since if White allows Black to give away his h-pawn, stalemate is inevitable; for example, 5 ♜xb1? h1 ♖+ 6 ♜xh1 or 5 ♜d8? h1 ♖+ 6 ♜xh1 ♜xh1+ followed by perpetual check with the rook.

After the text-move, the struggle is between White's attempts to get a free tempo with his rook to give mate on the a-file and Black's efforts to give perpetual check with his own rook.

5...♜e1 (D)

Threatening 6...♜e6+ with perpetual check along the e-file. 5...♜d1? is wrong since 6 ♜d2 forces mate at once. This idea prevents Black from placing his rook on the same file as the white one.

6 ♜e4!

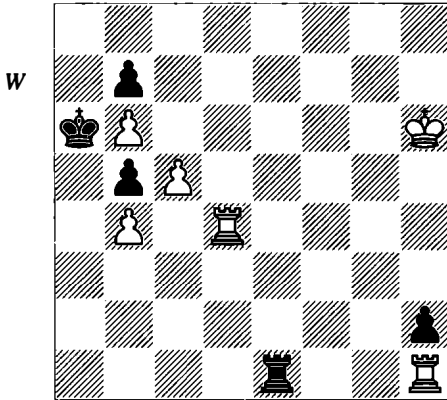
The only move, blocking off the check on e6. 6 ♜g4? ♜e6+ 7 ♖h5 ♜e5+ 8 ♖h4 ♜h5+ 9 ♖g3 ♜h3+ is perpetual check, while 6 ♜c4? ♜e6+ 7 ♖g5 bxc4 8 ♜xh2 ♖b5 is better for Black.

6...♜f1

Black again tries to get in a check.

7 ♜f4

Once again Black is blocked.

**7...Rg1**

The key point is that if Black moves his rook the other way along the first rank, White can place his rook on the sixth rank with gain of tempo and then release the stalemate by a timely Rxc6; for example, 7...Re1 8 Rf6 Rg1 9 Rc6 bxc6 10 Rxb2 Rg4 11 Rb2 Qb7 12 Qh5 Rg1 13 Rf2, followed by Rf4-g4, releasing the king, after which the ending is a clear win due to White's protected passed pawn.

**8 Rg4**

The dance of the rooks comes to an end. Black has run out of space and must go the other way.

**8...Re1 9 Rg6 Rf1**

This case is even easier, as Black cannot play his rook to g1.

**10 Rc6 Rxb1 11 Rc8**

White forces mate.

**212) V. Korolkov and L. Mitrofanov**

1st Pr., FIDE Tny, 1958

White is a piece down, but Black's knight is *en prise*. Unfortunately, White's own rook on a6 is also attacked and the first step is for White to safeguard this rook with gain of tempo.

**1 Rb5+!**

The most accurate move from a wide range of possibilities:

1) 1 Rxa4? Rg7+ 2 Qf2 Qd4 and Black consolidates his extra piece. Although White has two pawns for the piece, he has no chances of saving the game in view of his badly broken pawn-structure.

2) 1 Re6+? Qd5 2 Rf6 Rxf6 3 Rxf6 Qd4 is even worse.

3) 1 f4+? Qd5 2 Rb5+ (2 Rxa4 Qc5 is lost for White in the long run) 2...Qc5 3 Raa5 Rc7 and White's threats dry up.

4) 1 d4+? Qd5 2 Rb5+ (2 Rxa4 Qxd4 3 Raa5+ Qc4 is safe for Black) 2...Qc4 3 Rab6 f4+ 4 Qf2 Qxd4 and again White faces defeat.

**1...Qc5!**

This sacrifice is the only way to play for a win. 1...Qd4?! 2 Rxa4+ Qxd3 3 Rxb3+ is, if anything, better for White.

**2 Rxc5+**

2 Raa5? b6 3 Rxb6 Rc7 4 Rb4 Rxd3 5 Rbxa4 Qf6 is winning for Black even though he has only one pawn left. White's rooks are poorly positioned and his king is exposed to attack.

**2...Qd4**

Both White's rooks are attacked and he has only one good way to rescue them.

**3 Raa5!**

Not 3 Rc4+? Qxd3 4 Rxa4 b5! and, unlike the game continuation, Black has not been obliged to play ...Rg7+. This deprives White of the stalemate defence which saves him in the main line.

**3...Rg7+!**

Black has no choice but to interpose this check even though, as we shall see, it helps to set up White's saving resource. 3...b6 is met by 4 Rxf5! Rg7+ 5 Rg5 Rg5+ 6 Rg5 Qxd3 7 Rb5, when the passed f-pawn ensures a comfortable draw.

**4 Qf4!**

Setting up the stalemate defence at move 10.

**4...b6!**

Now that Black's rook has moved away from f7, he can fork White's rooks without running into Rxf5.

**5 Rc4+**

The only way to avoid losing one of the rooks is to shuffle them down a rank.

**5...Qxd3 6 Rxa4 b5**

Again forking the rooks, so White has to repeat the manoeuvre.

**7 Rc3+ Qxd2 8 Raa3 b4**

White seems to have come to the end of the road as there are no further rook checks to evade the unwelcome attentions of Black's b-pawn.

**9 Rc5!**

The final finesse: White plays for stalemate.

**9...bxa3 10 Rd5+**

Now after 10...♙c3 11 ♖xd8 ♜g2 12 ♙xf5 White will draw with his f-pawn even if he has to give up his rook for Black's a-pawn.

**10...♖xd5**

Stalemate.

### 213) V. Pachman

1st Pr., *Sachové Umenie*, 1972

The material situation is such that White can only hope to win if he picks up Black's knight without losing his own.

**1 ♖f5+ ♔g6**

Forced. If the black king loses contact with White's knight then White will win by taking on e1, while 1...♙f6 2 ♖d6+ ♖f3+ 3 ♖xf3+ ♙xf3 4 ♖f2 leaves White a piece up.

**2 ♖h4+**

2 ♖c6+? is the wrong check as Black draws by 2...♙h5 3 ♖g3+ ♙g4 4 ♖c4+ ♙h3 5 ♖e4 ♙b2. 2 ♖cf2? is also a mistake, as Black draws by centralizing his queen with 2...♙e4.

**2...♙h5**

2...♙g5 is met the same way.

**3 ♖c5+!**

3 ♖f5+? sets the trap 3...♙xh4? 4 ♖c4+ ♙h3 5 ♖h5#, but 3...♙h6 draws.

**3...♙g4**

Here too Black must eschew White's knight:

3...♙xh4 4 ♖f4+ ♙h3 5 ♖h5#.

**4 ♖c4+**

Defending the h4-knight with gain of tempo.

4 ♖xe1? does not work because after 4...♙xh4 Black's queen prevents the check on e4.

**4...♙h3**

Black cannot save his knight, so he must seek counterplay against the white king. 4...♙h5 5 ♖xe1 leads to a technical win on material.

**5 ♖xe1**

It looks dangerous for White's king, and Black takes the chance to jump in with his queen.

**5...♙a7+ 6 ♙h1**

6 ♙f1? ♙f7+ picks up the c4-rook.

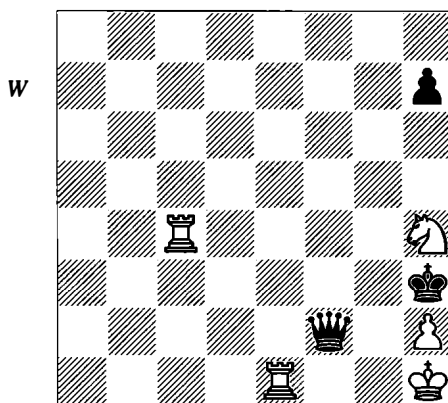
**6...♙f2! (D)**

Best, as 6...♙b7+ 7 ♖ce4 mates quickly.

The text-move threatens two different mates in one, and it seems that White has nothing better than to force a draw with 7 ♖c3+.

**7 ♖e3+!!**

A surprising reply. Instead of giving up his knight, White offers a whole rook!



**7...♙xe3 8 ♖g2!**

This is the point. Black has no checks and must both prevent mate on h4 and avoid the possible loss of his queen to a discovered check after 9 ♖f4+.

**8...♙h6!**

This is the only way to avoid immediate defeat, since 8...♙f2 9 ♖f4+ ♙g4 10 ♖d3+ and 8...♙e7 9 ♖f4+ ♙g4 10 ♖d5+ are hopeless for Black.

After the text-move, Black to play would lose immediately because there is no safe square for his queen, but it is not so easy to pass the move to Black since White must prevent Black's queen from giving a check on the back rank.

**9 ♖f4!**

This is the only square as White must cut the h6-c1 diagonal.

**9...♙h5**

9...♙g5 loses to 10 ♖f3+ ♙g4 11 ♖g3+ so Black has no choice.

**10 ♖d4!**

Forced in order to cover d1, but now White is close to achieving his aim.

**10...♙h6**

Back to h6, but now Black falls into a fatal zugzwang. 10...♙g5 loses to 11 ♖f4+ ♙g4 12 ♖e6+.

**11 ♖c4!**

White wins by zugzwang; e.g., 11...♙f6 12 ♖f4+ ♙g4 13 ♖d5+.

### 214) D. Petrov

1st Pr., *Vecherny Novosibirsk*, 1978

Material is roughly balanced, but if Black's queen can escape then only Black can be better

since White's king is very exposed. Moreover, the g6-rook is trapped so White's only chance is to exploit Black's vulnerable king.

**1 e7!**

After 1 ♖d3? ♕d6+ Black wins easily; for example, 2 ♖h3 (2 ♖f3 ♖f8+) 2... ♖xd4 and there is no check on h1. The text-move is designed not so much to free the g6-rook as to prevent Black's check on d6.

**1... ♕xe7 2 ♖d3**

Quieter methods are insufficient; for example, 2 ♖e6? ♖b8+ 3 ♖e5 ♕d6 4 ♖e2+ ♖g6 5 ♖xb8 ♕xb8 leads to a simple draw for Black. The text-move threatens mate in one.

**2... ♖xd4!**

2... ♖a8 3 ♖e6, threatening 4 ♖e2+, gives White a decisive attack since 3... ♖d5 loses to 4 ♖e2+ g4 5 ♖e5+.

**3 ♖h1+**

Black's queen cannot be allowed a free move, so White must play to win it.

**3... ♖h4+ 4 ♖xh4+ gxh4+**

Four checks in a row, but now it becomes clear that White is going to be four pawns down in an opposite-coloured bishop ending. With some good luck one might imagine that this could be a draw, but a win seems inconceivable.

**5 ♖f4!**

White must draw the enemy bishop to g5.

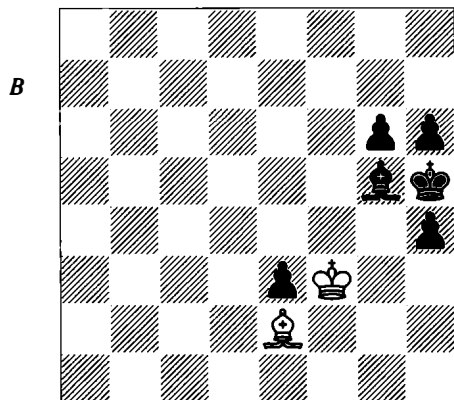
**5... ♕g5+**

**5... hxc6 6 ♕e2#.**

**6 ♖f3! hxc6**

Or else White wins with his extra rook.

**7 ♕e2! (D)**



A remarkable position. Despite his four extra pawns, Black cannot avoid mate next move!

## 215) N. Kondratiuk

1st Pr., Cheliabinsk Festival, *Intellectualnie Igri*, 1990

This study is just pure tactics from start to finish. White is well down on material, but has two dangerous pawns and serious threats against Black's king.

**1 h7**

Edging closer to promotion, although curiously enough the pawn stays on h7 for the rest of the study. Other moves fail:

1) 1 ♖f5+? ♕e3+! (not 1... ♖f8? 2 ♖c5+ ♕d6+ 3 ♖xd6+ ♖xd6 4 ♖a8+ ♖f7 5 ♖e7#) 2 ♖xe3 (2 ♖xe3+ ♖f8 is also winning for Black) 2... ♖b1+ and Black takes over the initiative with a winning position.

2) 1 ♖c5? ♕d6! 2 ♖xd6 ♖xd6+ 3 ♖xd6+ ♖f8 4 h7 ♖f4+ gives Black enough checks to draw.

**1... ♖h6**

Clearly forced.

**2 ♖f5+ ♕e3+!**

This is again the only move, as 2... ♖f8 still loses to 3 ♖c5+ ♕d6+ 4 ♖xd6+ ♖xd6 5 ♖a8+ ♖f7 6 ♖e7#.

**3 ♖xe3+ ♖f8**

White has no 'normal' checks, so he has to resort to drastic measures.

**4 ♖e8+!**

This clears the diagonal from g1 to c5, and gives the attack fresh impetus.

**4... ♖xe8**

4... ♖xe8 5 ♖c5+ ♖e7 6 ♖xe7+ ♖f7 (alternatively, 6... ♖e8 7 f7+ ♖xf7 8 ♖g5+) 7 ♖d6+ ♖e8 8 f7+ wins for White.

**5 f7+ ♖f8 6 ♖c5+ ♖e7!**

In a repeat of the situation at move two, Black's only hope is to sacrifice a piece on the checking line.

**7 ♖xe7+ ♖g7**

Everything is ready for the final flourish. 7... ♖xf7 loses to 8 ♖g5+.

**8 f8 ♖+!**

8 f8 ♖+ also wins, but this is a very minor point.

**8... ♖xf8+**

Black delivers check, but...

**9 ♖f6#**

...White answers it with double check and mate.

**216) D. Gurgénidze**1st Pr., *Problemista*, 1985

Black is well up on material, but White's advanced passed pawns are so strong that Black can only hope to win by a direct attack against the white king.

1... ♖f1+ 2 ♔h2 ♙c7+!

2... ♗xh7 3 ♗g2! ♙c7+ 4 f4 transposes to the main line.

3 f4

Other moves allow a quick mate.

3... ♗xh7

Removing one of the dangerous pawns and preventing White from promoting the other one.

4 ♗g2!

By covering g4, White meets the threat of 4... ♙g4+ and renews the threat of promoting the e-pawn. Not 4 e8 ♖+? ♙g4+ mating.

4... ♙g6+

Forced if Black wants to play for a win. If he gives up his rook for the e-pawn, then White has enough material to draw.

5 ♙h6+!

5 ♙g3? loses to 5... ♖d3+ picking up the rook, while 5 ♙h4+? is the wrong check since Black wins by 5... ♙f5 6 ♗g5+ ♙xe4 7 e8 ♖+ ♙xf4 followed by a deadly discovered check from the black king.

5... ♙f5

The only other move not to lose is 5... ♙f6, but then 6 ♗e6+! ♙f5 7 e8 ♖ ♙xf4+ 8 ♗g3 ♖f2+ 9 ♙h1 leaves Black with nothing better than perpetual check.

6 ♗g5+!

Black threatened to take on h6, so White must keep the momentum going.

6... ♙xe4

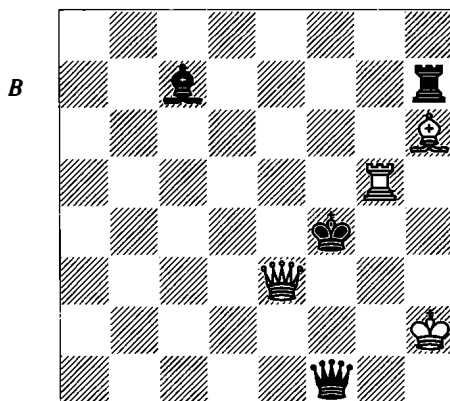
6... ♙f6? 7 ♗e6+ would even win for White.

7 e8 ♖+ ♙xf4

This is the same position as in the note to White's fifth move, except that the bishop is on h6 instead of h4. Clearly, this gives White various discovered checks, but it is hard to see how to make use of them since a discovered check from the rook can be met either by the capture of the h6-bishop with check, or by a discovered check from Black's king. The solution to this dilemma is not deep, but it requires a leap of the imagination.

8 ♖e3+!! (D)

A remarkable move, not only sacrificing a queen, but even forcing Black to give his discovered check. The point is that a discovered check does White no good, but a double check is a different matter! 8 ♗e5+? ♗xh6+, 8 ♖f8+? ♙e4+ 9 ♗g3 ♖xf8 and 8 ♗h5+? ♙f3+ all lead to a quick mate by Black.



8... ♙xe4 9 ♗g3++

As every chess-player knows, you can only meet a double check with a king move. Unfortunately for Black, White has arranged to pin all his own pieces, so after the king moves it is stalemate.

**217) R. Åström and A. Ornstein (version)**1st Pr., *Tidskrift för Schack*, 1997

White has two rooks and a bishop for the queen, but some loss of material is inevitable since Black threatens both 1... c1 ♖ and 1... ♖xd8. Indeed, it is clear that White's only hope of winning is to allow Black to promote his c-pawn and play for a direct attack against Black's king.

1 ♗f8!!

A beautiful and unexpected move. White can reach a position similar to the main line by 1 ♗xd7? c1 ♖ 2 ♗xf7+, the only difference being that here Black has lost his d-pawn. One would expect the removal of a black pawn to favour White, but here it has the opposite effect because several moves ahead it allows Black to force a stalemate. We will comment on this further in the note to White's 10th move, but for now we give the key continuation, indicating only those points which are significantly different from those arising in the main line: 2... ♙h6

3 ♖e7 ♜c2 4 ♜h7+ ♘g5 5 h4+ ♘g4 6 ♖e4+ ♜xe4 7 ♜f7 ♜be3 8 fxe3 (8 ♖xe4?! ♜xe4 9 ♜f8 is an interesting idea, but is refuted by 9...♜f3! 10 ♜xf3 ♘xf3 11 ♘g1 ♘e4 12 f4 ♘d3 13 g4 ♘xc3 14 f5 gxf5 15 gxf5 ♘b3 and only Black has winning chances) 8...♜c2+ 9 ♖g2 g5 10 e4 (10 ♜g7 ♘f5 11 ♜xg5+ ♘f6 12 ♜xa5 ♜xc3 13 ♜c5 ♜b4 14 ♜c6+ ♘e7 15 a5 ♜xa5 16 ♜xc4 ♜d2 17 ♜c5 ♜e2 reaches a position in which White cannot win because his bishop must stay guarding his king from perpetual check) and now readers should refer to the note to Black's 10th move.

1...c1♜

1...♘h6 2 ♜xf7 c1♜ transposes to the main line.

2 ♜xf7+ ♘h6 3 ♖e7

The threat is 4 ♜h7+ ♘g5 5 h4+ ♘g4 6 f3+ (6 ♖f3+ ♘xf3 7 ♜hf7+ also mates) 6...♘f5 7 ♖e4+ ♘f6 8 ♜hf7#, a threat which Black is curiously powerless to prevent. If Black has to give up a queen for a mere pawn (e.g., by playing ...♜xf2+ at some point) then White will have a technical win based on his material advantage.

3...♜c2

Black's only hope is to pin the f-pawn, but 3...♜d2 loses to 4 ♜h7+ ♘g5 5 h4+ ♘f5 6 ♖e4+ ♘g4 7 ♖f3+! ♘xf3 (7...♘f5 8 ♜hf7+ ♜f6 9 g4+ hxg4 10 ♖e4+ ♘f4 11 ♜xf6#) 8 ♜hf7+ ♘g4 9 ♖e4+ mating. By playing the queen to c2 Black again pins the f-pawn, but he also prevents ♖e4+ at the end of this line.

4 ♜h7+!

4 ♘g2? is too slow. After 4...♜cxf2+! 5 ♜xf2 ♜d6 White has to surrender his bishop, after which the draw is inevitable.

4...♘g5 5 h4+ ♘g4

A critical position. Black's queens prevent the mating lines with f3+ and ♖f3+, but another promising move is hard to find. 5...♘f5 loses to 6 ♜hf7+ ♜f6 7 ♖e4+ ♜xe4 8 ♜xf6+ ♘xf6 9 ♖xe4.

6 ♖e4+!

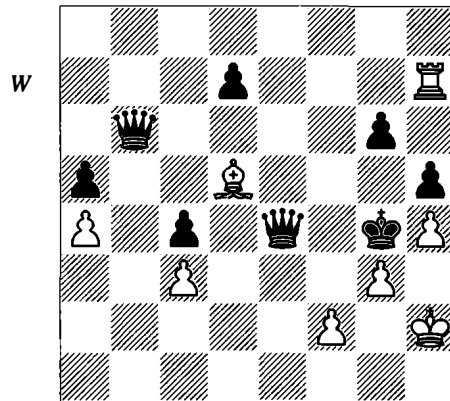
An odd-looking move because after 6...♜xe4 7 ♖xe4 ♜xf2+ White loses immediately, so it is not obvious what he has in mind.

6...♜xe4 (D)

6...♘f5 leads to a technically lost ending after 7 ♜f7+ ♜f6 8 ♜f4+ ♘e5 9 ♜4xf6 ♘xd5 10 ♜xd7+, and now:

1) 10...♘e5 11 ♜dd6! ♜xc3 12 ♜fe6+ ♘f5 13 ♜xg6 ♘e5 14 ♜ge6+ ♘f5 15 ♘g2 ♜b2 16 ♜h6 ♘e5 17 ♜b6 with an easy win.

2) 10...♘c5 11 ♜b7 ♜xa4 12 ♖e7 ♘d5 13 f4 ♜c2+ 14 ♘h3 ♜xc3 15 ♖e5+ picking up Black's queen, with a win on material.



7 ♜f7!!

This remarkable move is the key to White's play. The threats are 8 f3+, with immediate mate, and 8 ♖xe4, when mate can only be delayed by a few moves. Black is amazingly helpless despite his two queens.

7...♜be3

The best try. 7...♜c6 8 f3+ ♜xf3 9 ♜xf3 ♜d6 10 ♜f4+ ♜xf4 11 gxf4 ♘xh4 and 7...♜xf2+ 8 ♜xf2 ♜e3 9 ♜f4+ ♜xf4 10 gxf4 ♘xh4 lead to the same position, in which White wins by 11 ♖f3! g5 12 f5 (the move-numbers are different in one case).

8 fxe3 ♜c2+

Black at least gets a check in this variation. 8...♜xe3 9 ♜f4+ transposes to the previous note.

9 ♖g2 g5

Preventing the mate on f4, but it doesn't help Black for long.

10 e4!

This stops the black king escaping via f5, and so threatens 11 ♜g7. There is no defence.

10...gxf4

10...♜d2 11 ♜g7 is not an improvement for Black. However, if White had played 1 ♜xd7? rather than 1 ♜f8!, this position would arise without the d7-pawn. In this case Black can draw, since 11 ♜g7 can be met by 11...♜xg2+ forcing stalemate. If White waits with his rook

on the f-file then Black just keeps his queen on the second rank and White cannot make progress.

### 11 ♖g7#

The study as originally published was missing the pawns on a4 and a5, but in this position Black can draw by 1 ♖f8 ♖a5!. I added the two pawns to correct this defect.

## 218) G. Kasparian

1st Pr., *Magyar Sakkélet*, 1959

In this highly unbalanced position, the key role is played by the numerous advanced passed pawns. Black has three passed pawns within two squares of promotion, and this partially offsets White's material advantage.

### 1 ♖xg2!

The best move from a wide range of plausible options; White eliminates one dangerous pawn and prepares to switch the queen into the attack at d5 or a8. Other moves are weaker:

1) 1 ♖f5? b2 and Black threatens to promote with check.

2) 1 ♖g5? ♖g7 2 ♖xg2 ♖f6+ 3 ♖xg4 a1 ♖ and it is about time for White to force perpetual check.

3) 1 a7? ♖e5+ 2 ♖f5 ♖xg3 (not 2...a1 ♖? 3 ♖xg2, transposing to the main line) 3 a8 ♖+ ♖h7 4 ♖f6 (4 ♖a7 g1 ♖ 5 ♖xd7+ ♖g8 is a draw) 4...♖e5+! 5 ♖f7 ♖h6 6 ♖e4 (6 ♖g8 ♖h5 is also a draw) 6...♖g5 7 ♖xe5+ ♖h4 and Black's armada of passed pawns will oblige White to take a draw within a couple of moves.

3) 1 ♖xb3+? ♖g7 2 ♖d1 ♖f6 3 ♖xg4+ ♖f8 and White should force a draw by 4 ♖xg2 a1 ♖ 5 ♖a8+.

4) 1 ♖xg4+? ♖g7 is likewise only a draw after 2 ♖xg2 a1 ♖ 3 ♖d5+.

### 1...♖e5+

The only move, or else White wins using his a-pawn.

### 2 ♖f5

2 ♖g5? a1 ♖ 3 a7 ♖f4+ exploits the position of the white king and forces a draw after 4 ♖xf4 ♖xa7.

### 2...a1 ♖

White's aim is to attack Black's king directly by playing ♖g6, but at the moment 3 ♖g6?? is met by 3...♖b1+. Therefore White must first of all deflect the black queen.

### 3 a7! ♖xa7

Black must accept or White will just promote his pawn.

### 4 ♖g6

Not 4 ♖d5+? ♖h7, when White has no more than a draw.

The text-move threatens mate by 5 ♖d5+ ♖h8 6 ♖xe5+ (or 6 ♖h1+). Black must meet this threat while retaining control of a8.

### 4...♖a1

4...♖a5 loses to 5 ♖h1 ♖h2 6 ♖xh2, so the text-move is forced.

### 5 ♖d5+!

This intermediary check is vital since, amazingly, the position after 5 ♖e4? ♖h8 is reciprocal zugzwang. With White to play there are few useful moves, since he must both stop ...♖b1+ and retain the possibility of playing his queen to Black's first rank. The only reasonable try is 6 ♖f5, which leads to a draw after 6...♖g7 7 ♖h5+ ♖g8 8 ♖d5+.

The preliminary check on d5 loses a vital tempo, so that the reciprocal zugzwang position arises with Black to move.

### 5...♖h8 6 ♖e4!

Black is strangely lacking in moves. A queen move releases control of h1 or a8, a bishop move allows the queen to e8, while the other possibilities are 6...b2 7 ♖xe5+, 6...g3 7 ♖h4+ and 6...♖g8 7 ♖c4+.

## 219) V. Yakimchik

1st Pr., *Shakhmatnaya Moskva*, 1966

Black's material advantage of ♖+2♖+♗ vs ♖ is amply sufficient to win, so White must undertake rapid action before Black consolidates. Two points are in White's favour: the passive positions of Black's bishops, and the fact that Black's king is somewhat exposed to checks.

### 1 ♖a1

The only chance. After other moves Black slowly but surely coordinates his forces and eventually releases the imprisoned bishops; for example, 1 ♖d4? ♖h8 2 ♖d8+ ♖g7 3 ♖d3 ♖d5 4 ♖g3+ ♖h7 5 ♖h3 ♖g7 6 ♖g2 (6 ♖c3 ♖f5 followed by ...♖h6 is the same) 6...♖h6 followed by ...♖f5, and the f4-pawn falls.

The text-move threatens both 2 ♖a3+ ♖e8 3 ♖a4 and 2 ♖a8+, so Black must clear a flight-square for his king.

**1...♖h8**

1...♖h7 2 ♜a8+ ♔e7 3 ♜a7+ is a draw as Black cannot afford to allow White to take on f7, while 1...♖h6 2 ♜xf6 costs Black his bishop, with a clear draw. Of course, it is uncomfortable for Black to have to withdraw his bishop to h8, but his intention is ...♖g7-h7 and then ...♖g7, slowly but surely activating his numerically superior forces.

**2 ♜a3+!**

White must not waste time; if Black were allowed to move his rook to a protected square such as d5 then there would be nothing White could do to interfere with Black's plan.

**2...♖g7 3 ♜g3+ ♔h7 4 ♜d3+**

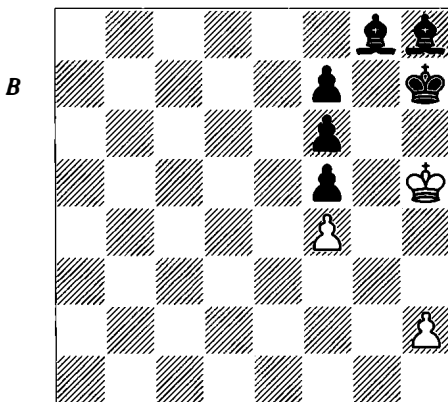
White makes use of the undefended rook to force Black to play ...♜f5. If the rook were anywhere else, Black could play ...f5 followed by ...♖g7, eventually liberating his pieces.

**4...♜f5**

However, it is far from clear what White has achieved with this series of checks. Black's rook is now secure, and he seems ready to proceed with ...♖g7-h6, winning the f4-pawn.

**5 ♜xf5+!!**

An extraordinary move. White gives up his queen and just continues playing, despite being two bishops and a pawn down.

**5...exf5 6 ♖h5 (D)**

Suddenly we see one thread of White's plan – he intends to stalemate himself by playing h4. Black's king must quickly retrace its earlier steps in order to free the h6-square for the white king.

**6...♖g7 7 h4 ♖f8**

White has only one legal move.

**8 ♖h6**

This is a position of reciprocal zugzwang. Amazingly, Black to play cannot win.

**8...♖g7+**

8...♖h7 9 ♖xh7 ♖g7 10 h5 ♖h6 11 ♖xh6 ♖g8 is stalemate, while after 8...♔e7 9 h5 Black cannot avoid stalemate, since any bishop move would cost Black **both** his bishops (and then White would even win).

**9 ♖h5**

Now, however, Black must return in order to lift the stalemate (once again 9...♖h6? 10 ♖xh6 would actually win for White).

**9...♖h8**

Black cannot avoid the repetition.

**220) R. Réti**

1st Pr., *Shakhmaty*, 1928

White has a decisive material advantage, but the complication is that Black can play ...♖e5 winning the queen, since to move away would allow mate on h8. The first point to notice is that ...♖e5 is not as dangerous as it might appear, since White replies ♖g7, and after Black takes the queen White recaptures with the pawn, putting Black in zugzwang. White's problems are twofold: firstly he must make sure that he does not end up in zugzwang himself after Black takes the queen, and secondly he must find a way to make progress if Black refuses to take the queen.

**1 ♖h6!**

White aims to transfer his king to g7, but he must make sure he keeps all his pawn tempo moves in reserve. 1 ♖g7? is wrong because after 1...♖e5 White has to play a pawn move: 2 b4 (2 c4? is even worse because 2...♖xf6+ 3 gxf6 b4 leaves White with no tempo move and so Black wins) 2...♖h2 3 ♜f1 (3 ♖h7 ♖e5 repeats, while 3 g6? ♖e5 and 3 c4? bxc4 4 b5 ♖e5 5 b6 ♖xf6+ 6 gxf6 c3 7 b7 ♖d7 8 ♖xf8 ♖c7 win for Black) 3...♖e5+ 4 ♜f6 and White cannot make progress. 1 g6? also fails to win after 1...♖e5 2 ♜xe5+ dxe5 3 g7 f5 4 exf5 ♖f7 5 gxf8 ♜+ ♖xf8 6 c4 bxc4 7 bxc4 e4 8 c5 e3 9 c6 ♖e7 10 f6+ ♖xf6 11 c7 e2 12 c8 ♜ e1 ♜ 13 ♜f8+ ♖g5.

The text-move threatens to extract White's king with 2 ♖h5, so Black's reply is forced.

**1...♖e5 2 ♖g7**

Now it is Black to move, and he has nothing better than to play his bishop away.

**2...♟h2**

White faces the problem of how to make progress. The basic idea is to undermine the e5-square by playing c4-c5, but White must take care to ensure that he does not fall into zugzwang while executing his plan.

**3 c4**

3 b4? loses to 3...♟e5.

**3...bxc4**

3...b4 allows White to execute his basic plan by 4 c5 ♟e5 (4...dxc5 5 ♟c6+ ♟e7 6 ♟b7+ ♟e8 7 ♟c8+) 5 cxd6 ♟xf6+ 6 gxf6 and wins.

**4 e5!!**

This is the difficult move to see. It is worth sacrificing a pawn to make sure that it is Black and not White who falls into zugzwang. After 4 bxc4? ♟e5 we have a full-point reciprocal zugzwang (whoever moves loses).

**4...♟xe5**

4...dxe5 5 ♟c6+ and 4...cxb3 5 exd6 are both hopeless for Black.

**5 bxc4**

It seems odd to sacrifice a pawn to force Black to pin White's queen, but the result is that Black is now in zugzwang.

**5...♟xf6+**

After 5...♟h2 6 c5 White wins as before.

**6 gxf6**

Black cannot save the game even though he is a whole rook up.

**6...♞h8 7 ♟xh8 ♟d7 8 ♟g8**

Avoiding the last trap: 8 ♟g7?? loses to 8...♟e6.

**8...♟e6 9 ♟g7**

White wins.

## 221) V. Kozirev and S. Rumiantsev

1st Pr., Odessa Festival, 1989

White is threatening perpetual check on d8 and d7, so Black can't promote immediately, but he can improve his chances by means of a preliminary check.

**1...g6+ 2 ♟f6!**

White must keep up the pressure, even though this move allows Black to promote with check. After 2 ♟g5? a1♟ there is no perpetual check; for example, 3 ♟d8+ ♟g7 4 ♟e7+ ♟f7 and Black wins.

**2...a1♟+ 3 e5**

Black has no more checks, while White is threatening mate in one, hence Black has little choice.

**3...♟d5!**

3...♟e8 is the only other move to prevent instant mate, but then 4 ♟b5+ ♟d8 5 ♟b8+ ♟d7 6 ♟b7+ forces an immediate draw.

**4 ♟xd5**

Now that the white queen has been deflected, Black has a check on a6.

**4...♟a6+ 5 e6**

White is still a rook down, so retreating is not an option.

**5...♟a1+**

A critical moment, since White appears to be in some difficulties.

**6 ♟e5!**

After 6 ♟g5? Black can continue 6...h6+ 7 ♟xg6 (7 ♟g4 ♟f6 8 ♟a8+ ♟e7 9 ♟a3+ ♟xe6 10 ♟b3+ ♟e7 11 ♟b7+ ♟f8 is also winning for Black) 7...♞g8+ 8 ♟f5 (after 8 ♟h5 ♟f6 Black will eventually win on material; if White starts checking, Black hides his king on h8) 8...♟b1+ 9 ♟e5 ♟b2+ 10 ♟f5 (10 ♟d6 loses to 10...♟b8+ 11 ♟c5 ♟c7+ 12 ♟b5 ♟e7) 10...♟c2+ 11 ♟e5 ♟c7+ 12 ♟f5 ♟e7 and Black activates his rook, with an easy win to follow. The text-move looks very odd, as Black can simply swap queens, retaining the advantage of a rook against two pawns.

**6...♟xe5+**

Forced, as White would even win after other moves.

**7 fxex5**

7 ♟xe5 ♟e7 is a simple technical win for Black, so White has to accept the further handicap of doubled and isolated pawns. However, in this precise position White can achieve a draw because he can keep Black's rook bottled up in the top-right corner.

**7...♟e8 (D)**

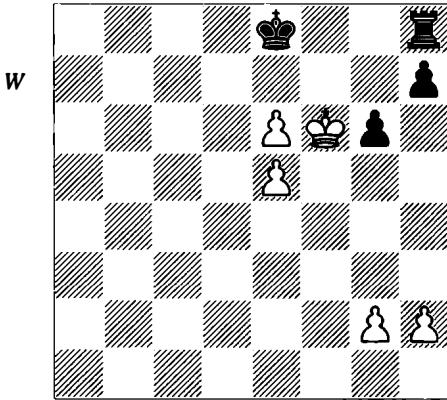
White was threatening to trap the rook by 8 e7+ ♟e8 9 ♟g7, and 7...♞g8 8 e7+ ♟e8 is just a transposition.

**8 e7 ♞g8**

Forced, or else ♟g7, but now Black is threatening to escape by ...g5 followed by ...♞g6+.

**9 h4!**

The only move. White must be ready to meet ...g5 with h5.

**9...g5**

9...h5 10 e6 is an easy draw, while 9...h6? would even lose after 10 g4 ♖d7 11 ♕f7 ♜h8 12 e6+ ♖d6 13 e8♞ ♜xe8 14 ♕xe8 ♕xe6 15 ♕f8 ♕f6 16 ♕g8.

**10 h5 g4**

Black fights for space. Now he intends ...g3 followed by ...♜g4.

**11 g3**

Countering Black's plan.

**11...h6**

It seems that all White's efforts are in vain, since Black can now extract his rook via g5, but a final point saves the day for White.

**12 e6! ♜g5**

Stalemate.

**222) A. Kuznetsov and K. Sumbatian**

1st Pr., *Shakhmaty/Sahs* (Riga), 1984

The position is not very natural, but the play is entertaining and the finish almost comical. White is material up but his king is caught in a box. The two advanced passed a-pawns are also key players in the drama about to unfold.

**1 ♖c3**

1 a7? is the only alternative, but then Black wins by 1...a1♞ 2 a8♞+ (or 2 ♖c3 ♖xc3 3 dxc3 ♕h7 4 a8♞ ♕c2 5 ♖f3 ♕e1 6 ♖e2 ♕e4 7 g4 ♕f3 and White loses his queen) 2...♕h7, and now:

1) 3 ♖e8 ♖g7 4 ♖xc4 ♕e5 5 ♖b4 (or 5 ♖f4 ♕g4) 5...♕e4 with decisive threats.

2) 3 ♖f1 ♖f6! 4 ♖e8 ♖xe6 (threatening ...f4) 5 g4 (5 ♖xe7+ ♖xe7 6 ♖xf5+ ♕g7 7 ♖g6+ ♕h8 is winning for Black) 5...♕c2! 6 ♖f3 ♕e5 7 ♖fa8 ♕g6 and Black wins.

**1...♕h7!**

With the a-pawn unable to promote, Black must aim for an attack against White's king. The immediate threats are 2...♕c2 and 2...♕f2 followed by 3...♕e4.

**2 a7**

With his existing queen needed to defend a1, White must secure a second queen fast.

**2...♕f4+!**

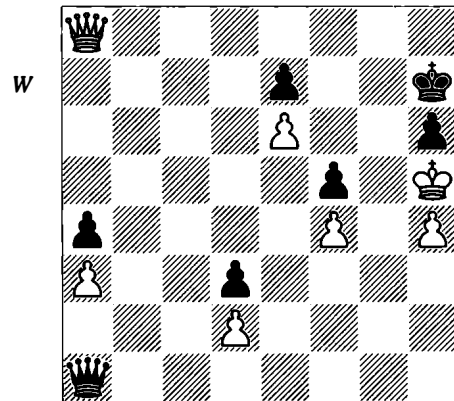
Everything else loses; e.g., 2...♕c2 3 ♖h8+! ♕xh8 4 ♕xh6 and mate next move.

**3 gxf4 ♕d3!**

Threatening mate in two.

**4 ♖xd3!**

The advantage of this move is that White's d-pawn is blockaded, so stalemate becomes an option. 4 ♖h8+? ♕xh8 5 a8♞+ ♕h7 6 ♖g2 is wrong due to 6...♕e2+! 7 ♖xe2 a1♞, when White cannot cover the many routes to his king; for example, 8 ♖f3 ♖g7 followed by mate. Moreover, the mobile d-pawn denies him any stalemate idea.

**4...cxd3 5 a8♞ a1♞ (D)**

Threatening 6...♖d1+, so there isn't much choice.

**6 ♖h1!**

White must go right to the corner, since 6 ♖f3? ♖g1 7 ♖g3 ♖d1+ forces mate.

**6...♖h8!**

The most awkward, threatening mate at e8. 6...♖g7 7 ♖g2 is a clear draw (for example, 7...♖f6 8 ♖g8+), while 6...♖f6 7 ♖g2 also defends.

**7 ♖a8!**

Not 7 ♖c6? ♖g8! 8 ♖g2 ♖e8+ mating, so once again the queen must play to the corner.

7...♖a1! 8 ♜h1!

The queens bounce backwards and forwards like table-tennis balls. Draw.

## 223) R. Réti

Wiener Tageblatt, 1925

It looks simple – a knight check winning the queen by a discovered attack. Of course, there is more to it than that – much more!

1 ♜c3+

However, the knight check is the right way to start. The material balance indicates a draw, so White must keep up the momentum of the attack.

1...♕a1!

This is Black's defence; if White takes the queen it is stalemate. Therefore White has to find another way to play for the win of Black's queen.

2 ♜a4+

2 ♜a6+ is just as good.

2...♕b2 3 ♜a2+

First it was a discovered attack, and now White hopes to win the queen with a skewer.

3...♕c1!

Once again White is foiled by stalemate, so he tries again.

4 ♜b1+ ♕d2 5 ♜b2+

Will it be third time lucky for White?

5...♕e1!

No! Yet another stalemate attempt frustrates White.

6 ♜c1+

It might seem that Black is escaping now that his king and queen have joined up, but this move allows White to introduce his knight into the attack with check.

6...♕f2 7 ♜d1+ ♕f3

A check on the long diagonal would finish Black here, but unfortunately White's king is in the way. If 7...♕e2, then 8 ♜b2+ forces 8...♕d3, transposing into the main line.

8 ♜c3+!

This check keeps Black on the run.

8...♕e2

During the next phase, White zigzags his queen back to a2. 8...♕f4 loses to 9 ♜f6+ ♕e4 10 ♜d4+ (10 ♜c6+ ♕d3 wastes time) 10...♕f3 11 ♜d5+ and the queen falls.

9 ♜b2+

After this check Black is forced to d3 because 9...♕f3 fails to 10 ♜b7+. 9 ♜c2+ ♕f3 wastes time.

9...♕d3

Another stalemate, but now Black is nearing the end of his resources.

10 ♜b3+

Black's king cannot move to e4 and so must return to the second rank.

10...♕e2 11 ♜a2+

Forcing the king to d3 again.

11...♕d3

Now White can reveal the point of his manoeuvres.

12 ♜b2+!

The queen had to retreat to a2 to clear the way for the knight. Now White has formed a queen and knight battery which can fire in such a way as to prevent another stalemate defence.

12...♕e3

12...♕c3 13 ♜a4+ and 12...♕e2 13 ♜c4+ are also decisive.

13 ♜c4+ ♕f3 14 ♜e5+

Now White can finally take the queen.

## 224) J. Vančura

28 Rijen, 1926

This solution to this study is quite surprising until you see the logic behind it. The first point is that if the c7-pawn were not there, then White would win by 1 ♜e4+ ♜g2 2 ♜h7+ ♕g1 3 ♜b1+ ♜f1 4 ♜b6+ ♕h1 5 ♜h6+ followed by mate or a knight fork. At the moment, however, the c7-pawn gets in the way and prevents this win. This also means that 1...♜g2 is a threat; White would be forced to start checking, but at the moment this doesn't lead to anything.

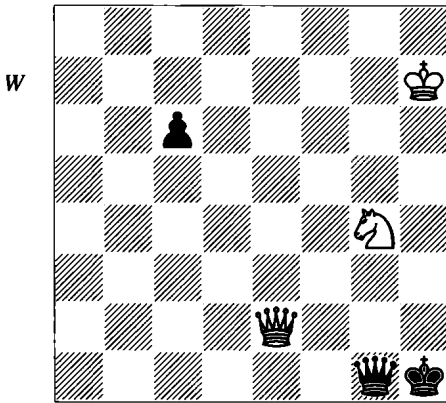
1 ♕h7!

This is primarily directed against the threat of 1...♜g2, but it also carries a new threat of 2 ♜f3+ ♜g2 3 ♜d1+ ♜g1 4 ♜d5+ ♜g2 5 ♜h5+ ♕g1 6 ♜c5+ ♕h1 (6...♕f1 7 ♜e3+ is possible because 1 ♕h7 unpinned the knight) 7 ♜c1+ ♜g1 8 ♜c6+ ♜g2 9 ♜h6+ ♕g1 10 ♜c1+ ♜f1 11 ♜c5+ ♕h1 12 ♜h5+. The question arises as to why the king should move to h7 and not some other square which unpins the knight. The answer is that f7 and f8 are no good because after 1...♜g2 any dangerous checking sequence will lead to Black interposing his queen

on the f-file with check, while 1 ♖h8? allows Black to escape with 1...♞d4+.

#### 1...c6 (D)

Black must meet the threat, but his options are limited. 1...c5 does not stop the threat, while after 1...♞g2 2 ♞d1+ White evensaves a move. 1...♞b1+ loses because White can now approach Black's king with his own king; for example, 2 ♖h6 ♞b6+ (2...♞c1+ 3 ♖h5 ♞c5+ transposes, while 2...♞g1 3 ♖h5 ♞g2 4 ♞e3 c6 5 ♖h4 leads to a quick win) 3 ♖h5 ♞c5+ (3...♞g1 4 ♖h4 ♞d4 5 ♞f3 is similar) 4 ♖h4 ♞g1 5 ♞f3 ♞e7+ 6 ♖h3 ♞h7+ 7 ♖g3 and Black is helpless. In many of these lines Black is doomed by his c-pawn, since it prevents any stalemate ideas.



Therefore the text-move is forced, covering the d5-square which was a vital stopping-off point for the white queen in the threatened checking sequence. Having forced Black to push his c-pawn, the b6-square is now available for the white queen and White can best exploit this by...

#### 2 ♖g8!

...playing his king back to g8! The logic here is that with b6 available White has a winning checking sequence starting e4-h7-b1-b6-c6-h6. At the moment his king is blocking the h7-square, so it must move, but at the same time it must avoid closing any of the other lines White needs in the above sequence. A quick check of the above route shows that g7, h8 and g8 are the only squares which satisfy this condition, but the first two allow a check on d4. So g8 it is.

#### 2...c5

2...♞g2 loses to the checking sequence mentioned above, viz. 3 ♞e1+ ♞g1 4 ♞e4+ ♞g2 5 ♞h7+ ♞gl 6 ♞bl+ ♞fl 7 ♞b6+ ♖hl 8 ♞xc6+ ♞g2 9 ♞h6+ ♞gl 10 ♞cl+ ♞fl 11 ♞c5+ ♖hl 12 ♞h5+.

With the pawn on c5, Black is blocking the diagonal from b6 to g1, so the e4-h7-b1-b6 sequence doesn't work any more, while the f3-d1-d5 sequence doesn't work when the knight is pinned. However, White can tip the balance in his favour by an appropriate king move.

#### 3 ♖h7!

Yes, it's back to h7 again, unpinning the knight to threaten the f3-d1-d5 sequence.

#### 3...c4

The pawn push counters White's threat because it blocks the vital line c5-c1. You may well be able to guess White's next move!

#### 4 ♖g8

Yes, it's g8 again. Now it doesn't matter whether the pawn is on c3 or c4 – the e4-h7-b1 sequence works in either case. Thus we have come to the end of the road.

4...♞g2 5 ♞e1+ ♞gl 6 ♞e4+ ♞g2 7 ♞h7+ ♞gl 8 ♞b1+ ♞fl 9 ♞b6+ ♖hl 10 ♞h6+

White mates or wins the queen.

### 225) K.A.L. Kubbel

1st Pr., USSR Trade Unions Tny, 1940

Black has enough material to draw, so the focus of the struggle seems clear enough: White must deliver mate before Black has a chance to activate his queen. While there is an element of truth in this, the battle takes an unexpected twist at the end. Moreover, actually mating Black's king is harder than it might appear; for example, 1 ♖g4? ♞a5! allows Black to escape.

#### 1 ♖h2!

This is the right start, threatening 2 ♖d4#. The reply is forced.

#### 1...♖e3 2 ♖d4+

White maintains the impetus of his attack.

#### 2...♖f4

2...♖e4 3 ♖f6+ ♖f5 4 ♖d7 attacks Black's queen and threatens 5 ♞g4#.

#### 3 ♞f1+!

Not 3 ♞d2+? ♖e4 4 ♞e2+ ♖d4 and Black escapes.

#### 3...♖e4

3...♖g5 4 ♞f6+ mates next move.

4 ♖f6+

The knight hops to a more dangerous square, from which it can easily fork Black's king and queen.

4...♙d4

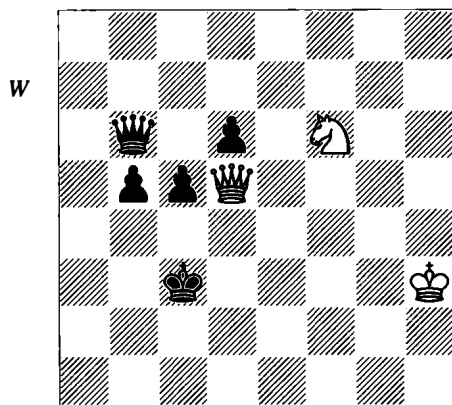
The only way to avoid an immediate fork.

5 ♗d1+!

5 ♗f4+? is wrong in view of 5...♙d3.

5...♙c4 6 ♗xd5+ ♙c3 (D)

6...♙b4 7 ♗a2! followed by 8 ♖d5+ will either mate or win the queen.



After the text-move, it looks natural to play 7 ♖e4+, but after 7...♙c2 8 ♗d2+ ♙b3 9 ♗c3+ ♙a4 (9...♙a2? loses to 10 ♗c2+ ♙a3 11 ♖c3!) 10 ♗a1+ ♙b4 White cannot make any progress. The winning move is surprising, because up to now White has been playing to corner Black's king, but at the very end the focus of the attack switches from king to queen.

7 ♗a8!

Threatening a knight fork, so the king must move.

7...♙b2 8 ♖d5

Black's queen is trapped.

## 226) N. Rezvov

2nd Hon. Men., Victory-45 Anniversary Tny, 1990

In this rather comical position, Black is threatening mate in two, so White doesn't have much choice.

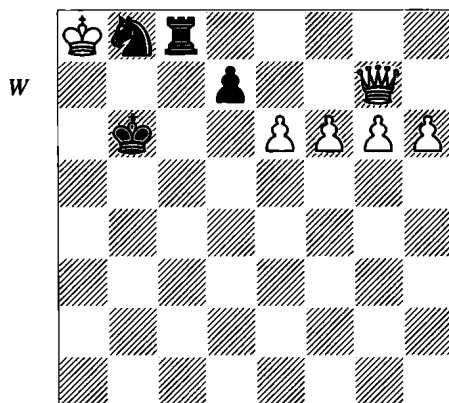
1 ♖d6!

1 ♗xd7? ♖xd7 mates next move, while 1 ♖e7? ♖c7+ 2 ♙a8 ♖e8 3 f7 ♖c6+ 4 fxe8 ♗a7# is no better.

1...♖c7+ 2 ♙a8 ♙b6!

2...♖d8? doesn't work because 3 e7 ♖c6+ 4 exd8 ♗ pins the rook, so Black closes in. It is remarkable that White can survive with Black's pieces swarming around his king.

3 ♖xc8+ ♖xc8 (D)



The key position. White can only prevent mate by sacrificing his queen on the back rank, but which of the three available squares is correct?

4 ♗g8!

The only move to save the game. Here are the two alternatives:

1) 4 ♗f8? ♖xf8 5 e7 (5 g7 ♖c8 transposes to the analysis of 4 ♗h8?) 5...♖c8 6 e8 ♗ ♖xe8 7 f7 ♖c8 8 f8 ♗ ♖xf8 9 g7 ♖c8 10 g8 ♗ ♖xg8 11 h7 ♖d8! 12 h8 ♗ ♖c6+ and Black wins.

2) 4 ♗h8? ♖xh8 5 g7 ♖c8 6 g8 ♗ ♖xg8 7 f7 (7 h7 ♖h8) 7...♖c8 8 f8 ♗ ♖xf8 9 e7 ♖e8 and mate next move.

From these lines we can see the logic behind White's choice. The only hope is for White to give away his pawns one by one until Black is forced to give stalemate. For this to work, White has to start at one end of his row of pawns and work his way steadily towards the other end (the analysis of 4 ♗h8? shows what happens if White ends up with two disconnected pawn islands). According to this logic, there should be two drawing methods: one with 4 ♗f8, followed by pushing the pawns from left to right, and one with 4 ♗g8, followed by pushing the pawns from right to left. However, the first fails because Black is able to play ...♖d8 and ...♖c6+ at the end. The second succeeds because the last pawn to be pushed is the e-pawn, and this

**automatically denies Black's rook access to the d8-square.**

**4...♔xg8 5 h7!**

5 f7? ♖c8 6 f8 ♗ ♖xf8 7 g7 ♖c8 8 g8 ♗ ♖xg8  
9 h7 ♗h8 mates.

5...♖c8 6 h8♔ ♖xh8 7 g7 ♖c8 8 g8♔ ♖xg8 9 f7 ♖c8 10 f8♔ ♖xf8 11 e7

If Black moves his rook along the eighth rank, then White pushes his pawn and forces stalemate, so Black makes a final try.

11...♖f3

**In order to cover a check on e3.**

**12 e8♔ ♖c6**

**Threatening mate on a3.**

### 13 ♔e3+!

**It turns out that the check hasn't really been prevented after all.**

**13...♖xe3**

### Stalemate.

### 227) E. Pogosiants

1st Pr., *Chervoni Girnik*, 1974

In order to solve this study you have to know something about the ‘Troitsky line’, which is a helpful tool for deciding whether a position with  $2Q$  vs  $\Delta$  is winning. The basic principle is that if the pawn is on or behind the Troitsky line, and is firmly blockaded by a knight, then the position is winning. Matters become more complicated when the pawn is beyond the line, since in this case the result may depend on the king positions. For this study it is enough to know that a rook’s pawn on the fifth rank lies on the Troitsky line.

In the diagram position White is down on material, but has various ways to win Black's rook. Which one is correct?

**1 ♖b3+!**

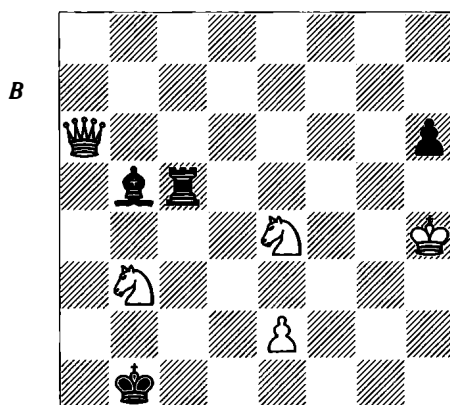
1 ♖xa6 2 ♜b3+ ♜b2 3 ♜bxc5 ♙xe2 is a simple draw, as is 1 ♖h8+? ♜a2 2 ♜xc5 (2 ♜g8+? ♙c4 is very bad for White) 2...♗xa5 3 ♜g8+ ♜b2.

1...♔b1

After 1... ♖b2 2 ♜h8+ ♔c2 (or 2... ♗xb3 3 ♜xc5+) 3 ♜bxc5 White wins on material, while 1... ♗a2 2 ♜xa6+ ♔xa6 3 ♜bxc5 ♔xe2 4 ♜c3+ leads to a typical 2♙ vs ♚ win. White puts a knight on h3, after which the black pawn can advance only as far as h4. That leaves it on the Troitsky line, which guarantees a win for White.

We do not cover the necessary winning technique here, as it is rather complex. For details, see either Troitsky's original work (*Collection of Chess Studies*, Whitehead & Miller, 1937, more recently reissued by Olms, 1985), or a more modern coverage, such as Chéron (*Lehr- und Handbuch der Endspiele*, Volume 2, Siegfried Engelhardt Verlag, 1964) or Averbakh and Chekhover (*Knight Endings*, B.T. Batsford, 1977).

**2 ♠x6 (D)**



This variation looks little different from that after 1...♘a2 above, but Black is not in check so he has an important finesse.

**2...♖h5+!**

**Black deflects the king to h5 so that the e2-pawn can be captured with check.**

3 ♔xh5 ♚xe2+!

This stalemate trick is the point of Black's play. After 3...♙xa6 4 e3 ♖b2 5 ♘bc5 White can win without reaching a 2♘ vs ♖ ending.

4 ♔h4!

The only move to win as White must cover the h3-square for reasons which will become apparent at move six.

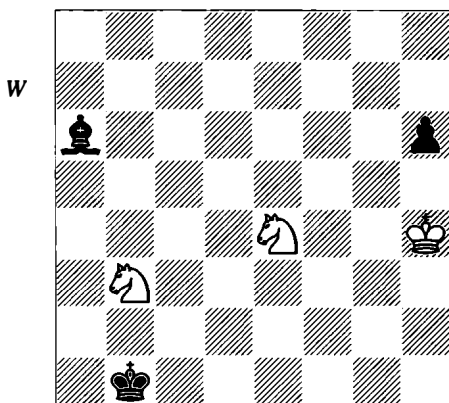
#### 4...♘a6 (D)

White's prospects hardly appear bright, since Black still has his bishop. However, this position is exceptional in that the two knights can weave a net around the bishop.

**5 ♖bc5!**

If White can win the bishop, then he will be able to play a knight to h3 and release his king, while making sure that the pawn does not advance beyond the Troitsky line.

5...♖c8



Forced, as all the squares on the a6-f1 diagonal are ruled out by the forks on c3 and d2.

**6 ♜d6**

Now we see why the king had to move to h4 at move four. If g4 and h3 were not covered, the bishop would be able to escape.

**6...♙g4**

Black cannot get his pawn beyond the Troitsky line.

**7 ♜xg4 h5+ 8 ♙h4!**

With the king on h4 the pawn will be too far back and White wins. 8 ♙h3? h4! is a draw because White has to free his king to make progress, and this involves putting a knight on h2 and then moving the king. This inevitably allows Black to play ...h3, when his pawn is beyond the Troitsky line, which is sufficient for a draw in this position.

## 228) V. Halberstadt

1st Pr., Problem, 1967

This looks like an example of a discovered attack such as one might find in a beginners' book, but there is much more to this study than a simple check winning the queen.

**1 ♙e5+**

Nevertheless, this check is the correct first move, as it forces the black king into the corner.

**1...♙a8 2 ♚b5!**

White avoids the first stalemate and threatens mate in one. With both queen and bishop in active positions White has a dangerous attack, but the route to victory is not at all simple.

**2...♚a7+!**

This is the only move, because Black loses quickly in the two variations 2...♙a7 3 ♙d4+

♙a8 4 ♚a6+ ♙b8 5 ♙e5+ and 2...♚b7 3 ♚e8+ ♙a7 4 ♙d4+.

**3 ♙e2!**

White must take care; e.g., 3 ♙d3? ♚d7+.

**3...♚b6!**

This second stalemate attempt is the toughest defence, since after 3...♚a2+ 4 ♙e1 ♚a7 5 ♚c6+ ♚b7 6 ♚e8+ ♙a7 7 ♙d4+ White wins relatively easily.

After the text-move, White can only win by a subtle manoeuvre designed to disrupt Black's stalemate defence. The key idea is to transfer the queen from b5 to b4 with gain of tempo.

**4 ♚d5+ ♚b7**

4...♙a7 loses to 5 ♙d4, so this is forced.

**5 ♚a5+ ♚a7 6 ♚b4! ♚a6+**

The alternatives are:

1) 6...♚b7 7 ♚a4+ ♚a7 8 ♚c6+ ♚b7 9 ♚e8+ is a win we have seen before.

2) 6...♚b6 7 ♚e4+! (this is the reason why the queen is better placed on b4 than on b5) 7...♚b7 8 ♚a4+ ♚a7 9 ♚c6+ ♚b7 10 ♚e8+, etc.

3) 6...♚a2+ 7 ♙e1 ♚a7 8 ♚e4+ and White wins as in line '2'.

**7 ♙d2!**

Once again there is only one move to win. 7 ♙e3? ♚b6+ and 7 ♙e1? ♚c8! 8 ♚a5+ ♙b7 9 ♚b5+ ♙a8 are draws, in the latter case because White is unable to strengthen his attack by ♙d6 without allowing a check.

**7...♚c8**

This is still the best defence. Other moves fail in familiar ways:

1) 7...♚b6 8 ♚e4+ ♚b7 9 ♚a4+ ♚a7 10 ♚c6+, etc.

2) 7...♚a2+ 8 ♙e1 transposes into line '3' of the note to Black's sixth move.

3) 7...♚h6+ loses to 8 ♙f4! ♚b6 9 ♚e4+ ♚b7 10 ♚e8+.

**8 ♚a5+**

8 ♚a4+ is just as good. The idea is to transfer the queen back to b5.

**8...♙b7 9 ♚b5+ ♙a8 10 ♙d6!**

This is a position of reciprocal zugzwang. Black to play must guard both a6 and b8, so there are only two possible moves.

**10...♚b7**

10...♙a7 loses to 11 ♙c5+ ♙a8 12 ♚a5+ ♙b7 13 ♚b6+.

**11 ♚e8+ ♙a7 12 ♙c5+ ♙a6 13 ♚a4#**

**229) C. Mann***Utrechts Dagblad*, 1913

♖+♔ vs ♚ is generally drawn, but White can sometimes win if he has a favourable initial position. Here the offside black queen is a promising sign, but the black pawns complicate the issue.

**1 ♖g8+!**

This is the correct first move as White needs to get his bishop into play with gain of tempo. After 1 ♖g3+? ♚c4 2 ♚c7+ ♚b5 3 ♚c5+ ♚a6 White can give a lot of checks, but cannot activate his bishop in favourable circumstances; for example, 4 ♖d6+ (4 ♚c4+ ♚b6 5 ♔c5+ ♚c7) 4... ♚b5 5 ♚b4+ ♚a6 6 ♚a4+ ♚b7 7 ♚xe4+ ♚b8 8 ♔d6+ ♚a7 9 ♚a4+ ♚b7 10 ♚b5+ ♚c8 and White is not making progress.

**1... ♚a4**

The king cannot move to a dark square due to the discovered attack, while 1... ♚c2 2 ♚c4+ mates, so this move is forced.

**2 ♚c4+ ♚a5 3 ♔d6!**

An important move, transferring the bishop to the a5-d8 diagonal with gain of tempo. 3 ♔b4+? ♚b6 4 ♚c5+ ♚b7 5 ♖d5+ ♚a7 6 ♔c5+ ♚b8 is similar to the note to White's first move – lots of checks, but no genuine progress.

**3... ♚b6 4 ♔c7+ ♚a7**

4... ♚b7 5 ♖d5+ transposes to the main line.

**5 ♚c5+**

White must avoid 5 ♖d4+ ♚b7 6 ♚xe4+? ♚a7; as we shall see, White needs to leave both black pawns on the board for the moment.

**5... ♚b7 6 ♖d5+ ♚a7 7 ♔b6+ ♚b8**

Even in this more advantageous position it is hard to see how White is going to make progress. Nothing can be achieved by checks alone and, surprisingly, White must drive the black queen out of the corner in order to win.

**8 ♖d7!**

In this position the black pawns help White by cutting out enemy queen checks. Had White captured either pawn during the earlier checking sequence, this manoeuvre would be impossible.

**8... ♚a6**

8... ♚b7 9 ♖d6+ transposes.

**9 ♚c6!**

Threatening 10 ♔c7+ ♚a7 11 ♔b8+. Since 9... ♚c8 loses to 10 ♔a7+, the reply is forced.

**9... ♚b7**

White has now forced Black's pieces into the required formation for the final winning manoeuvre. However, this manoeuvre involves the use of zugzwang, so White must first deprive Black of spare tempi by capturing both pawns with check.

**10 ♖d6+ ♚a8 11 ♚xa3+**

One down, one to go.

11... ♚b8 12 ♖d6+ ♚a8 13 ♖d8+ ♚b8 14 ♖d5+ ♚b7 15 ♚a5+ ♚b8 16 ♖e5+ ♚a8 17 ♖e8+ ♚b8 18 ♚xe4+ ♚b7

Both pawns have gone and now White can close in for the kill.

**19 ♖e8+ ♚b8 20 ♚a4+!**

Unless you have seen the target zugzwang position, White's moves are quite hard to understand. Here, for example, White drives the black king out of the corner.

**20... ♚b7 21 ♚b5!**

This is a position of reciprocal zugzwang (although the fact that it is a draw with White to play is unimportant for this study).

**21... ♖g8**

The other lines are 21... ♚c8 22 ♔c5+! ♚c7 23 ♚b6+ ♚d7 24 ♖d6+ ♚e8 25 ♖e7# and 21... ♚a8 22 ♔a5+ ♚c8 23 ♖e8+ ♚b7 24 ♖e4+ ♚b8 25 ♖e5+ ♚a7 26 ♚c5+ with mate in two more moves.

**22 ♔a5+**

There are other winning moves but this is the quickest.

22... ♚a7 23 ♚b6+ ♚a8 24 ♚c6+ ♚b8 25 ♔c7+ ♚c8 26 ♔e5+ ♚d8 27 ♔f6#

**230) O. Pervakov**

1st Pr., *Biulleten Tsentralnovo Shakhmatnovo Kluba SSSR*, 1986

Black's army of pawns will decide the game in his favour if White cannot somehow exploit the exposed position of the black king. Since the first rank can be covered by ...h1♖, the obvious line of attack is the long diagonal.

**1 ♔d4!**

1 ♚b3? ♚h8+ 2 ♔d4 ♚xd4+ 3 ♚xd4 h1♖ only leads to a draw.

**1... ♚b6!**

This queen sacrifice is the only chance because other moves allow a quick mate; for example, 1... ♚c6+ 2 ♚b4+ ♚b1 3 ♚b3+ ♚c1 4

♙xe3# or 1...♚d6 2 ♚c4! with overwhelming threats.

## 2 ♙xb6

White is forced to accept because Black was threatening both 2...♚xd4+ and 2...♚b2+.

## 2...h1 ♚ 3 ♙d4

3 ♚g7? is the wrong way to occupy the long diagonal since Black can win by 3...♙b1.

After the text-move Black once again faces the threat of ♙c2#.

## 3...♚d1

The best chance, covering both c2 and d4. The only alternative is 3...♚c1+, but after 4 ♙b4+ ♚b2+! 5 ♙xb2+ ♙xb2 White can gradually round up the pawns; for example, 6 ♚b3+ ♙c1 7 ♚xe3+ ♙d1 8 ♚d4+ ♙e2 (8...♙c1 9 ♚a1+) 9 ♚c4+ ♙e1 10 ♚xa2 and now:

1) 10...e3 11 ♚e6 ♙e2 (11...e2 12 ♚e3) 12 ♚g4 ♙f2 13 ♙c3 e2 14 ♚h4+ ♙f1 15 ♙d2 and White wins.

2) 10...f2 11 ♚b1+ ♙d2 (or 11...♙e2 12 ♚xe4+ ♙f1 13 ♚h1+ ♙e2 14 ♚g2 ♙e1 15 ♙c3) 12 ♙c4 e3 13 ♚f1 is decisive.

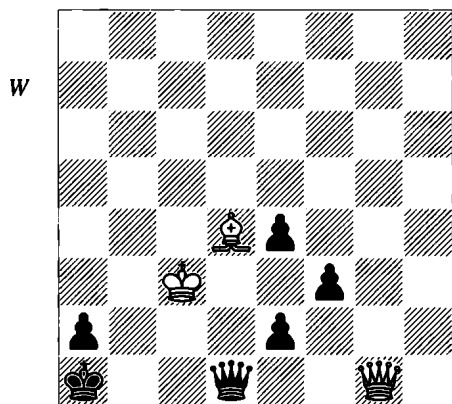
After the text-move, Black seems to have neutralized White's threats on the long diagonal, as 4 ♙c4+? ♚xd4+ 5 ♙xd4 e2 leads to a draw; e.g., 6 ♚g3 ♙b2 7 ♙c4 a1 ♚ 8 ♚g7+ ♙b1 9 ♚g1+ ♙b2 10 ♚d4+ ♙a2 11 ♚a7+ ♙b1.

## 4 ♚g1!

Black is not the only one to sacrifice his queen in this study.

## 4...e2 (D)

The only move, as 4...♚xg1 allows 5 ♙c2#.



However, Black now threatens 5...f2 followed by 6...e1 ♚+. The antidote is a remarkable manoeuvre.

## 5 ♙h8!!

The bishop must move to the end of the diagonal so that the queen can move in front of it.

## 5...f2

5...e1 ♚+ 6 ♚xe1 ♚xe1+ 7 ♙c2+ mates.

## 6 ♚g7!

There is no defence to the threat of a king check followed by ♚b2#.

## 231) M. Matouš

1st Pr., *Shakhmaty/Sahs* (Riga), 1979

White is a piece down, but Black's queen is badly out of play. If White is going to win, it will have to be by a direct attack on the black king.

## 1 ♙f2!

It is more important to close in for the kill than to take the knight. The obvious 1 ♚xf1+? ♙h2 2 ♚f4+ ♙g2 offers White no more than a draw, while he even loses after 1 ♙xf1?? ♙a6 or 1 ♚h4+?? ♙h2.

## 1...♙g2

The only way to meet the threat of 2 ♚xf1+, since 1...♙h2 2 ♙f3+ ♙xf3 (2...♙xf3 3 ♚f1+) 3 ♚c1+ leads to mate, while 1...♚a6 2 ♙f3+ costs Black his queen.

## 2 ♙f3

With several threats, including 3 ♙xg2+ and 3 ♚xf1+.

## 2...♚g7

Everything else allows a quick mate.

## 3 ♚h4+!

3 ♚xf1+? is tempting, but after 3...♙h2 4 ♚g1+ ♙h3 5 ♙xg2+ ♙h4 6 ♚h2+ ♙g5 7 ♚g3+ ♙f6 Black escapes with a draw.

## 3...♙h2

Now Black's king is completely bottled up in the corner.

## 4 ♚h8!

This queen sacrifice prevents Black's threatened checks on d4 and b2, and forces Black to move his queen along the g-file.

## 4...♚g6

Black does his best to delay the end. After 4...♚g5 5 ♚h6 he loses one move more quickly.

## 5 ♚h7!

A second dose of the same medicine. Now Black's queen has just one square left on the g-file.

## 5...♚g5 6 ♚h6!

And again! This drives the black queen to g8, whereupon the check on the first rank wins.

6... ♖g8

Black's queen is now too far up the board and eventually falls prey to a skewer.

7 ♖c1+ ♜f1 8 ♖xf1+ ♜h2 9 ♖g1+ ♜h3 10 ♜xg2+ ♜h4 11 ♖h2+ ♜g5 12 ♖g3+

With the queen on g6 or g7 this is a draw, but g8 is too far away and now Black loses his queen.

## 232) V. Kozirev

1st Place, 5th WCCT, 1993-6

Material is roughly equal, but with Black's g-pawn threatening to promote with mate, White has to take great care.

1 ♖f7+!

The key point of this study is that White has to choose between the two lines 1 ♖f7+ ♜e5 2 ♖xh5+ ♜e4 and 1 ♖xh6+ ♜f5 2 ♖xh5+ ♜e4. Obviously, the only difference is that in one line Black has a pawn on h6 and in the other he does not. Normally one would be happy to remove an enemy pawn with gain of time, but in this case it is better for White to keep the pawn on the board. The reason does not become apparent until move 13, so a considerable degree of foresight is required for this decision! For 1 ♖xh6+? ♜f5 2 ♖xh5+ ♜e4, etc., see the note to White's 13th move.

1... ♜e5!

1... ♜g5 loses to 2 ♜xe7+ ♜g4 3 ♖g6+ ♜f4 4 ♖xg2 since Black has no real attack and therefore the e-pawn will decide.

2 ♖xh5+ ♜e4

The best square, not allowing the bishop to enter the attack with gain of tempo. The alternatives are:

1) 2... ♜d6 3 ♖h2+ ♜g3 (or else White takes the g-pawn) 4 ♖xg3+ ♜c6 5 ♜xh6 and White wins as the bishop is ready to interpose on c1.

2) 2... ♜f4 3 ♜xh6+ ♜g3 4 ♖e5+ ♜h3 5 ♖f5+ ♜h2 6 ♜f4+ ♜g1 7 ♖b1 ♜h1 (the only try, since the rook has no squares on the second rank) 8 ♖h7+ ♜g1 9 ♖xe7 ♜f1 10 ♜h2 and White will win with his passed pawn.

3 ♖g4+

White forks the king and g-pawn, but Black's king is now quite aggressively placed and this enables him to resist further.

3... ♜d3! 4 ♖g6+!

Disrupting Black's mating-net while still attacking the g-pawn. 4 ♖f3+? ♜e3 5 ♖d5+ ♜d4 is a draw.

4... ♜c3! 5 ♖xg2

The main enemy is removed, but despite White's material advantage the game is not yet over since Black now starts a dangerous attack against the white king. 5 ♜g7+? is wrong due to 5... ♜d4 6 ♖g3+ (6 ♜xd4+? ♜xd4 7 ♖g4+ ♜c5 would even lose for White) 6... ♜c4 7 ♜xd4 ♜xd4 and White should hurry to give perpetual check.

5... ♜d2+ 6 ♜c1 ♜c2+ 7 ♜b1 ♜b2+ 8 ♜a1 ♜d4!

Black is aiming for a discovered check on the long diagonal.

9 ♖e4!

Other moves let Black off the hook:

1) 9 ♖xb2+? is answered by 9... ♜c4 10 ♜xe7 ♜xb2+ 11 ♜xb2 ♜d5, eliminating the white pawn.

2) 9 ♖d5? ♜f2! (9... ♜e2? loses to 10 ♖a5+ ♜d3+ 11 ♜b1 ♜b2+ 12 ♜c1 ♜c2+ 13 ♜d1) 10 ♜xh6 (there is nothing better; after 10 ♖b5 ♜xf8 Black has sufficient material to draw) 10... ♜d3+! 11 ♜b1 ♜b2+ 12 ♜c1 ♜c2+ 13 ♜d1 ♜d2+! 14 ♜e1 (14 ♜xd2 is stalemate) 14... ♜e2+ 15 ♜f1 ♜f2+ 16 ♜e1 (not 16 ♜g1? ♜f5+) 16... ♜e2+ leads to stalemate or a draw by perpetual check. Black was saved in this line because White removed the h6-pawn, thereby setting up the stalemate.

9... ♜b6!

9... ♜b5 10 ♖c6+ (10 ♜xe7 also wins for White) 10... ♜c5 11 ♖a4 repulses Black's attack.

10 ♜xe7!

After 10 ♖e2 ♜b2 White has nothing better than to repeat the position, since 11 ♖a6? ♜c2! draws. 10 ♜a2 ♜b2+ is similar; White should return to a1 since 11 ♜a3? ♜c5+ 12 ♜a4 ♜b4+ leads to a draw.

10... ♜c4+ 11 ♜a2 ♜b2+ 12 ♜a3 ♜b3+ 13 ♜a4

White wins since Black's checks have come to an end. However, if White had started with 1 ♖xh6+?, this position would have arisen without the h6-pawn, and then Black could draw by 13... ♜b4+! 14 ♜a5 ♜b5+ 15 ♜a6 ♜b6+, with perpetual check or stalemate.

**233) M. Matouš**1st Hon. Men., *Szachy*, 1975

White is down on material, but his active pieces pose a considerable danger to Black's king. Nevertheless, it isn't easy to choose the correct method of attack.

**1 ♖c8!**

1 ♖d6+? ♘g8 2 gxf7+ ♘h8 3 ♙xa5 is tempting as 3...♗e6+? 4 ♖xe6 fxe6 5 ♘g6 leads to mate. However, Black can defend by 3...♖c8! 4 ♙d2 (4 ♖e5 ♖f8! and 4 ♙d8 ♖g4 also deny White a win) 4...♙b6! 5 ♖xb6 ♖g4 and he will be able to capture the h7-pawn in safety.

The text-move threatens to win by 2 ♙e7+ or 2 gxf7, so Black's reply is forced.

**1...♘g8 2 ♙c7!!**

A stunning move offering the queen. Other moves fail; for example, 2 gxf7+? ♘h8 leads to nothing, while after 2 ♙b6? ♖xc8 3 gxf7+ ♘f8 White loses as Black is covering c5.

**2...♖xc8**

2...♙xc7 3 gxf7+ mates in a few moves.

**3 gxf7+ ♘h8**

In this position Black has to move into the corner.

**4 ♙e5**

Black must cover f8 while at the same time preventing a mate on the long diagonal. Thus his reply is forced.

**4...♖c5**

Black threatens simply 5...♖xe5+, so the bishop must retreat along the long diagonal. Which square is correct, b2 or a1?

**5 ♙b2!**

This is the winning move. If White makes the mistake of playing 5 ♙a1? then the key reciprocal zugzwang (see the position after 8 ♙a1 in the main line) will arise with White to move.

**5...♙c7**

Again forced. Now Black's pieces are fully committed to covering the various discovered checks by the white king, so he can only move his a-pawn. White too is restricted in his options, and can only oscillate with his bishop between a1 and b2.

**6 ♙a1 a4 7 ♙b2 a3 8 ♙a1**

This is a full-point reciprocal zugzwang. If White were to play, he would have no waiting moves and would lose.

**8...a2 9 ♙b2 a1 ♖10 ♙xa1**

Black has exhausted his waiting moves and must now permit a discovered check on the long diagonal.

**10...♙d5+ 11 ♘e6+ ♙c3**

Black blocks the diagonal, but he cannot save the game.

**12 ♙xc3+ ♖xc3 13 f8 ♖#**

**234) P. Joitsa**1st Pr., *Revista Romana de Sah*, 1984

Material is equal, but White has the advantage thanks to his advanced pawn and threats against the enemy king. However, given the reduced material White will have to fight hard for the full point.

**1 ♖f3+**

The correct check. 1 ♖a1+? ♘b7 2 ♖a6+ ♘xc7 3 ♖b6+ ♙d7 4 ♙xe6+ ♘e7 leads to a drawn ♖+♙ vs ♖ position, while 1 ♖g2+? ♘a7 is wrong since f2 is covered, so White's queen cannot zigzag closer.

**1...♘a7 2 ♖e3+ ♘a8**

Forced, as 2...♘b7 loses to 3 ♖b6+ ♘a8 4 ♖b8#.

**3 ♙xe6**

White activates his bishop. There are some tempting alternatives, but against these Black can defend:

1) 3 ♖c5? ♖e4 4 ♖c6+ ♖xc6+ 5 ♘xc6 ♘a7 and White's advantage is insufficient to win (indeed, this position is drawn even without Black's pawn); e.g., 6 ♙d6 ♘b6 7 ♙h7 e5 8 ♙e4 ♙g4 9 ♙c6 ♙c8 10 ♙d7 ♙b7 11 ♙f5 ♙a6 12 ♙d7 ♙b7 13 ♙d8 ♙a6 14 ♙c8 ♙f1 15 ♙b7 ♙h3 and White is unable to make progress.

2) 3 ♖e5? ♙d7+ 4 ♘c5 ♖e7+ 5 ♖d6 ♖g5+ and White cannot evade the checks.

3) 3 ♙h7? ♙d7+ and White has no reasonable square for his king.

The text-move carries so many threats (such as 4 ♙d5+ or 4 ♖a3+) that Black's only hope is to play for stalemate.

**3...♙a6+!**

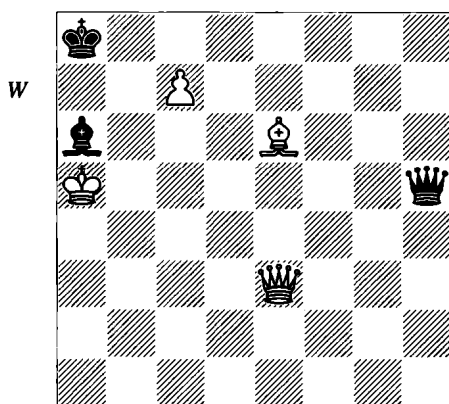
3...♙xe6 4 ♖xe6 mates quickly; for example, 4...♖h5+ 5 ♘b6 or 4...♖g5+ 5 ♘a6.

**4 ♘a5!**

Not 4 ♘xa6? ♖c4+ 5 ♘b6 ♖xe6+ drawing.

**4...♖h5+ (D)**

The best chance. 4...♖b7 5 ♖a3, 4...♗h1 5 ♗e5 ♖b7 6 ♖d5 and 4...♗h8 5 ♖d5+ ♖b7 6 ♖a3 all give White a decisive attack.



After the text-move, Black seems to be escaping since 5 ♖xa6? leads to a draw after 5...♗e2+! 6 ♖a5 ♗a6+! 7 ♖b4 ♗b6+ and the series of stalemates saves the game for Black. However, White has an astonishing move which tips the balance back in his favour.

**5 ♗g5!!**

This queen sacrifice, reminiscent of Mitrofanov's No. 127, is the key.

**5...♗xg5+ 6 ♖xa6**

Now Black has no good checks and has trouble controlling both d5 and c8.

**6...♗g8**

The last attempt to reach a stalemate, but it doesn't work.

**7 ♖d5+ ♗xd5 8 c8♗#**

### 235) A. Beliavsky and L. Katsnelson

2nd Pr., *Magyar Sakkelet*, 1980

Black is a piece up, but White's threats against the enemy king are so strong that he can even hope to win.

**1 ♗d4+**

Nothing else offers any real chance; for example, 1 ♖d2+? ♖g2 2 ♖c6+ ♖h3 3 ♗f3+ ♖g3 and Black's king escapes.

**1...♖h1**

1...♖g2 allows a quick mate by 2 ♗f2+ ♖h3 3 ♖xf5#.

**2 ♖c6+ ♖g2+ 3 ♖f1**

Not 3 ♖f2?? ♖g1+.

**3...♗g8**

Black must defend the knight with his queen, but he must also retain contact with the check on c4 (since 3...♗g7, for example, loses at once to 4 ♗f2).

After the text-move, White only needs to add his queen to the attack against g2 and the game will be over. However, this turns out to be far from easy and White has to make a difficult choice between a number of tempting moves. The key to the study is a position of reciprocal zugzwang; White must arrive at this position with Black to move.

**4 ♖f3!**

Or:

1) 4 b3? ♗g5 5 ♗e3 ♗g3 6 ♖f3 ♗f4! is the reciprocal zugzwang. White to play has nothing better than to exchange queens, leading to a draw, since he cannot afford to allow a check on c1 or c4.

2) 4 ♗d1? ♗g3 5 ♖f3 ♖g1 6 ♗e2 ♖h2 7 ♖xg2 ♖f2 8 ♗xf2 ♗d3+ 9 ♖e1 ♗b1+ forces a draw.

The text-move is the only correct choice. Black is forced to play his queen to f4 in two moves rather than three, and the result is that it is Black to move in the critical position rather than White.

**4...♗g5**

4...♗g3 5 ♗e3 ♗f4 transposes to the main line, while 4...f4 5 ♗e4 ♖g3 6 b3 (White must rule out the check on c4 before winning the knight; 6 ♗e2? ♖f2 7 ♗xf2 ♗c4+ only draws) 6...♗g5 (6...♖h2 loses to 7 ♗e2 ♖e1 8 ♖xg2 ♗g3 9 ♖e4+ ♖h3 10 ♗xe1) 7 ♗e2 ♖f2 8 ♗xf2 ♗b5+ 9 ♖e2 ♖e3+ 10 ♗xe3 wins for White.

**5 ♗e3! ♗f4!**

5...♗g8 6 ♗e2 and 5...f4 6 ♗e2 are winning for White.

**6 b3!**

Just at the right moment to cut out the check on c4. Now Black is in zugzwang.

**6...♗g3**

6...♖g3 is met by 7 ♗g1#.

**7 ♗e2 ♖g1 8 ♖xg2+**

It is mate in two more moves.

### 236) D. Gurgenidze (version)

1st Pr., *Azerbaidzhan Open*, 1979-84

Yes, it's a weird position, but this one is intended primarily to be entertaining!

**1...♖d3+!**

Deflecting the queen so that the e-pawn can promote with check. After 1...e1♗+ 2 ♖xe1 ♚xe1 3 c8♗ White wins easily.

**2 ♖xd3**

White's sole winning chance. After 2 ♖g2? ♚xc3 3 e8♗ c1♗ 4 ♖a4+ ♖b7 White has nothing better than perpetual check.

**2...e1♗+ 3 ♖g2!**

The only square:

1) 3 ♖h2?? ♖f2+ 4 ♖h3 c1♗ leads to a quick mate.

2) 3 ♖h3?? ♖e6+ 4 ♖h2 c1♗ is probably winning for Black.

3) 3 ♖f3? ♖h1+! 4 ♖g3 ♖g1+ is perpetual check since White cannot allow the c-pawn to promote with check.

4) 3 ♖g4? ♖g1+ and now White should play 4 ♖f3 with perpetual check since the attempt to run up the board with 4 ♖f5? loses to 4...c1♗ 5 e8♗ ♖cg5+ 6 ♖e6 ♖e5+ 7 ♖f7 ♖h5+ 8 ♖f8 ♖h8+ 9 ♖e7 ♖e1+ 10 ♖d6 ♖b4+ 11 ♖d5 ♖xe8 12 c8♗ ♖e5+ 13 ♖c6 ♖a4+ followed by mate.

**3...c1♗**

Black has no checks with his queen and so has nothing better than to promote the other pawn. With two queens on the board, Black threatens a quick mate in a variety of ways, so White must operate with checks.

**4 ♖d4+ ♖b7**

The best chance. 4...♖a8 5 ♖a4+ ♖b7 6 ♖b5+ ♖c8 transposes to the main line at move nine, while 4...♖a6 loses at once to 5 c8♗+ ♖xc8 6 ♖b6#.

**5 ♖d5+**

White is restricted in his choice of checks since the black queens cover so many squares. The only alternative check is 5 ♖b6+?, but then 5...♖xb6 6 c8♗+ ♖b5 7 ♖xc1 ♖xc1 8 e8♗+ ♖c6+ is a draw.

**5...♖a7**

5...♖a6 6 ♖a2+ transposes to the main line after 6...♖b7, while 6...♖b5 loses at once to 7 ♖b3+ since the c-pawn promotes with check. 5...♖c8 6 ♖a8+ transposes to the main line at move 12.

**6 ♖a2+ ♖b7 7 ♖b3+**

Once again, an easy move to find as it is the only reasonable check that does not repeat the position.

**7...♖c8**

Black cannot afford to return to the a-file because of the potential mate on b6; for example, 7...♖a7 8 ♖b8+ ♖a6 9 c8♗+ ♖xc8 10 ♖b6#.

**8 ♖b8+**

Again the only check to make progress, since after 8 ♖h3+ ♖b7 the white queen must return to b3.

**8...♖d7**

It might seem that White has made significant progress, but it is still not clear where the sequence of checks is leading. In order to win, White must meet ...♖c8 by ♖a8+ and the next few checks are designed to bring about this circumstance.

**9 ♖b5+ ♖c8**

After 9...♖d6 10 ♖d3+ a comical situation arises: Black must allow one of the pawns to promote with check.

**10 ♖a6+!**

After 10 ♖f5+ ♖b7 White has not made progress.

**10...♖d7 11 ♖a4+**

Now 11...♖d6 would fail to 12 ♖d4+, so the king must return to c8.

**11...♖c8 12 ♖a8+**

This is the position White has been aiming for: his queen needs direct access to the d5-square.

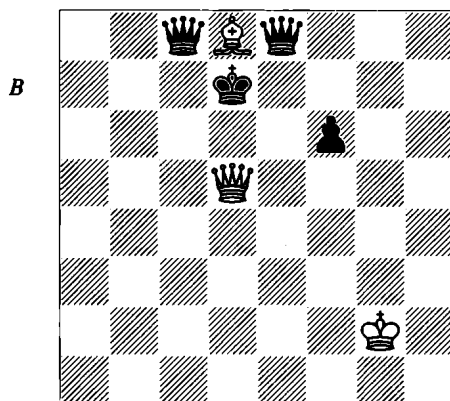
**12...♖d7**

Now the immediate 13 ♖d5+ ♖c8 gets White nowhere, but he has a remarkable winning manoeuvre.

**13 c8♗+! ♖xc8 14 ♖d5+**

Black's king cannot return to c8...

14...♖e8 15 ♖g8+ ♖d7 16 e8♗+! ♖xe8 17 ♖d5# (D)



...and now it cannot move to e8 either! A remarkable mating pattern.

### 237) J. Rusinek

=1st Pr., *Szachy*, 1971

Certainly not the most natural position in the book, but the feast of sacrifices that ensues is well worth the oddly located black king and knight. Black is a rook up, but more important is the fact that his b-pawn is about to promote with check. Indeed, there is an immediate threat of mate by 1...b1♖+ 2 ♜xh2 ♜c7+, etc.

#### 1 ♟e5!

The b8-h2 diagonal is critical, and by occupying it White not only nullifies Black's mating threat, but also sets up his own threats of 2 g3+ ♜xh3 3 ♜f5+ or simply 2 ♜xh2 followed by g3 or ♟g3. 1 d8♞? ♞xd8 2 ♞xd8 ♟f3+! 3 gxf3 b1♖+ 4 ♜g2 ♞xc2+ mates, while after 1 g3+? ♜xh3 2 ♜f5+ ♟g4 3 ♜f1+ ♜xg3 4 ♜g2+ ♜f4 White faces a quick defeat.

#### 1...e2+!

White's own mating threats are so strong that the only way Black can counter them is to arrange to play ...e1♞+, followed by ...♞xe5+. In order to achieve this he has to sacrifice almost all his pieces. Other moves all lose quickly:

1) 1...♟f3+ 2 ♞xf3 g4 (2...b1♖+ 3 ♜h2 g4 4 d8♞+ ♞xd8 5 ♞xe3 transposes) 3 d8♞+ ♞xd8 4 ♞xe3 b1♖+ 5 ♜h2 leads to a quick mate.

2) 1...b1♖+ 2 ♜xh2 ♞gl+ 3 ♜xgl e2+ 4 ♜h2 ♞gl+ 5 ♜xgl e1♞+ 6 ♜f1 wins easily.

#### 2 ♜xh2 ♞gl+!

The first queen sacrifice, necessary to avoid immediate mate.

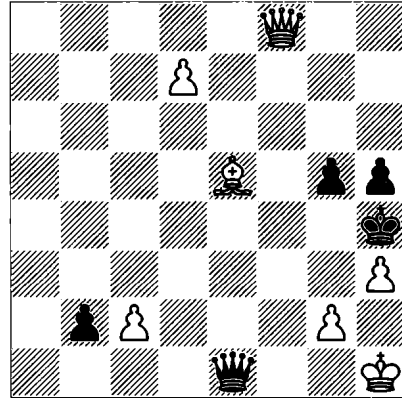
#### 3 ♜xgl ♞a1+!

The best move. Black first deflects the king to h1, where it no longer defends f1. The immediate 3...e1♞+ fails to 4 ♜f1 ♞xf1+ (or 4...♞e3+ 5 ♜f2+ ♞xf2+ 6 ♜xf2 ♞f6+ and now the mundane 7 ♟xf6 b1♖ 8 ♟xg5+ ♜xg5 9 d8♞+ leads 'only' to a winning queen ending for White, but 7 ♜gl! b1♖+ 8 ♜h2 results in a quick mate) 5 ♜h2! ♞f2 6 d8♞ (threatening 7 ♜d4+) 6...♞a4 7 ♜b6! with a forced mate.

#### 4 ♜h2 ♞h1+! 5 ♜xh1 e1♞+ (D)

5...b1♖+ 6 ♜h2 ♞h1+ 7 ♜xh1 e1♞+ does nothing to help Black; White wins by 8 ♜f1 as in the main line.

W



#### 6 ♜f1!

White interposes his queen even though it is no longer guarded! This second queen sacrifice is forced, because after 6 ♜h2? ♞xe5+ it is Black who mates.

#### 6...♞xf1+

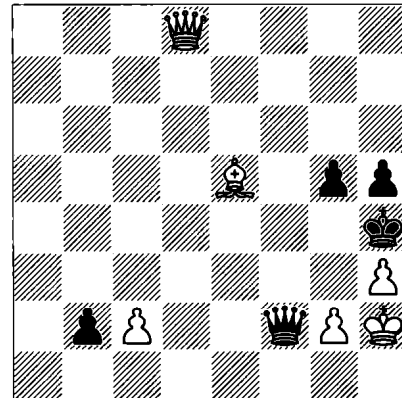
6...b1♖ fails to 7 g3+, with the self-sacrificing white queen providing a crucial defence of h3.

#### 7 ♜h2

White threatens two different mates in one, and Black's reply is forced if he is not to be mated quickly.

#### 7...♞f2 8 d8♞ (D)

B



White cannot achieve more using just his bishop, but the new queen threatens instant destruction by 9 ♜d4+. Black seems to be at the end of his tether, but the presence of the queen on d8 does have one effect which helps Black: the g5-pawn is now pinned so stalemate is a possibility.

#### 8...♞g1+!

With the third queen sacrifice, Black seeks to give away his remaining force to achieve stalemate.

**9 ♖xg1 b1♚+**

Now Black would achieve his aim after 10 ♖h2? ♚g1+ or 10 ♖f2? ♚e1+ 11 ♖f3 ♚e3+, but with a fourth queen sacrifice White once again turns the tables in his favour.

**10 ♚d1! ♚xd1+ 11 ♖h2**

There is no real defence to the threatened mates on g3.

**11...g4 12 ♖f6#**

### 238) A. Avni

3rd Pr., *Schweizerische Schachzeitung*, 1979

Of course, the pawn-structure on the kingside is rather odd, but otherwise the position looks quite game-like. White is well ahead on material (five pawns for a piece) and in addition he is threatening mate in one, so Black must try to exploit the rather congested mass of enemy pieces if he is to have any hope of saving the game.

**1...♖e5+!**

In fact, the only chance is to play for stalemate.

**2 dxe5 ♖e2+!**

Black is being very generous with his pieces, but the point is that after 3 ♖xe2? ♚xe3+ 4 ♖f3 (4 fxe3 is also stalemate) 4...♚xf3+, stalemate is unavoidable. However, White is not forced to take the knight.

**3 ♖h3!**

It seems that Black's resources are exhausted, but he has a remarkable defensive try.

**3...♖g1+! 4 ♚xg1**

White must capture if he is to avoid perpetual check.

**4...♚f1!**

Black again exploits a stalemate possibility. Now Black is threatening to take the queen, but he is not threatening 5...♚xg2+ because 6 ♖xg2 relieves the stalemate. However, it isn't easy to find a good move for White as 5 ♚h2? ♚xg2+! is a draw (after 6 ♖xg2 the queen covers h4), while 5 ♖h2? ♚xf2! 6 ♚d1 ♚h4+ 7 ♖g1 ♚e1+! leads to perpetual check or stalemate.

**5 ♖g3!!**

White must sacrifice his queen if he is going to win.

**5...♚xg1**

The only move; for example, 5...♚a1 6 ♖d1 or 5...♚e1 6 ♖e2.

**6 ♖d1!!**

A beautiful move, losing a tempo so as to arrive at a reciprocal zugzwang with Black to play. 6 ♖e2? is wrong because after 6...♚e1! it is White who is in zugzwang; he has nothing better than to move the bishop, but then 7...♚xe3+ forces stalemate.

**6...♚e1**

Forced in order to prevent 7 f4#.

**7 ♖e2**

Now the line from e1 to e3 is blocked and Black is deprived of his stalemate defence.

**7...♚xe2 8 f4#**

### 239) D. Petrov

14th Place, 1st USSR Ch., 1946-7

White has two extra pieces, but his bishop is attacked and he is threatened by mate starting with ...♚a8+.

**1 ♖a5!**

White's first move is already quite surprising, but actually there is no choice since no other bishop move counters Black's threat of ...♚a8+.

**1...bxa5**

Black must accept, since otherwise White's pieces converge on the exposed black king; for example, both 1...♚a8 2 ♚d3+ ♖a4 3 ♖e1 and 1...♚b7 2 ♚d3+ ♖a4 3 ♖e1 lead to a quick mate.

At first, one can hardly see what the bishop sacrifice has achieved: Black's queen has the open b-file, and White's knight is still out of play.

**2 ♚d3+ ♖a4**

2...♖b4 loses to 3 ♚bl+.

**3 ♖a2!**

Threatening to win Black's queen by 4 ♚a3+ and 5 ♚b3+. Black's choice is limited as he must also prevent mates at b3 and c4.

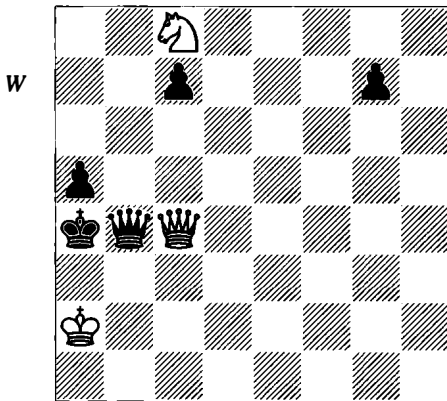
**3...♚b7!**

The only move since 3...♚b4 4 ♖a7 mates quickly.

**4 ♚c4+**

Not 4 ♚c2+? ♖b5 5 ♚b3+ ♖a6, when Black has escaped.

**4...♚b4 (D)**

**5 ♖b6+!!**

An extraordinary move. White sacrifices his other minor piece so that, instead of being two minor pieces up, he is now three pawns down. After the immediate 5 ♖d3 Black just repeats the position with 5...♗b7.

**5...cxb6 6 ♖d3**

This is the point – Black cannot move his king or queen, the latter because the only move which defends b3, 6...♗b5, allows mate at a3 instead. Thus Black is reduced to pawn moves.

**6...g6**

Black plays to spin the game out as long as possible. If Black had no tempo moves with his g-pawn, then he would be in a fatal zugzwang, so White must play to win the g-pawn without releasing the pressure. This can be achieved by waiting until the pawn is on g4, whereupon White can win it with checks.

**7 ♖d7+**

White finds a manoeuvre to lose a tempo, which he repeats again and again until Black's g-pawn is on the correct square.

**7...♗b5**

7...b5 loses to 8 ♖d1+.

**8 ♖d4+ ♗b4 9 ♖d3**

Now the g-pawn must move again.

**9...g5 10 ♖d7+ ♗b5 11 ♖d4+ ♗b4 12 ♖d3 g4**

Finally White reaches the required position and now mops up the g-pawn.

**13 ♖d7+ ♗b5 14 ♖xg4+ ♗b4**

It is only necessary to bring the queen back to d3 to finish the game.

**15 ♖d7+ ♗b5 16 ♖d4+ ♗b4 17 ♖d3**

Black must give up his queen to avoid immediate mate.

**240) A. Seletsky**

1st Pr., *Shakhmaty v SSSR*, 1933

White is only a pawn up, but it is a dangerous passed pawn on the seventh rank. Everything hinges on the fate on this pawn, since if Black can nullify it at the cost of a piece he should be able to draw. Note that Black threatens to win the pawn not only by 1...♙xd7 but also by 1...♙c6/7+ and 2...♙xd7.

**1 ♖g5!**

A very surprising move, allowing Black to take the pawn in two different ways. However, it does move the white queen into a dangerous attacking position and the black king suddenly looks far from safe. It also threatens to promote the pawn and so forces Black's hand. 1 ♙e1? ♙xd7 2 ♖xa7 ♖d6 is safe for Black, as is 1 ♙h5+? ♙e7+ 2 ♙e1 ♖f6! (not, however, 2...♙xd7? 3 ♖c5+ or 2...♙xd7? 3 ♖xa7+ ♙e6 4 ♖e3+ ♙d7 5 ♙e5+ ♙c7 6 ♖a7+), when Black will be able to take the pawn in safety.

**1...♙e6+**

1...♙xd7 2 ♙f4! gives White a decisive attack. The immediate threat is 3 ♙h5# and after 2...♖d6 3 ♙c4+ ♙e8 4 ♖g8+ ♙e7 5 ♙d5+ Black loses his queen.

**2 ♙g1!**

White must choose his square carefully, because later on he needs to play a quiet move and he must be sure that Black doesn't have a disruptive queen check. After 2 ♙e1? ♙xd7 3 ♙c5+ ♙c8 Black has potential queen checks on e7 and b4, so White cannot continue as in the main line of the solution. However, White has a very dangerous try in 4 ♖e5:

1) 4...♗h6? 5 ♙g4+ ♙d8 6 ♙e6+ ♙e7 7 ♙f4+ ♙f8 (7...♙d8 8 ♖b8+ ♙e7 9 ♖xa7+ transposes; 7...♙f7 8 ♙h5+ ♙f8 9 ♖b8+ is also winning for White) 8 ♖c5+ ♙g7 9 ♖xa7+ ♙f6 (9...♙h8 loses to 10 ♖b8+ ♙g7 11 ♖e5+) 10 ♖d4+ ♙f7 (10...♙g5 11 ♙h5! ♖f6 12 ♙h3+ ♙f5 13 ♙g4+ ♙g6 14 ♙f4+ ♙f7 15 ♙e6+) 11 ♙h5+ ♙g8 12 ♖e5 and White's centralized pieces give him an irresistible attack.

2) 4...♙d7! 5 ♙a6 (5 ♖d5 ♙c6) 5...♙d8 6 ♖c7+ ♙e7 7 ♖c5+ ♙f7 8 ♙c4+ ♙g7 9 ♖d4+ ♖f6 10 ♖xd7+ ♙f8 and Black can defend. White's king is now exposed to checks and 11 ♖xa7 is met by 11...♖c3+, picking up White's bishop.

Other second moves for White are less critical since they leave the white king too exposed to checks.

**2...♖xd7**

White has surrendered his pawn in order to activate his pieces and must now make the most of his initiative.

**3 ♖c5+ ♖c8**

Or 3...♖d6 (3...♖e8 4 ♖h5+) 4 ♖g3+, and now:

1) 4...♖e7 5 ♖e5+ ♖f7 6 ♖c4+ ♖g6 7 ♖d3+ ♖h6 (7...♖f7 8 ♖e6+ mates) 8 ♖h2+ costs Black his queen.

2) 4...♖d5 5 ♖c4+! ♖xc4 (5...♖d4 6 ♖e6+) 6 ♖b3+ ♖xc5 7 ♖a3+ and White wins because Black is unable to reach the drawing fortress with bishop on b7, knight on d5 and king on a7 (or b8); for example, 7...♖b6 8 ♖xf8 ♖b5 9 ♖b4 ♖b7 10 ♖f2 ♖c6 11 ♖e3 ♖c7 12 ♖d4 ♖d5 (everything is in place except for the black king, but this one omission is enough to doom Black) 13 ♖c5+ ♖d7 14 ♖e5 and White wins easily.

**4 ♖a6+ ♖b8 5 ♖g3+**

White's king needs shelter, so this is better than 5 ♖e5+?, which leaves Black a check on g8.

**5...♖a8**

White has chased the king into the corner, but how should he continue the attack?

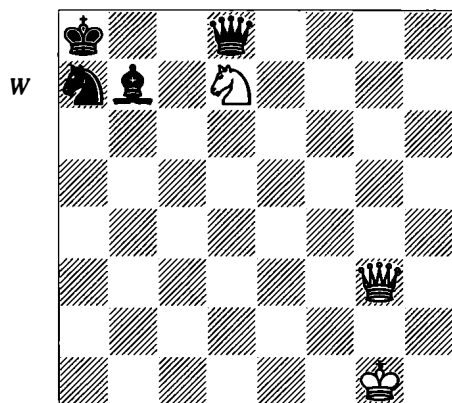
**6 ♖b7+!**

With a sacrifice! 6 ♖e6? ♖f3 7 ♖g8+ ♖c8 is not dangerous for Black.

**6...♖xb7 7 ♖d7!**

Threatening mate on b6. After 7 ♖e6? ♖f7 8 ♖c7+ ♖b8 Black defends.

**7...♖d8 (D)**



The only square to cover both b6 and b8.

**8 ♖b8+!**

A fitting finish.

**8...♖xb8 9 ♖b6#**

Smothered mate.

## 241) O. Pervakov

1st Pr., Československy Šach, 1993

White is well ahead on material, but his queen is *en prise* and he is threatened by two different mates in one.

**1 ♖b6+!**

The only move, deflecting one of Black's rooks.

**1...♖7xb6!**

Also after 1...♖2xb6 2 ♖xf5 ♖a6+ 3 ♖a5 Black has no more than a draw.

**2 ♖f3+**

Not 2 ♖g2+? ♖a7, when White is dead lost.

**2...♖b8!**

White eliminates both enemy rooks after either 2...♖a7 3 ♖a3+ or 2...♖b7 3 ♖a3+.

**3 ♖d5**

Blocking the line from f7 to a2. The immediate threats have been dealt with, but Black still has a strong attack against the precariously placed white king.

**3...♖b1+**

Forcing the king to a2, and thereby pinning White's knight.

**4 ♖a2 ♖1b5!**

The next wave of the attack. The threats are 5...♖xd5+ and 5...♖a6+.

**5 ♖g3+!**

The correct check. Both 5 ♖f4+? ♖a8 6 ♖a4+ ♖b7 and 5 ♖f4+? ♖b7 are dead lost for White.

**5...f4!**

Clearly best. 5...♖b7 6 ♖c7+ ♖a8 7 ♖c8+ is a draw, while 5...♖a8?! 6 ♖a3+ ♖b7 7 ♖e7+ is even bad for Black.

**6 ♖xf4+**

6 ♖xf4+? ♖b7 mates quickly.

**6...♖a8!**

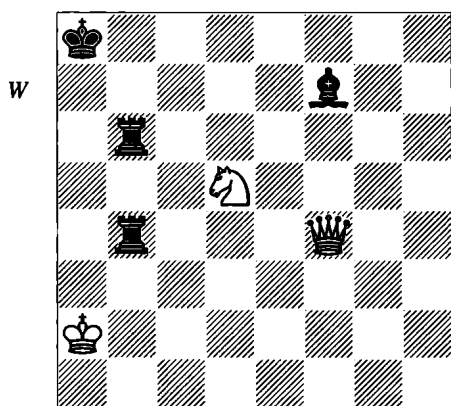
The only move, but apparently a good one because 7 ♖a4+? fails to 7...♖b7, when White has no defence. However, White produces an extraordinary idea.

**7 ♖b4!**

This looks odd because Black can just take it.

7...♖xb4 (D)

Or 7...♙xd5+ 8 ♖a3 ♖a6+ 9 ♜b2 ♖a4 10 ♜c3 and White defends.



Note that 2♖+♙ vs ♖ is in general a win, so White must not lose his knight for nothing.

8 ♖c4!!

This is the point. White stops 8...♖a6#, and 8...♖xc4 is answered by 9 ♖c7+ ♖a6 10 ♖c8+ ♖a5 11 ♖c3! ♙xd5+ 12 ♖a3 and White just plays his queen up and down the c3-e1 diagonal. Black cannot make progress.

8...♖b7!

8...♖a7 is also a dangerous try, but White can defend with accurate play: 9 ♖c7+ ♖a6 10 ♖c8+ ♖a5 11 ♖c3! ♙xd5+ 12 ♖a3 and White just plays his queen up and down the c3-e1 diagonal. Black cannot make progress.

The text-move threatens both 8...♖a7+ and 8...♙xd5.

9 ♖c8+

Checking is the only answer.

9...♖a7 10 ♖c5+

Not 10 ♖a3? hoping for 10...♙xd5? 11 ♖a8+, since Black can continue 10...♖4b5! 11 ♜b4 ♖a5+ 12 ♜b2 ♖xb4+ 13 ♜c3 ♖c4+, winning.

10...♖4b6

The best chance, threatening to take on d5. 10...♖7b6 11 ♖c7+ transposes into the note to Black's eighth move, while 10...♖b8 11 ♖f8+ ♖a7 12 ♖c5+ and 10...♖a6 11 ♖c6+ ♖a7 12 ♖c5+ just repeat the position.

11 ♖a1!

White's final resource – playing for stalemate.

11...♙xd5 12 ♖a5+ ♖a6 13 ♖xa6+ ♖xa6 Stalemate.

## 242) V. Shupletsov

1st Pr., 13th Birnov Memorial Tny, 1996

This looks more like a middlegame position than a study, but the play is spectacular enough to justify the large number of pieces. White has several checks to choose from, but only one is effective.

1 ♜ge6+

Other moves are bad; for example:

1) 1 ♜fe6+? ♜b6! and the checks run out.

2) 1 ♜e4+? ♖xe4! 2 ♖xe4 ♖xf7 offers White no winning chances.

3) 1 ♜d7+? ♜d6! also leads to nothing.

1...♜b6

The only square, since Black loses straight away after 1...♜d6 2 ♖d3+ or 1...♜c6 2 ♙e8+.

2 ♜d7+

The chase continues.

2...♜c6

The only move to avoid a quick mate; e.g., 2...♖a6 3 ♖d3+ or 2...♖a5 3 ♖h5+ ♜xa4 4 ♖g4+ ♖a3 5 ♖b4+, etc.

3 ♜e5+

White sacrifices his knight in order to gain a check on e8 with the bishop.

3...♖xe5

3...♜d5 is no better, since White wins by 4 ♜d4+ ♜xe5 5 ♖g7+ ♖f6 (5...♜d6 6 ♖f8+) 6 ♖g3+ ♜e4 7 ♖g4+ ♜e5 8 ♖xe2+ ♜d6 9 ♖e6+ ♖xe6 10 ♜xe6, when Black cannot exploit the slightly tangled white pieces.

4 ♙e8+ ♜b6

4...♜d5 5 ♖xb7+ ♜xe6 6 ♖d7+ ♜f6 7 ♖f7+ ♜g5 8 ♖xf1 ♖xe8 9 ♖b5+ and White wins.

5 ♖c7+ ♖a6

White has gone as far as he can with checks, but it turns out that taking the e5-rook runs into a skewer. What should he do?

6 ♖xe5!

White takes the rook in any case!

6...♖a1+

Black has little choice but to go for the queen, because otherwise White wins with his extra piece.

7 ♜b4 ♖xe5

If Black tries to deliver perpetual check by 7...♖b1+ then White escapes after 8 ♜c4 ♖c2+ (8...♖a2+ 9 ♜d3 ♖b1+ 10 ♜e2 ♖c2+ 11 ♜f3 ♖d1+ 12 ♜f4 is similar) 9 ♜d5 ♖d2+ 10 ♜d4 ♖a2+ 11 ♜e4 ♖b1+ 12 ♜f4 ♖c1+ 13 ♜f5

♖f1+ 14 ♕e6 ♖c4+ 15 ♖d5 and the checks soon end.

8 ♖c7+!

Not content with giving up his queen, White also sacrifices his knight!

8... ♖xc7

8... ♖b6 9 ♖a8+ ♖a6 10 ♖b5+ ♖xb5+ 11 axb5# is an alternative mate.

9 ♖b5+ ♖b6 10 a5#

A spectacular finish.

## 243) Y. Hoch

1st Pr., Dobrescu-60 Jubilee Tny, 1994

White has sufficient material to win, but his king is very poorly placed. Black threatens not only 1... ♖h4# but also 1... ♖xg7 (possibly preceded by 1... ♖g1+).

1 ♖e1+!

The only move to preserve winning chances. 1 fxg4? ♖xg7 is an immediate draw, while all other moves actually lose for White.

1... ♖xe1

Black should accept, since 1... ♖f2 2 ♖a7+ ♖xe1 3 ♖e3+ (covering the h6-square with gain of tempo) 3... ♖f1 4 fxg4 leaves White with a simple win on material.

2 ♖e5+!

It is important to give the correct check. 2 ♖c3+? ♖f2 3 ♖b2+ ♖xf3 offers White no winning chances, while 2 ♖e7+?? ♖f1 leads to a quick mate for Black.

2... ♖f1!

Other moves put up less resistance:

1) 2... ♖f2 3 fxg4 ♖h6+ 4 ♖h5 ♖xh5+ 5 gxh5 and the widely separated pawns are too much for Black's poor knight; e.g., 5... ♖e3 6 a5 ♖e4 7 a6 ♖c8 8 h6.

2) After 2... ♖e4 3 fxg4 ♖xg4 White's a-pawn will prove decisive.

3 fxg4 ♖h6+

This position is the key to the struggle. White has two legal moves, but only one wins. The basis for the ensuing play is that White must give up his queen in such a way as to keep two pawns for the knight. Black, on the other hand, will try to take the queen under circumstances that allow a knight fork picking up a pawn.

4 ♖h5!!

4 ♖h2? is tempting, because 4... ♖xh2+? 5 ♖xh2 wins for White after 5... ♖f2 6 a5 ♖f3 7

a6 ♖c8 8 g5 ♖e4 9 g6 ♖f5 10 g7 ♖e7 11 a7. However, Black has a remarkable defence in 4... ♖e4!! 5 ♖xh6 ♖f2+ 6 ♖h2 ♖xg4+, when there is no good square for White's king:

1) 7 ♖g3 ♖xh6 8 a5 ♖f5+ 9 ♖f4 ♖d6 and the knight gets back in time.

2) 7 ♖h1 ♖f2+! repeats the position (but not 7... ♖xh6? 8 a5, when the pawn cannot be stopped).

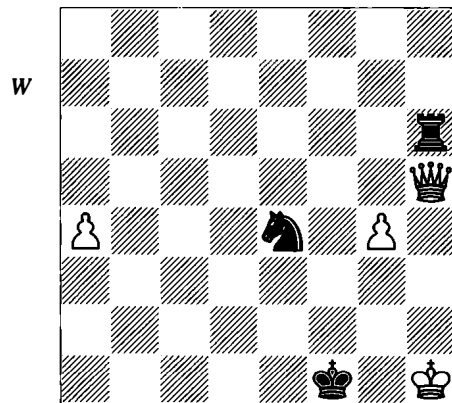
3) 7 ♖h3 forces Black to defend accurately: 7... ♖xh6 8 a5 ♖f7! 9 a6 ♖g5+ 10 ♖g4 ♖e6! 11 a7 ♖c7 and now:

3a) 12 ♖f5 ♖f2 13 ♖f6 (d6 is out of bounds, so White has to go the long way round) 13... ♖f3 14 ♖e7 ♖e4 15 ♖d7 ♖a8 16 ♖c6 ♖e5 and Black can meet ♖xa8 with ... ♖c7.

3b) 12 ♖f3 ♖g1! (12... ♖e1? loses to 13 ♖e3 ♖f1 14 ♖d3 ♖f2 15 ♖c4 ♖e3 16 ♖c5 ♖e4 17 ♖c6 ♖a8 18 ♖b7) 13 ♖e3 ♖g2 14 ♖d3 (d4 is also out of bounds so it takes White three moves to reach c5) 14... ♖f3 15 ♖c4 ♖e4 16 ♖c5 ♖e5 17 ♖c6 ♖a8 and again Black is just in time.

4... ♖e4! (D)

Black tries the same defence, but with the queen on h5 White has the free square h2 for his king.



5 ♖h2!

5 ♖xh6? ♖f2+ leads to a draw as in the note to White's fourth move.

After the text-move, it seems to be all over, as 5... ♖xh5+ 6 gxh5 leaves Black with a hopeless fight against the two pawns. However, Black has a final defensive resource.

5... ♖f6!

Again angling for a knight fork which picks up a pawn. Now 6 ♖xh6? ♖xg4+ draws as in

the note to White's fourth move, but what else is possible?

**6 ♖h3+!**

This finesse is the answer. White induces Black to play his king to f2, which takes away a vital square from Black's knight.

**6...♟f2**

6...♞xh3+ 7 ♜xh3 ♟f2 8 g5 ♞e8 9 a5 ♟f3 10 a6 ♟f4 11 a7 ♞c7 12 g6 is winning for White, as is 6...♟e2 7 g5 ♞g4+ 8 ♟g3 ♞xh3+ 9 ♟xh3 ♟f3 10 g6 ♟f4 11 g7 ♞f6 12 a5, when the pawns cannot be stopped.

**7 ♖xh6**

Now this is forced; every other move loses.

**7...♞xg4+**

We have transposed into the note to White's fourth move, but with the black king on f2 rather than f1. This apparently small change alters the result of the game.

**8 ♜h1!**

8 ♜h3? ♞xh6 9 a5 ♞f7! 10 a6 ♞g5+ 11 ♟g4 ♞e6! 12 a7 ♞c7 13 ♟f4 ♞a8 14 ♟e4 ♟g3 draws.

**8...♞xh6**

With the king on f1, Black could continue ...♞f2+, but now he has to take the queen.

**9 a5**

The pawn cannot be stopped.

## 244) D. Gurgendize

1st Pr., Problem, 1971

With so many heavy pieces around, the play is likely to be fast and furious. Black has several deadly threats, so White need only consider a check. Since c2, c4 and g2 are all covered, there isn't a lot of choice.

**1 ♖f7+ ♟b2**

1...♟xb1? 2 ♖b3# would be a nasty accident, but the move played looks very strong since after a further queen check Black can safely take the knight.

**2 ♜g2+!**

White plays for stalemate, because the obvious queen checks 2 ♖f6+? ♟xb1 and 2 ♖f2+? ♟xb1 3 ♜g2 ♖d3+ 4 ♟e1 ♖c3+ both give Black a win based on his material advantage.

**2...♖xg2 3 ♖f2+**

Forking the king and queen, but Black's resources are not yet exhausted.

**3...♟b3!**

A neat point: Black can afford to leave his queen *en prise*. 3...♖xf2 is stalemate.

**4 ♖xb6+!**

After 4 ♖xg2? ♞xb1 + 5 ♜d2 ♞b2+ Black wins thanks to his queenside pawns, while if White gives the wrong queen check then he loses: 4 ♖f7+? ♟b4 5 ♖f4+ ♟a5 6 ♖e5+ ♟a6 7 ♖xal a2 8 ♜c1 ♖f1+ 9 ♟b2 ♖xb1 + 10 ♖xb1 axb1 ♖+ 11 ♟xb1 ♟b5 or 4 ♖e3+? ♟a2 5 ♖e6+ ♟xb1 and, compared to the main line, the extra b-pawn proves decisive; e.g., 6 ♖b3+ ♖b2 7 ♖c4 b5 and wins.

**4...♟a2**

If Black's king heads for open space by 4...♟c4 5 ♖a6+ ♟c5 then 6 ♖a5+ ♜d6 7 ♖d8+ leads to a draw.

After the text-move, however, White faces an awkward problem. Black's king is on a2 rather than b2, so there is no stalemate check on f2, but once again White's knight is under threat.

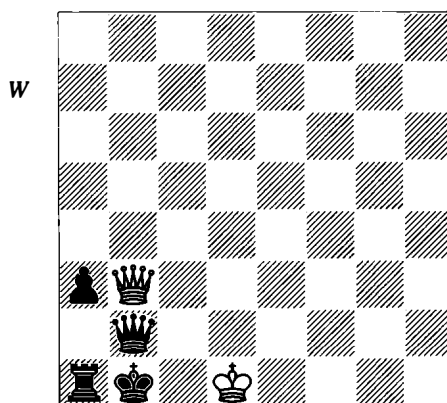
**5 ♖e6+!**

Rather surprisingly, White even encourages Black to take the knight.

**5...♟xb1**

5...♟b2 6 ♖b6+ repeats.

**6 ♖b3+ ♖b2 (D)**



It looks like the end, since the check on d3 is met by discovered check and mate. However, there is a subtle defence.

**7 ♖c4!!**

A remarkably calm move taking into account that White is a rook and pawn down. However, the possibility of mate at c2 severely restricts Black's options.

**7...♞a2**

The only reasonable move, since 7...♖c1+ 8 ♖xc1+ ♘a2 9 ♖xa1+ ♘xa1 10 ♘c2 is a draw, while after 7...♖f2 8 ♖b3+ Black has to return to b2.

8 ♖b4!

White makes use of stalemate to pin Black's queen. 8 ♖d3+? loses to 8...♖c2+.

8...♘a1

The only way to avoid a repetition.

9 ♖c3!

The same idea again. Black is unable to free himself and put his extra material to use because his queen is pinned.

9...♘b1 10 ♖b4!

Black cannot make progress.

## 245) V. Pachman

1st Pr., *The Problemist*, 1980

White faces brutal threats of mate by 1...♘b3+, 1...♖c3+ or 1...♖e5+ and it is hard to see any defence. However, there is one move that keeps Black at bay for the moment.

1 ♔d2!

Other moves are hopeless:

1) 1 ♘b1? loses after 1...♖b4+ 2 ♘c2 ♖b3+ 3 ♘c1 ♔xe2#.

2) 1 ♘a2? ♘b5+! 2 ♘b1 ♖b4+ 3 ♘c2 ♖b2+ 4 ♘d3 ♔e5+ wins the queen.

3) 1 ♔d3? ♖e5+ mates.

4) 1 ♔d3? ♘b5+! 2 ♘b1 ♖b4+ mates.

5) 1 ♖c2+? ♘b4+ 2 ♖a2 (2 ♘b1 ♔a3+) 2...♖e5+ 3 ♘b1 ♔a3+ wins White's queen.

6) 1 ♖g3? is a tempting try, but Black wins by 1...♔xe2! 2 ♖b8 (2 ♖d3 ♘b5+) 2...♖c3+ 3 ♘a2 (3 ♘b1 ♔a3+ 4 ♘a2 ♖c2+ 5 ♘a1 ♖xd1+ 6 ♘a2 ♔c3+) 3...♖c2+ 4 ♘a1 ♖xd1+ 5 ♖b1 ♖d4+ 6 ♘a2 ♔c3+ with mate in a few moves.

1...♘b3+!

Other moves are not dangerous; for example, 1...♘b4+ 2 ♘b1, 1...♘b5+ 2 ♘b1 ♖b4+ 3 ♘c1 and 1...♖c3+ 2 ♘a2 ♖b3+ 3 ♘a1 all lead nowhere.

2 ♘b1 ♔a3+ 3 ♘c1

3 ♘a1? ♔c2+ mates next move.

3...♖c3+

Not 3...♖c5+? 4 ♘d1, when White even wins.

After the text-move, White seems to be in serious trouble because both 4 ♔c2? ♖e1# and 4 ♘d1? ♖a1+ 5 ♖b1+ ♖xb1# lead to mate.

However, there is a defence based on a queen sacrifice.

4 ♖c2+! ♔xc2 5 ♔d3!

It's a draw if Black loses his queen, so his next two moves are forced.

5...♔xe2+ 6 ♘d1 ♖xd3+ 7 ♔d2+

Suddenly Black, a queen and a knight up, can't win!

7...♘a4

Stalemate.

## 246) D. Gurgendze and L. Mitrofanov

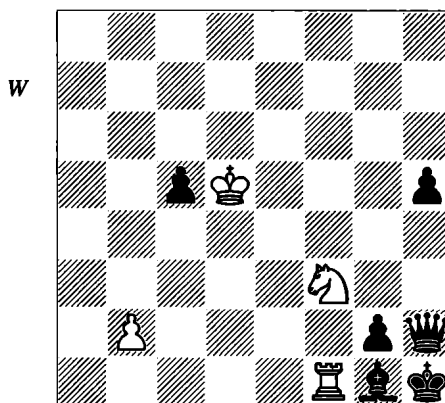
1st Pr., *Molodoi Leninet* (Kurgan), 1981

In this wild position White has a rook for three pawns, but the material situation is perhaps the least important feature of the position! Not only are several pieces *en prise*, but Black has to watch out for the possibility of mate on h2.

1 ♖xh2+!!

A spectacular start to the solution. Black's threat of ...gxf1♖ is so strong that only a rook move or the violent text-move come into consideration. However, 1 ♔b1? drops the knight to 1...♖b3+, while 1 ♔e1? ♖b7+ 2 ♖c6 ♖xb2 causes Black no problems because White's king is too exposed to checks.

1...♖xh2 (D)



After White moves his rook along the first rank, Black will be unable to move his queen because of the mate on g1. Thus Black will be limited to moving his c- and h-pawns and it might appear that White only has to wait to force Black to commit suicide. However, despite Black's lack of freedom, he does actually have a threat, albeit a very slow one. The idea is

to play ...c4 and ...h4-h3; the next step is to give away the c-pawn by ...c3, sacrifice the queen with check and then play ...h2. Black will then have stalemated himself and a quick glance shows that there is no convenient way for White to lift the stalemate, since if the g1-bishop is allowed to move, the g2-pawn can promote. Of course, White has several moves to prepare to meet Black's threat, but even so his opportunities are rather limited. His knight must stay on f3 and his rook must remain on the first rank, while his king movements are restricted by the need to prevent Black from moving his queen with check (except as a sacrifice).

## 2 ♖b1!!

This highly mysterious rook move is a key link in the solution. The current position is one of those in which the traditional method of chess analysis – finding candidate moves and analysing them one by one – is completely useless. The reason is that this move and those following make no sense at all unless one has seen the final outcome of the plan – White's strategy can only be grasped in its entirety and not piecemeal. The basic idea is to arrange things so that when Black gives away his queen with check, White can take it with his rook. This unpins the g1-bishop and so lifts the stalemate with gain of tempo. As we shall see, the extra tempo proves decisive. How can White guarantee to take the queen with his rook? He can of course leave his king on d5 and play his rook to e1, ready to meet ...♗e5+ with ♖xe5, but then Black sacrifices his queen on d6 instead. Clearly, White must ensure that Black has only one square rather than two on which to sacrifice his queen, and that implies that White's king must head for a8, which forces Black to give up his queen on b8. It turns out that White has just enough time to arrange this provided he doesn't waste a tempo. Thus the rook must go directly to b1, ready to take on b8 at move seven.

## 2...h4 3 ♖c6

Here is an example of what happens if White does not arrange to take the queen with his rook: 3 ♖d1? h3 4 ♖e4 c4 5 ♖c1 c3 6 b4 c2 7 b5 ♗e5+ (7...♗f4+? 8 ♖xf4 h2 9 ♖xh2 ♖xh2 10 ♖f3) 8 ♖xe5 h2 9 ♖xh2 ♖xh2 10 ♖xc2 ♖b6 with an easy draw.

## 3...h3 4 ♖b7 c4 5 ♖a8

Just in time.

## 5...c3 6 bxc3 ♗b8+ 7 ♖xb8 h2

Now White makes use of his extra tempo to switch the rook to the h-file. He also wins after 7...♖c5 8 ♖h8.

## 8 ♖h8

and mate next move.

It should be noted that this study has appeared in a number of versions. The Van der Heijden database gives the above version as unsound on the basis that White can also win by 1 ♖b1. However, as mentioned above this allows 1...♗b3+ winning the knight on f3. At any rate, the composers produced another version in which Black's queen starts on h3 rather than b8. It seems to me that the original version is sound and there is no need to put the queen on h3. Of course, some may prefer the version with the queen on h3 for aesthetic reasons. Finally, the Hungarian-American composer and player Pal Benko produced a version in which the queen sacrifice disappears but the white king's path is lengthened. This version is ♗e6, ♖b1, ♖c6, ♖g5, ♖b2, h5; b♖h1, ♗h2, ♖g1, ♖b7, g2, g6, with the solution 1 ♖f3 gxh5 2 ♖d5 bxc6+ 3 ♖e4 c5 4 ♖d5 and then as above. The switchback d5-e4-d5 by the white king is attractive, but the penalty of losing the initial sacrifice and precise choice of b1 for the rook seems to me too high and I prefer the version given here.

## 247) G. Kasparian

1st Pr., *Szachy*, 1979

Material is exactly equal, but White is the one in difficulties owing to his exposed king. Black threatens mate in two by 1...♗e8+ and 2...♖b5#, while White must also deal with the attacks on his queen and rook.

## 1 ♗h1+

Since neither capture of the black rook stops the mate, White can only consider a check.

## 1...♖b8

1...♖b7+ 2 ♖e7 creates no problems for White.

## 2 ♖e7

Again forced, since otherwise White loses a rook at least.

## 2...♖g6

The critical move, renewing the threat of mate on e8.

3 ♖f8+ ♜c8+ 4 ♖xc8+

Or else immediate mate.

4... ♜xc8

White has countered the immediate mating threats, but at the cost of losing an exchange. The material balance has now shifted decisively in favour of Black, but White stands to draw if he can win the h7-pawn without being punished.

5 b7+!

Other moves lose:

1) 5 ♖xh7? ♜d7+ 6 ♜f8 ♜d8+ 7 ♜f7 ♖f6+ 8 ♜g7 ♖f8#.

2) 5 ♖h3+? ♜b7 6 ♜xh7 ♖e4+ gives Black a decisive attack; e.g., 7 ♜f8 ♖f4+ 8 ♜e8 ♖g8+ 9 ♜d7 ♖g7+ 10 ♜e6 ♖e4+ or 7 ♜f7 ♖g4 8 ♜f6 ♖c4+ 9 ♜e7 (9 ♜f8 ♖c8+ 10 ♜f7 ♖g7+) 9... ♖g7+ 10 ♜d8 ♖c6 with a quick mate.

3) 5 ♖d5? does not allow Black to mate, but White's failure to win the h7-pawn means that Black only has to consolidate to win on material. He can achieve this by 5... ♖g7+ 6 ♜f8 (6 ♜f6 ♖d7 7 ♖e4 ♖a1+ 8 ♜f5 ♖a5+ 9 ♜g4 ♖xb6 leads to an eventual win on material) 6... ♖d7 7 ♖e6 ♜b7 8 ♜f7 and now the simplest win is by 8... ♖c6 since 9 ♖xc6+ ♜xc6 10 ♜e5+ ♜d6 11 ♜xd7 ♜xd7 sees the h-pawn running through.

5... ♜b8

After 5... ♜c7, 6 ♜e6+ forces Black to give up his rook, leading to a simple draw.

6 ♖h2+!

White's aim is to force Black's king onto the second rank before taking on h7. Other moves fail: 6 ♜xh7? ♖f4 gives Black a decisive attack, while 6 ♖d5? is answered by 6... ♖c6.

6... ♜xb7 7 ♖xh7

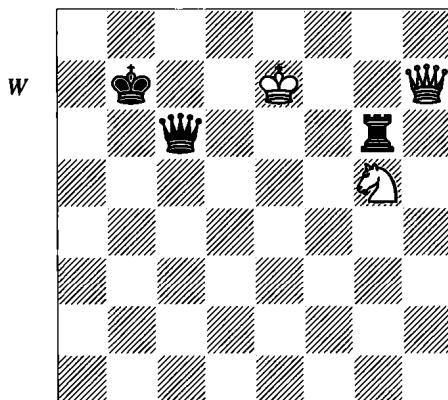
Now that White has the additional possibility of a discovered check from his king, he can consider taking the h-pawn. With the material balance indicating a draw, Black must take quick action to retain winning chances.

7... ♖c6! (D)

The most dangerous move. 7... ♖xg5 8 ♜f6+ is a draw, so Black brings his queen to a more active square and genuinely threatens to take the knight.

After the text-move, White appears to be in serious trouble; for example:

1) 8 ♜d8+? ♜b6 threatens 8... ♖d6+ and if 9 ♜f7 then 9... ♖g8+ wins the queen.



2) 8 ♜f7? ♖c5+ with a winning attack; for example, 9 ♜d7 ♖c8+ 10 ♜e7 ♖e6#.

3) 8 ♜f8+? ♜b6 9 ♖e7 ♖c8+ is winning for Black.

Apart from these moves, there hardly seems to be another option for White, yet he has a spectacular way to force a draw.

8 ♜e6!!

A remarkable idea: White allows Black to take the knight with check in two different ways. In both variations White is able to force a stalemate.

8... ♖xe6+

There is nothing better than taking the knight, since Black has no other checks and White has strong threats, such as 9 ♜d8+ or 9 ♖xg6. 8... ♖xe6+ leads to a finish similar to the main line after 9 ♜d8+! ♜a6 10 ♖b7+ (10 ♖a7+ also draws) 10... ♜a5 11 ♖b4+ with perpetual check or stalemate.

9 ♜f8+!

This time the king has to go the other way to set up the stalemate.

9... ♜a6 10 ♖b7+

10 ♖a7+ is equally good.

10... ♜xb7

Stalemate.

## 248) Y. Dorogov

=1st Pr., *Tidskrift för Schack*, 1970

White has plenty of extra material – he is a rook and a pawn up – but his dreadful king position makes the win problematic.

1 g4+!

This is the only move to offer winning prospects. Other moves:

1) 1 ♖b7? ♜f8+ 2 ♜h7 ♜h6+ 3 ♜g8 ♜e6+ 4 ♜f7 ♜e8+ 5 ♜g7 ♜h6+ 6 ♜f6 ♜g5+ is perpetual check.

2) 1 ♜d1+? ♜xd1 2 a8♜ is tempting, but fails against accurate defence:

2a) 2...♜xb3? 3 ♜e8+ ♜h6 (the alternative 3...♜g4 4 ♜d7+ ♜h5 5 g4+ also leads to mate) 4 ♜f8+ ♜h5 5 ♜f3+ ♜h6 6 ♜h3+ ♜g6 7 ♜f5+ ♜h5 8 g4+ leads to mate.

2b) 2...♜f6+! 3 ♜g8 ♜xb3+ 4 ♜d5+ ♜xd5+ 5 exd5 ♜h4 6 g3 ♜xg3 7 ♜xg3 ♜g4 8 ♜e5 e2 9 ♜c3 ♜f5 10 ♜f7 e1♜ 11 ♜xe1 ♜e5 draws.

1...♜h6

After 1...♜xg4 2 ♜e2+ ♜f4 3 ♜xe3+ White wins easily.

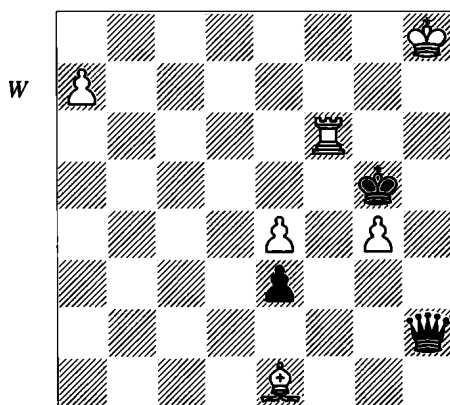
2 ♜h2+!

This queen sacrifice is actually the only way to avoid mate.

2...♜xh2 3 ♜b6+

Suddenly it is Black's king that is in an awkward situation.

3...♜f6+ 4 ♜xf6+ ♜g5+ (D)



This is check, so White has no time to promote his pawn.

5 ♜h4+!

A second spectacular sacrifice which is virtually forced since after 5 ♜g7? ♜c7+ 6 ♜f7 ♜e5+ only Black has winning chances.

5...♜xh4+

The sixth check in a row is forced because 5...♜xh4 6 ♜h6+ and 5...♜xg4 6 a8♜ ♜xh4+ 7 ♜g7 win easily for White.

6 ♜g7

White has gone from being a lot of material up to being a considerable amount down, but the position has turned in his favour. The queen

is very badly placed on h4, since it can neither check nor prevent White's promotion on a8.

6...e2

Black's only chance is to push his own passed pawn and hope to save the game with his two queens.

7 a8♜ e1♜

If there are already heavy pieces on the board and both sides promote, the usual saying is that 'whoever gives the first check wins'. While this is not universally valid, it is certainly true that having the initiative is very important when there are queens and rooks flying around and both kings are exposed. This is a case in point: White cannot win with checks, but the right first move gives him a decisive attack.

8 ♜b8!

White's main task is to prevent Black's king from running away by ...♜xg4. 8 ♜c8? prevents ...♜xg4 but allows Black to defend by 8...♜xe4 9 ♜f5+ ♜xg4, when White has nothing better than a draw by 10 ♜e5+. Random checks are wrong; for example, 8 ♜d5+? ♜xg4 9 ♜g6+ ♜f4 10 ♜f5+ ♜e3 11 ♜c5+ is a draw, while 8 ♜g6+? ♜f4 9 ♜f8+ ♜g3 10 ♜d6+ ♜g2 even favours Black.

After the text-move, the two black queens control various possible checking squares, but White only needs one good check to decide the game.

8...♜xe4

This allows mate in two, so in a game one would prefer to play 8...♜xg4 9 ♜f4+ ♜h3, which leads to a (lost) ♜+♜ vs ♜ ending. The specific details of ♜+♜ vs ♜ are quite complicated, but evaluating this ending is relatively easy. There is a general principle which states that with a c-, d-, e- or f-pawn, the defender can only draw if his king is in front of the pawn or has a chance of getting in front of the pawn. Since this is clearly not the case here, we know that the position is lost. For more details, see *Secrets of Practical Chess* (pp. 150-2) or *Fundamental Chess Endings* (pp. 319-20). We give a few further moves to illustrate how the winning line starts. White continues 10 ♜xh4+ and now:

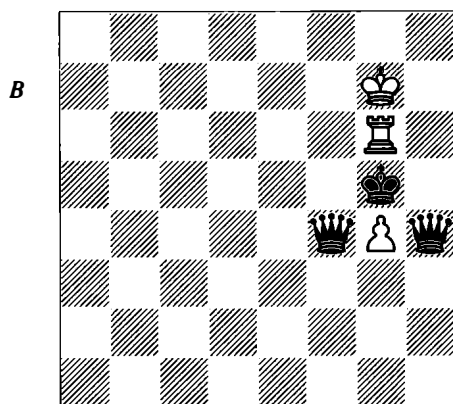
1) 10...♜xh4 11 ♜f4+ ♜h3 (after 11...♜h5 12 ♜f6 White wins quickly) 12 e5 ♜g1+ 13 ♜f6 ♜a1 14 ♜e4 ♜b2 15 ♜f7 ♜f2+ 16 ♜e8 followed by pushing the pawn.

2) 10... ♖xh4 11 ♕e5 ♖g4+ 12 ♖h6 (end of checks) 12... ♖g2 13 ♖g5 ♖f3 14 e5 and again the pawn starts advancing.

9 ♖f4+!

White's second queen sacrifice forces mate.

9... ♖xf4 10 ♖g6# (D)



A picturesque finish.

## 249) O. Pervakov

1st Pr., Moscow Ch., 1990

White is a rook and two minor pieces up, but Black threatens various mates in one.

1 ♖a4+!!

A blockbuster start, offering the queen to two black pieces. The only alternative is 1 ♖d3+? ♖xd3 2 ♖g2 (2 ♖a4+ ♖xa4 3 ♖c5+ ♖b5 4 ♖xd3 ♖xe7 is a draw, as is 2 ♖d5 ♖d2! 3 ♖b4+ ♖xb4 4 ♖xb4 ♖xb4) but then Black draws by 2... ♖c3+ 3 ♖b1 ♖b3+ 4 ♖c1 ♖c3+ (4... ♖xe7 is also safe for Black) 5 ♖d1 (5 ♖c2 ♖e1+ 6 ♖d1 ♖e3+ 7 ♖d2 ♖xd2+ 8 ♖xd2 ♖xe7 is an easy draw) 5... ♖a1+ 6 ♖d2 ♖b2+ 7 ♖e3 (7 ♖e1 ♖xg2 8 ♖xg2 ♖xe7) 7... ♖b6+ and the king has to go back.

1... ♖xa4

After 1... ♖xa4 2 ♖d1 White wins at once.

2 ♖d3+ ♖b4+ 3 ♖b2

This is the point behind White's queen sacrifice. Black's mating threats have disappeared, his queen has been driven into a passive position and White's pieces are cooperating well in an attack on the enemy king. The defect, of course, is that White is no longer noticeably ahead on material.

3... ♖e5!

The only chance, but a good one since it forks rook and bishop, and threatens an awkward check on c4. Instead, 3... ♖xe7 4 ♖d4+ ♖b5 5 ♖e2+, 3... ♖a6 4 ♖d4+ ♖b5 5 ♖e2+ and 3... ♖e8 4 ♖b3+ ♖c4 5 ♖d6+ are all hopeless for Black.

4 ♖c6+!

White is prepared to offer a piece to remove the threat posed by Black's knight. 4 ♖d5+? ♖c4 leads to nothing; e.g., 5 ♖c3+ ♖d4 or 5 ♖a3 ♖xa3+ 6 ♖xa3 ♖xf3.

4... ♖xc6

4... ♖b5 5 ♖xe5 gives White a decisive attack; for example, 5... ♖b6 6 ♖d7+ ♖c7 7 ♖c3+ ♖xd7 8 ♖c5+.

After the text-move, the obvious 5 ♖d1? ♖b5 6 ♖b3+ is only a draw.

5 ♖e2!!

The key idea. White does not have any direct threats but aims to put Black in zugzwang. Black cannot move his knight due to ♖d4+, while the queen can only move to b5 or a6, when ♖b3+ wins; finally, ... ♖b5 loses to ♖d4+. This leaves only ... ♖c4 and moves of the a-pawn to consider. In fact, the advance of the a-pawn changes nothing and sooner or later Black will be forced to play ... ♖c4.

5... a6

5... ♖c4 loses as in the main line.

6 ♖f1!

White simply waits.

6... ♖c4

As good a time as any to play this move.

6... a5 7 ♖e2 ♖c4 leads to the same thing.

7 ♖h3+!

This move has two surprise aspects. The first is that Black's king has to be driven into the centre of the board in order to win, and the second is that the rook has to go the full distance to the h-file.

7... ♖d5 8 ♖h5+ ♖e5

Forced, as king moves lose the queen at once.

9 ♖g2+

Now we can see the reason for White's choice of square at move seven: if the rook were now on g5 Black could play 9... ♖d4, while if it were on f5 Black could play 9... ♖e6.

9... ♖c4 10 ♖h4+ ♖b5 11 ♖f1+ ♖c4+

Black's last chance, but it only takes one accurate move to finish him off.

12 ♖xc4!

12 ♖xc4? ♜b6 draws.

12... ♖xc4

12... ♖d1 is met by 13 ♖cl+.

13 ♖d6+

White wins the queen.

## 250) D. Gurgenedze

=1st Pr., Tavariani Jubilee Tny, 1992

Although White is well ahead on material, Black has such a wide range of threats (1...e1 ♖# and 1... ♖cl#, for a start) that only a check offers any hope for White.

1 ♖a8+

1 ♖a8+? is the wrong check since 1... ♖a4 2 ♖xa4+ (2 ♖xe2? loses to 2... ♖xc8+ 3 ♖xf5 ♖axa8) 2... ♜xa4 3 ♖xe2 ♖xc8+ 4 ♖xf5 is only a draw.

1... ♜b3

The only move since 1... ♜b4 2 ♖b7+ ♜c3 3 ♖a3+ ♜d4 4 ♖f3+ leads a quick mate, while 1... ♖a4 2 ♖xa4+ ♜xa4 3 ♖xf5 e1 ♖+ 4 ♜xc2 leaves Black with no checks.

2 ♖b8+

Again, there is little choice since 2 ♖b7+? ♖b4 leads to nothing.

2... ♜a3

2... ♖b4 3 ♖xb4+ ♜xb4 4 ♖xe2 and 2... ♜c3 3 ♖xe2+ ♖xe2+ 4 ♖xf5 are easy wins for White, so Black must return to a3.

3 ♖a8+

Now that White has transferred his rook from c8 to b8, this move becomes considerably more effective.

3... ♖a4 4 ♖xe2

Black can no longer take the rook on c8 with check, so this is an awkward move to meet. Although Black has a wide range of discovered checks, White's material advantage is so large that Black must make considerable gains if he is to have any chance of survival.

4... ♖c8+

4... ♖xe2+ 5 ♖xf5 and 4... ♖b2++ 5 ♜cl are hopeless for Black, so he plays to win White's queen.

5 ♖xf5 ♖xa8

Black has achieved a notable success since with this material balance he should achieve a draw, provided only that he can survive the attack that White now unleashes.

6 ♖f3+!

The position of the rook on b8 is indeed curious, but it helps White's attack by confining Black's king to the a-file. 6 ♖b2? is tempting, as 7 ♖fb5 is a terrible threat, but Black can defend by 6... ♖cb8! 7 ♖f3+ ♜a4 8 ♖c3+ ♜a5, when the attack runs out of steam.

6... ♜a4 7 ♖c3+

White's knight joins the attack with gain of tempo.

7... ♜a5

7... ♜a3 loses more quickly, to 8 ♖a2+ ♜a4 9 ♖b4+ ♜a5 10 ♖a3#.

8 ♖f5+

8 ♖b2? still fails to 8... ♖cb8.

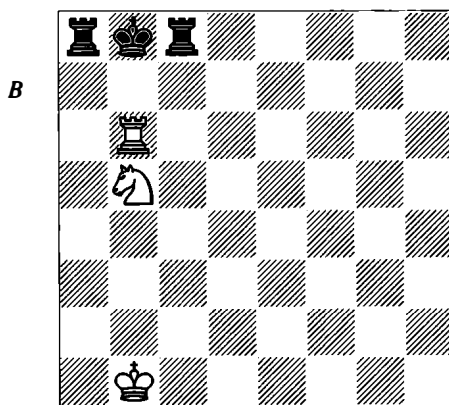
8... ♜a6 9 ♖f6+ d6

Giving up the d-pawn only delays the end by one move.

10 ♖xd6+ ♜a7

The king has marched all the way up the a-file, only to fall victim to an attractive finish. 10... ♜a5 is met by 11 ♖b5#.

11 ♖b5+! ♜xb8 12 ♖b6# (D)



A neat picture with which to conclude the book.

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Numbers refer to study numbers, except where indicated.

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# Index of Material

The studies are indexed by the amount of material in the starting position, disregarding pawns. The ordering is based on the hierarchy of material values ♖<♙<♜<♚, with white material given priority over black material (i.e. black material is only used for a 'tie-break' when white material is equal).

References are to study numbers, except for the positions given in the introduction, for which page numbers are given.

Readers will note that this ordering is slightly different to that used in the main text. This has been done to provide an alternative method of locating a particular study.

| White   |    | Black   | Study Number               |
|---------|----|---------|----------------------------|
| pawn(s) | vs | pawn(s) | 1, 3, 4, 5, 7, 8, 9        |
| pawn(s) | vs | ♖       | 10                         |
| pawn(s) | vs | ♙+♖     | 11, 12, 13                 |
| pawn(s) | vs | ♙+2♖    | 15                         |
| pawn(s) | vs | ♜       | 2, 6, 14                   |
| ♖       | vs | pawn(s) | 16, 18, 19                 |
| ♖       | vs | ♖       | 20, 21, 23                 |
| ♖       | vs | 2♖      | 17                         |
| ♖       | vs | ♙       | 22                         |
| ♖       | vs | ♜+♖     | 25                         |
| ♖       | vs | 2♜      | 24                         |
| 2♖      | vs | pawn(s) | 26                         |
| 2♖      | vs | ♙+2♖    | 28                         |
| 2♖      | vs | 2♙      | 30                         |
| 2♖      | vs | ♜       | 27, 29                     |
| 2♖      | vs | ♜+♙     | 31                         |
| ♙       | vs | pawn(s) | 33, 34, 51, 58             |
| ♙       | vs | ♖       | 35, 36, 37, 38, 39         |
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| ♙+2♖    | vs | ♚+♙     | 91                         |

|       |    |         |                                        |
|-------|----|---------|----------------------------------------|
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| 2♙    | vs | 2♙      | 92                                     |
| 2♙    | vs | ♙+♘     | 94                                     |
| 2♙    | vs | ♙+♙     | 95, 96                                 |
| 2♙    | vs | ♙+♙+♘   | 98                                     |
| 2♙+♘  | vs | ♙+♘     | 99                                     |
| 2♙+♘  | vs | ♙+2♘    | 100                                    |
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| ♙+♙+♘ | vs | ♙+2♘    | 179                                    |

|          |    |         |                              |
|----------|----|---------|------------------------------|
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John Nunn presents 250 challenging positions where your task is to find a cunning way to win or draw. In many cases the odds against success seem overwhelming, yet by using all the tactical resources in the position it is possible to achieve the goal.

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**John Nunn** is a grandmaster from England. He has won four individual gold medals (one of them for solving) and three team silver medals at Chess Olympiads. In the Chess World Cup of 1988/9, he finished sixth overall, ahead of several former World Champions. He is arguably the most highly acclaimed chess writer in the world, with two of his books receiving the prestigious British Chess Federation Book of the Year Award. He has won the British Chess Problem Solving Championship three times, and took the gold medal for Chess Problem Solving at the 1999 Mind Sports Olympiad. Nunn has also composed some outstanding problems and studies, notably in his recent 'Brains of Earth' Challenge.

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