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Introduction

Batsford Chess Endings has been a monumental project taking nearly a decade from conception to birth. Luckily, with the signal exception of database positions, endgame theory is fairly constant. And so the early sections I wrote on pawn endings and rook endings have needed little correction except in the very simplified "Siliconisable" examples. I have, however, added a few examples recently to bring them up to date.

Collating an encyclopaedia is a notoriously difficult process. And the team of midwives has only gelled finally in the last couple of years. As I stated above, I was personally responsible for the sections on rooks and pawns. I am delighted to have had the assistance of Bob Wade who did most of the queen endings; and Jonathan Tisdall who undertook the myriad other sections - about 40% of the book in total. We have indicated in the contents list who wrote each section. But naturally as chief editor I take ultimate responsibility for all the contents.

Since the first endgame databases in the late seventies, a considerable number of different endings have undergone the fascinating but also frequently baffling process of being subjected to total analysis. The list of databases is growing daily. And we have endeavoured, whenever possible, to check any examples which fall into these categories.

In order to consult an oracle you have to have access to it. My friend and colleague Dr John Nunn was indefatigable in his haruspications on our behalf; and displayed superhuman patience at my many requests. One should also mention Lars Rasmussen, who supplied the interface program which makes communication with the oracle itself immeasurably simpler than it would otherwise be.

There is a list of the known results for different endings following this introduction. As you will see, many types of endgame can take more than 50 moves to win. I have taken the opportunity at several places in the text to inveigh against FIDE's attempts to reconcile tournament play with this new information by extending the 50 move rule. And I am delighted that they have decided now to make everything 50 moves.

The death knell of the more complex arrangement was sounded by the startling discovery that rook and bishop v two knights can take 224 moves to win! I should add, however, that I have no objection whatsoever to study composers having their own arrangements for the sake of art. My constituency is actual players; and we certainly need protection from the wilder lunacies of Silicon-certainly.

The organization of the material should be easy to follow, as it is a very natural one. Having dealt with the basic mates, we first consider Pawn Endings, then Minor Piece Endings, before moving on to endgames with major pieces. Inside each section there is a similar progression of material, starting with no pawns (where this is non-trivial) before considering cases with one or more pawns on the board. In many types of ending there are more meaningful ways to subdivide
the material than the precise number of pawns; thus subheadings such as “Pawns all on the same side” or “Outside Passed Pawns” will be found throughout the book.

The main aim of the book is to increase the reader’s understanding of the practical aspects of playing endgames. Therefore top priority when allocating space has been given to the types of ending that occur most frequently in tournament play, while incorporating in the text explanations of the aims of both sides in these endings. However the reader will find plenty of artistic examples, for successful endgame play by its very nature tends to possess artistic elements.

It is worth clarifying at the outset precisely what we mean by reciprocal (or mutual) zugzwang, especially since computer analysis has shown that this phenomenon crops up in many endings far more often that human intuition would suggest. Reciprocal zugzwang is a situation in which the stronger side cannot force a win if he is to move, while the weaker side loses if he must move. Note that we do not insist that the side to move must lose (as do some writers).

In such a large work there are bound to be mistakes. I hope that readers will forgive us for our Carbon-based frailty. And we would be delighted to receive correspondence about improving BCE (c/o Batsford) for inclusion in the second edition.

Finally, there are many people whom I (JS) should like to thank. My original material was hand-written and I must express my admiration for Sarah Christopher’s detective work in translating a preliminary typescript into a viable version. Byron Jacobs has received a tidal wave of material from us for typesetting; I am very grateful to him for so cheerfully transforming water into print.

Throughout the gestation period, Peter Kemmis Betty has had an unreasonable but ultimately justified belief that this project could ever come to fruition. While Peter has been at the helm throughout, BCE has gone through several technical editors. I should like especially to single out Andrew Kinsman whose Caesarian enthusiasm prised the material from the various recalcitrant authors to expedite BCE’s big day; and the present incumbent Graham Burgess who was there to wield the forceps.

Jonathan Speelman,
September 1993
<table>
<thead>
<tr>
<th>Material</th>
<th>Longest Win</th>
<th>Target Position</th>
<th>Percentage Winning</th>
<th>Starting Position</th>
<th>Analyst(s)</th>
<th>Year</th>
</tr>
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<tbody>
<tr>
<td>QvK</td>
<td>10</td>
<td>M</td>
<td>100</td>
<td>Ka1,Qb1 v Ke6</td>
<td>S</td>
<td>1970</td>
</tr>
<tr>
<td>RvK</td>
<td>16</td>
<td>M</td>
<td>100</td>
<td>Ka1,Rb2 v Kc3</td>
<td>S</td>
<td>1970</td>
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<tr>
<td>PvK</td>
<td>19</td>
<td>P</td>
<td>76.5</td>
<td>Kh3/h2/g2,Pb2 v Kg5</td>
<td>C</td>
<td>1977</td>
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<tr>
<td>QvQ</td>
<td>10</td>
<td>MW</td>
<td></td>
<td>Kb1,Qa1 v Ke1,Qg1</td>
<td>SZ</td>
<td>1979</td>
</tr>
<tr>
<td>QvR</td>
<td>31</td>
<td>MW</td>
<td></td>
<td>Kc8,Qd8 v Ke3,Rc4</td>
<td>S</td>
<td>1970</td>
</tr>
<tr>
<td>RvB</td>
<td>18</td>
<td>MW</td>
<td></td>
<td>Ka4,Rc3 v Ka7,Ba6</td>
<td>S</td>
<td>1970</td>
</tr>
<tr>
<td>RvN</td>
<td>27</td>
<td>MW</td>
<td></td>
<td>Kd1,Rh1 v Kb1,Ng4</td>
<td>S</td>
<td>1970</td>
</tr>
<tr>
<td>BBvK</td>
<td>19</td>
<td>M</td>
<td>99.97</td>
<td>Kh8,Bd2,Bd7 v Kd3</td>
<td>BVH</td>
<td>1984</td>
</tr>
<tr>
<td>BNvK</td>
<td>33</td>
<td>M</td>
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<td>Ka8,Be8,Nh2 v Kc8</td>
<td>BAV</td>
<td>1981</td>
</tr>
<tr>
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<td>30</td>
<td>M</td>
<td>94</td>
<td>Kc8,Qg2,Qh1 v Kb6,Qf5</td>
<td>T</td>
<td>1986</td>
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<tr>
<td>QrvQ</td>
<td>67</td>
<td>M</td>
<td>92.1</td>
<td>Ka8,Qh8,Rb8 v Kg6,Qa4</td>
<td>T</td>
<td>1986</td>
</tr>
<tr>
<td>QBvQ</td>
<td>33</td>
<td>M</td>
<td>53.4</td>
<td></td>
<td>T</td>
<td>1986</td>
</tr>
<tr>
<td>QNvQ</td>
<td>41</td>
<td>M</td>
<td>48.4</td>
<td></td>
<td>T</td>
<td>1986</td>
</tr>
<tr>
<td>QPVQ</td>
<td>59</td>
<td>MPW</td>
<td></td>
<td>Kd6,Qa6,Pg7 v Kc2,Qb1</td>
<td>KF</td>
<td>1973</td>
</tr>
<tr>
<td>QvRP</td>
<td>29</td>
<td>MT</td>
<td></td>
<td>Kd4,Qa6,Pg7 v Kc2,Qb8</td>
<td>SZ</td>
<td>1979</td>
</tr>
<tr>
<td>QvBB</td>
<td>71</td>
<td>MW</td>
<td>92.1</td>
<td>Ka8,Qa1 v Kd7,Bc5,Bd5</td>
<td>T</td>
<td>1986</td>
</tr>
<tr>
<td>QvBN</td>
<td>42</td>
<td>MW</td>
<td>93.1</td>
<td>Ka8,Qb6 v Kd7,Bd5,Ne7</td>
<td>T</td>
<td>1986</td>
</tr>
<tr>
<td>QvNN</td>
<td>63</td>
<td>MW</td>
<td>89.7</td>
<td>Kd8,Qh1 v Kd6,Ne5,Nh8</td>
<td>T</td>
<td>1986</td>
</tr>
<tr>
<td>RBvR</td>
<td>59</td>
<td>MW</td>
<td>40.1</td>
<td>Kd6,Re2,Bc8 v Ka8,Rh7</td>
<td>T</td>
<td>1985</td>
</tr>
<tr>
<td>RNvR</td>
<td>33</td>
<td>MW</td>
<td>35.9</td>
<td>Kd5,Ra6,Na5 v Kc8,Re8</td>
<td>T</td>
<td>1985</td>
</tr>
<tr>
<td>RPvR</td>
<td>60</td>
<td>MPW</td>
<td></td>
<td>Kc3,Rc4,Pb2 v Ke4/f4,Rd1</td>
<td>LRGKF</td>
<td>1976</td>
</tr>
<tr>
<td>BBvN</td>
<td>66</td>
<td>MW</td>
<td>91.8</td>
<td>Ka8,Bh1,Bh6 v Kf3,Ng2</td>
<td>T</td>
<td>1983</td>
</tr>
</tbody>
</table>
The table on the previous page summarises the results of computer database analysis of various endings. It was compiled by Christian Posthoff, Rainer Staudte and Michael Schlosser.

Analyst Key: Ampt (A), Bakker (B), Clarke (C), Futer (F), Golfand (G), Herschberg (H), Komisarchik (K), Aleksandrov (L), Barayev (R), Strohlein (S), Thompson (T), van den Herik (V) and Zagler (Z).

Target Position Key: Mate (M), Promotion (P), Win of a piece (W) or Transposition to a simpler, won ending (T).

White to play in all cases except QPvQ, QvRP and RPvP.
Note that the result for QPvQ is only for the case of a knight’s pawn on the seventh rank, while that for QvRP is only for a centre pawn on the seventh rank.

The percentages of won positions may be misleading at first sight. These are based on random legal placings of the pieces, so White to play may, for example, simply be able to capture the black queen immediately.

Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Check</td>
</tr>
<tr>
<td>±/±</td>
<td>Better chances</td>
</tr>
<tr>
<td>++/+/+</td>
<td>Winning advantage</td>
</tr>
<tr>
<td>=</td>
<td>Equal position/Drawn</td>
</tr>
<tr>
<td>!</td>
<td>Excellent move</td>
</tr>
<tr>
<td>!?</td>
<td>Good move</td>
</tr>
<tr>
<td>?!</td>
<td>Interesting move</td>
</tr>
<tr>
<td>?</td>
<td>Dubious move</td>
</tr>
<tr>
<td>??</td>
<td>Bad move</td>
</tr>
<tr>
<td>+</td>
<td>(by diagram) White wins</td>
</tr>
<tr>
<td>-</td>
<td>(by diagram) Black wins</td>
</tr>
</tbody>
</table>

By each diagram are symbols indicating which player is to move, together with the result with correct play from White’s viewpoint. When the position is less clear-cut, an assessment, again from White’s viewpoint, will be given.

After many diagrams there follows analysis both with White to move and with Black to move. Then the result (or assessment) with correct play in each case appears above the appropriate letter.
Basic Mates

In this section we look at the basic checkmating techniques against a lone king. These are essential weapons in the arsenal of every player and need to be mastered.

King and Queen v King

Checkmating Positions
King and queen against lone king is usually the beginner’s first experience of endgames. The lone king needs to be driven to the rim of the board to be checkmated. Sample mates appear in the quarter diagrams of diag 1.

Stalemate
En route the player trying to win must guard against allowing stalemate. For samples of stalemate see the quarter diagrams in diag 2.

Do not be too enthusiastic to limit the black king as White in diag 3. Notice that
1. \( b6 \) is stalemate!
2. \( c6 \) is stalemate!

The Standard Technique
Proceeding from diag 4 White should make one queen move to limit the black king to one sector of the board.
1. \( e4 \)
   Not a check! After:
   1. \( d7 \)
   White should start to bring the slow mover, the king, near the opposing king.
2. \( b4 \) \( d6 \)
3. \( b5 \) \( d7 \)
4. \( c5 \) \( c7 \)
   Only now is a check to drive the king on to the edge appropriate.
5. \( e7+ \) \( c8 \)
6. \( c6 \) \( b8 \)
7. \( b7 \) mate
Basic Mates

Again:

1 e4 c5
2 b3 d6
3 c4 c7
4 c5 e7
5 e7+ c8
6 c6 b8
7 b7 mate

Once more:

1 e4 c5

King and Rook v King

This is also always a win. The same basic technique is used as in king and queen against king: the enemy king must first be driven to the edge of the board before a mating net can be constructed. Whereas a queen can drive the king towards the edge without the help of the king, here the king must be used in conjunction with the rook to achieve this.

In diag 5 the win is quite straightforward. Both 1 a4 and 1 e1 would immediately restrict the black king but it is probably most logical to activate the king first:

1 b7 e4
2 c6 d4

3 e1
This forces the enemy king towards the a-file.

3 c4
4 e4+ d3
5 d5
Black is now boxed in to the area a1-a3-d3-d1 and White can gradually tie the noose.

5 c3
6 d4
Further reducing the box.

6 c2
7 c4 b2
8 d2+ c1
The king is already forced to the edge.

9 c3 b1
10 b3 c1
11 d3 b1
12 d1 mate

King and Two Bishops v King

Although one bishop cannot mate a lone king, two bishops can force a win very easily.

In diag 6 the winning procedure is similar to that which we encountered in the queen and rook positions.

White can gradually drive back the black king by co-ordinating the bishops to control the king’s escape squares:

1 b2 e4
2 c3 d5
3 f3+ e5
4 g3+ e6
5 d4
Having cut off the black king.

Le rapprocher un peu avec le roi (approximative, à ne pas redouter)
Donnez échecs avec de manièra 10 dé file de diagonales // coupant coudières
Annorez le roi.
Basic Mates

King the white pieces can easily drive it into a corner.

5 f5
6 d5 f6
7 R4 g5
8 d7 f6
9 h4+ g6

Having prepared the way White is now able to push back the king into the h8-corner.

10 e5 f7
11 f5 g7

King and Two Knights v King

It should be obvious that there is no way that a single knight can checkmate a lone king, but perhaps it is not so apparent that even two knights cannot force mate. Whilst there are mating positions there is no way that these can be constructed without a strong degree of cooperation by the defending side - the defender’s sole task is to avoid one-move mates.

In diag 7 White has driven the black king into the corner but he cannot make further progress:

1 f8
Of course 1 e7 and 1 h6 are stalemate.

1 ... g8
2 d7 h8
3 d6 g8
4 f6+ f8

Of course not 1 ... h8?? 2 f7 mate, but after 4 ... f8 White has no way of forcing checkmate.

King, Bishop and Knight v King

With bishop and knight mate can be forced, and this ending is worth careful study to develop the necessary technique since checkmate usually takes many moves and inaccurate play may result in a draw under the fifty-move rule. Checkmate can only be forced in the corners of the same colour as the bishop; in the other two corners mate is possible, as is the case with two knights, but only if the defender makes a mistake.

The winning procedure is quite involved. The first stage is to drive the enemy king to the edge of the board. Then the king must be driven into a corner and finally, assuming that it is in the “wrong” corner, the king must be pushed over to the corner of the same colour as the bishop. The technique is much more difficult than, for example, the two bishops ending, as
Basic Mates

here it is far from easy to cut off and drive back the defending king. The bishop and knight do not act particularly effectively as a team, and they always need the support of the king. The theme is to use the knight and king to control squares which the bishop cannot control.

1 $b2 b3
2 $c7 c4

Black holds back his opponent's king.

3 $e6 e5
4 $d4 d4
5 $c2 c2

5 ... $d5 would be met by 6 $d3.

6 $d3 d3
7 $h2

Having coordinated his forces it is clear that White has taken many squares away from the black king.

7 ...
8 $d5

The king must retreat, so it heads for a8. Less accurate is 8 ...

9 $c4 $e6 would drive the black king towards the “correct” corner - h8.

9 ...
10 $c5 $d6

9 ... $d7 is well met by 10 $d5.

10 $c5 $c6
11 $a4

We have now reached a typical situation which is similar to that after White’s eighth move except White has grouped his forces better.

11 ...
12 $b5 $c8
13 $c6 $d8
14 $d6 $c8

Black could try to escape with 14 ...

15 $b6+ $b7
16 $c5 $a6
17 $c6 $a5
18 $d6 $a6
19 $b8

Having barred the route back a8 White begins to drive the black king towards a6.

19 ...
20 $d5! $a4

White would win more simply after 20 ...

21 $b4+ $a5 22 $c5 $a4
23 $c4 $a5 24 $e7+ etc.

21 $c5 $b3
22 $b4!

A key knight move - this is a typical way of driving the king from one corner to another.

22 ...
23 $f4

The excellent position of the knight stops the black king escaping.

23 ...
24 $e5 $a4
25 $c4 $a5
26 $c7+ $a4
27 $d3 $a3
28 $b6

A fine waiting move.

28 ...
29 $b2+ $a3
30 $c3 $a2
31 $c2 $a3
32 $c5+ $a2
33 $d3 $a1

White has finally cornered the black king in the “correct” corner.

34 $b4 $a2
35 $c1+ $a1
36 $e3 mate

The reader is recommended to practise this ending in order to become fully conversant with the winning technique.
Pawn(s) v Pawn(s)

King and Pawn v King

If the attacking king is so badly placed that it takes no part at all, then this ending becomes a straight race between the defending king and the pawn.

There are two possible ways to calculate the outcome of this race:

A. The Rule of the Square
Imagine a square on the chessboard with the pawn at one of the corners and the side equal to the pawn’s journey home. In diag 1, we have drawn such a square.

The defender will draw, if on his move he can get his king into the square, otherwise he will lose.

Thus in diag 1 Black to move plays:
1 ... ♦e4!
The king has entered the square so it is a draw.
2 a5 ♦d5
3 a6 ♦c6
4 a7 ♦b7 etc

But White to move wins with:
1 a5 ♦e4
2 a6 ♦d5
3 a7 ♦c6
4 a8♕+ and wins

B. Counting
An alternative method, equally good, is to count the number of moves which the pawn and king require to reach the queening square. Then White to move will win if his pawn requires fewer than the enemy king; otherwise it will be drawn.

Thus in diag 1 we count:
The pawn requires four moves to reach a8.
The king requires five moves to reach a8.

Therefore White to move wins - as we have already seen this is indeed true.

But after Black’s 1 ... ♦e4! the counts are equal so it is a draw.

Counting is a very important tool in the ending. Personally I (JS) find A is an easier method; but B is also perfectly okay. However:

C. “Analysis”
“I go there, he goes there, now I go there, where is he now? ...” This is a method much beloved of beginners but we do not recommend it.

Diag 1a: A Slight Modification
When the pawn is on the second rank, then in view of its ability to make a jump, you must imagine that the pawn is already on the third rank.

Thus in diag 1a we draw a square as though the pawn were on a3:

White to move wins with 1 a4!.
Black to move draws with 1 ... ♦f3!. 
Pawn(s) v Pawn(s)

**Diag 2** is the fundamental position of king and pawn vs king and, it could well be argued, the fundamental position of endgame theory as a whole.

It is "zugzwang".

White to move can only draw.

But Black to move loses.

**White to move:**

1. d7+ d8
2. d6

This is the only move to protect the pawn but now it is stalemate.

Instead of 1 d7+ White might try to mess around a bit; but as long as Black always retreats his king in front of the pawn then no harm can befall him, e.g.

1. d5 d7
2. e5 d8!

But not 2 ... e8?? (or 1 ... c8??) 3 e6 d8 4 d7 and wins.

3. e6 e8 etc.

**Black to move:**

Here Black to move must choose the right square for his king. As we have already seen, correct is 1 ... d8!

**Diagram 2a:**

Here Black to move must choose the right square for his king. As we have already seen, correct is 1 ... d8!

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1. d7+ d8
2. d6

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2. d6

This is the only move to protect the pawn but now it is stalemate.

Instead of 1 d7+ White might try to mess around a bit; but as long as Black always retreats his king in front of the pawn then no harm can befall him, e.g.

1. d5 d7
2. e5 d8!

But not 2 ... e8?? (or 1 ... c8??) 3 e6 d8 4 d7 and wins.

3. e6 e8 etc.

**Black to move:**

Here Black to move must choose the right square for his king. As we have already seen, correct is 1 ... d8!

**Diagram 2a:**

Here Black to move must choose the right square for his king. As we have already seen, correct is 1 ... d8!

**White to move:**

1. d7+ d8
2. d6

This is the only move to protect the pawn but now it is stalemate.

Instead of 1 d7+ White might try to mess around a bit; but as long as Black always retreats his king in front of the pawn then no harm can befall him, e.g.

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Here Black to move must choose the right square for his king. As we have already seen, correct is 1 ... d8!

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1. d7+ d8
2. d6

This is the only move to protect the pawn but now it is stalemate.

Instead of 1 d7+ White might try to mess around a bit; but as long as Black always retreats his king in front of the pawn then no harm can befall him, e.g.

1. d5 d7
2. e5 d8!

But not 2 ... e8?? (or 1 ... c8??) 3 e6 d8 4 d7 and wins.

3. e6 e8 etc.

**Black to move:**

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Here Black to move must choose the right square for his king. As we have already seen, correct is 1 ... d8!

**White to move:**

1. d7+ d8
2. d6

This is the only move to protect the pawn but now it is stalemate.

Instead of 1 d7+ White might try to mess around a bit; but as long as Black always retreats his king in front of the pawn then no harm can befall him, e.g.

1. d5 d7
2. e5 d8!

But not 2 ... e8?? (or 1 ... c8??) 3 e6 d8 4 d7 and wins.

3. e6 e8 etc.
Pawn(s) v Pawn(s)

Black to move:

Since White has the opposition the black king must give way.

1 ... $\not e7$

Or 1 ... $\not f7$ 2 $\not h6$.

2 $\not f6$! $\not g8$

3 $\not g6$

But not 3 ... $\not h8$?? or 3 ...

$\not f8$?? (see diag 2).

4 $\not h6$ $\not h8$

5 $g7+$ $\not g8$

6 $\not g6$ stalemate

The white pawn will queen only if it is escorted through by the king. But in order to escort it, the white king must get in front of the pawn and seize the opposition; otherwise we will get a position like diag 2a where Black draws by choosing the right square for his king.

White to move:

1 $\not f2$

Or 1 $\not d2$, but he must on no account advance the pawn. White now just has time to get his king in front of the pawn and is therefore able to win.

1 ... $\not f8$

Black takes the so-called “distant opposition” - the kings face each other an odd number of squares apart and the opponent is to move. But here that does not help him since by advancing his king, White gets a “reserve tempo” with his pawn.

2 $\not f3$ $\not f7$

3 $\not e4$ $\not e6$

Black has the opposition, but White has the reserve tempo move.

4 $e3!$ $\not d6$

Black to move:

Winning again as in diag 3.

White to move:

Or 4 ... $\not f6$ 5 $\not d5$ etc.

5 $\not f5$ $\not e7$

6 $\not e5$!

But not 6 $e4$? $\not f7$ and Black takes the opposition and draws.

6 ... $\not d7$

7 $\not f6$ $\not e8$

8 $e4$ $\not f8$

9 $e5$ $\not e8$

10 $\not e6$! and wins as in diag 3.

But not 10 $e6$?? $\not f8$ 11 $e7+$ $\not e8$ 12 $\not e6$ stalemate.

Black to move:

1 ... $\not e7$

2 $\not f2$ $\not f6$

Or 2 ... $\not e6$ (which also draws since the white king cannot go to e2). But not 2 ...

$\not d6$?? 3 $\not f3!$ $\not e5$ 4 $\not e3$ when White gains the opposition and wins.

3 $\not f3$ $\not f5$

4 $\not e3$ $\not e5$

5 $\not d3$ $\not d5$

6 $e3$

Or 6 $e4$+. The white king cannot make any headway so it is a draw.

6 ... $\not e5$

7 $e4$

White can never do any better than diag 2a and so it is
Pawn(s) v Pawn(s)

When the attacker has a rook's pawn then his winning chances are drastically reduced. This is because the defender will always draw if he can get his king in front of the pawn - h7 will always lead to stalemate whether the black king is on g8 or h8.

White can win only if:

a) The pawn queens immediately - the black king is outside the square; or
b) He can “shoulder” the enemy king away from the queening square with his own king.

White to move:
1 \( \text{g7!} \)
The only move shouldering the enemy king off.
1 ... \( \text{e6} \)

Black to move:

King and Two Pawns v King

The ending of king and two \( \text{v} \) king is usually a very simple win. Even in the absence of their own king, two pawns can often defend each other. In these two half diagrams we can see the most common instances of this.

Diagram 7b
Black cannot take the b-pawn since the a-pawn would queen immediately. Therefore he must mark time with 1 ... \( \text{a6} \) when White can bring up his own king, winning easily.

Diagram 7a

1 ... \( \text{h5} \)
Or 1 ... \( \text{f5} 2 \text{h5!} \).
2 \( \text{f5!} \)
The pawns defend each other. Black’s position is hopeless since if he ever tries ... \( \text{g7} \) then White can answer h5! If we assume that the white king is on a1:

2 ... \( \text{h6} \)
3 \( \text{b2} \)
4 \( \text{h5!} \)
5 \( \text{f6!} \) etc.
In these examples White has problems because of the doubled pawns.

Diagram 8a

If White had played 5 ♕c6 then the black king would now be on a7 and 8 ♕c7?? would lead to stalemate. Instead 8 b8♕+! ♕xb8 9 ♕b6 would win.

A rank further up, the position is drawn even with Black to move. White has not got “room” for a successful pawn sacrifice.

Diagram 8b

This position is decisive zugzwang. As we already know, whoever is not to move has the “opposition” and this decides the game.

White to move can make no progress, e.g.

Black has the opposition but, as we know from diag 3, with the white pawn already on the fifth rank this does not help him. White wins, e.g. 8 ♕e6 ♕e8 9 d6 ♕d8 10 ♕d7 ♕c7 11 ♕e7 etc.

White to move can still get nowhere. Black to move will lose his pawn exactly as in diag 9. But here, with the white pawn only on the fourth rank, that does not really matter.

White obviously cannot gain anything by delaying the capture of this pawn.

Black has the opposition. Here that is sufficient to draw cf diag 4, e.g. 8 ♕e5 ♕e7 9 d5 ♕d7 10 ♕d8! 11 ♕e6 ♕e8 12 ♕d7+ ♕d8 13 ♕d6 stalemate.
Pawn\(v\) Pawn

White's king has broken through and he will always win, with, or without the move. But he must be very careful about tempi.

White to move:
1 \(\mathbb{g}5\)

But not 1 \(\mathbb{e}6?\) \(\mathbb{c}5\) and Black wins!

1 \(\ldots\) \(\mathbb{c}5\)
Or 1 \(\ldots\) \(\mathbb{g}7\) 2 \(\mathbb{e}6\) etc.
2 \(\mathbb{e}6\)
This position is decisive

But White can win by using his king in two ways at once. The king can both approach the a-pawn, and shoulder off his opponent.

1 \(\mathbb{e}6\) \(\ldots\) \(\mathbb{c}5\)
2 \(\mathbb{d}5\)

With this move he keeps the enemy king away from the vital c7-square.

2 \(\ldots\) \(\mathbb{d}3\)
2 \(\ldots\) \(\mathbb{b}4\) 3 \(\mathbb{c}6\) \(\mathbb{a}5\) 4 \(\mathbb{b}7\) \(\mathbb{b}5\) 5 \(\mathbb{a}7\) \(\mathbb{c}6\) \(\mathbb{b}8\) etc.
3 \(\mathbb{c}6\) \(\ldots\) \(\mathbb{e}5\)

In the game (see above) Black was able to play 3 \(\ldots\) \(\mathbb{e}5\).

4 \(\mathbb{b}7\) \(\ldots\) \(\mathbb{d}5\)
5 \(\mathbb{a}7\) \(\ldots\) \(\mathbb{c}6\)
6 \(\mathbb{b}8\) and wins

This very famous study is another example of a multi-purpose king. At first sight, it seems quite incredible that White should be able to draw. But he does so by following a "king-path", whereby he approaches both the enemy h-pawn and his own, seemingly quite useless, passed pawn.

1 \(\mathbb{g}7!\) \(\mathbb{h}4\)
If 1 \(\ldots\) \(\mathbb{b}6\) 2 \(\mathbb{f}6!\) \(\mathbb{h}4\) 3 \(\mathbb{e}5\) \(\mathbb{h}3\) 4 \(\mathbb{d}6\) \(\mathbb{h}2\) 5 \(\mathbb{c}7\) and draws.

2 \(\mathbb{f}6!\) \(\mathbb{h}3\)
Or 2 \(\ldots\) \(\mathbb{b}6\) 3 \(\mathbb{e}5\) as in the previous note.

3 \(\mathbb{e}6\)
Or 3 \(\mathbb{e}7\).

3 \(\ldots\) \(\mathbb{h}2\)
4 \(\mathbb{c}7\) and draws
Ljubojevic - Browne
Amsterdam 1972

This position could well have been a study! In time trouble Black played:
1 ... f5?
2 ♕b4

And a draw was agreed. After 2 ... f4 3 ♕c3 both pawns will disappear, and if 2 ... ♕d5 3 ♕c3 ♕e4 4 ♕d2 Black also gets nowhere.

But Black could have won with the study-like, multi-purpose king move:
1 ♕d5!!
2 b4 f5 3 b5 f4 4 b6 ♕c6!

transposes into the main line.
2 ... ♕d4!
3 ♕a5
Or 3 ♕a3 f5 4 ♕b2 f4 5

But first, Black's task is to prevent the enemy king from attacking his pawn from the rear. This he does by the now familiar tactic of shouldering the enemy off.

1 ♕d4!!

If 1 f4? ♕c4 2 ♕e5 ♕d3 3 ♕f6 ♕e4=. 1 ♕e5 is similar: 1 ... ♕c4 2 ♕f6 ♕d4 3 ♕xg6 ♕e4 and the pawn perishes.

Finally, if 1 ♕d5 ♕b4!

White is outflanked again.
1 ... ♕c6

If 1 ... ♕b4 2 f4 and White has time to win the g-pawn, or 1 ... g5 2 ♕e5 ♕c5 3 ♕f5 ♕d5 4 ♕xg5 ♕e4 and, having taken the pawn on g5, White can easily support his f-pawn with 5 f4 (or 5 g4).

2 ♕e5 ♕c5
3 f4! and wins
 Pawn(s) v Pawn(s) 

and:

a) 9 wB2 d1 10 d4 c1W and White cannot play 11 d3;

b) 9 wA2 c3! (but not 9 ... d1? 10 e4 c1W 11 d3 and wins) 10 wA3+ d2 etc.

Instead White plays:

8 wD5+!! wE3

If 8 ... wC3 9 d4+ wB3 10 wA1 etc, or 8 ... wE2 9 wA2! and now the king cannot go to c3 so 9 d1 10 wE4 c1W 11 d3 and wins.

9 wE2! and wins.

9 wE2 was the only winning move. If 9 d4+ wE2 10 wB2 d1 etc, or 9 wH1 d2.

King and Two Pawns v King and Pawn

The white pawns protect each other (cf diag 7). White to move wins by first mopping up the black pawn and then queening his own. But, of course, the white king is outside the square of the pawn, (cf diag 1) so Black to move would win.

Black to move:

1 ... d3; 2 ... d2 and 3 ... d1B.

White to move

1 wE4 d3
2 wF3 d2
3 wE2 a8
4 wXd2

Now in order to win, White must sacrifice the a-pawn with a8w+ following this up with wA6 or wC6, e.g. 4 ... wB7 5 d3 wA8 6 wC4 wB7 7 wC5 wA8 8 wB5 wB7 9 wA8+ wXa8 10 wC6 (Or 10 wA6) 10 ... wB8 11 b7 wA7 12 wC7 etc.

The white king cannot possibly stop the enemy e-pawn. But his own pawns are far advanced and, even with Black to move, he can force a win.

1 ... e2
2 h7+ wH8

3 wF7 3 g7+ wXh7 4 wF7 would amount to the same thing.

3 ... wH7
4 g7+ wXh7
5 g8w+ wH6
6 wG6 mate

Protected Passed Pawns

An extra protected passed pawn will usually ensure the win. But there may be problems if the pawn is advanced either too far or too little.

Diagram 19

White can do no better than give stalemate, e.g.

1 ... wB8

Or 1 ... wC8 2 wC6 wB8 3 b7 wA7 4 wC7 stalemate.

2 wC6

Since he has a rook’s pawn, 2 b7 would be pointless.

2 ... wC8
3 b7+ wB8
Pawn(s) v Pawn(s)

Diagram 19a
White wins easily by sacrificing the f-pawn.
1  \( \text{f8} \)
2  \( \text{f7!} \)
If 2  \( \text{e6} \) 3  \( \text{f7+} \)  \( \text{f8} \) then White can still win with anything except 4  \( \text{f6??} \).

Grigoriev 1921
In contrast to diag 19, here the white pawns are not advanced far enough. There is no danger of stalemate, but White cannot get his king active for fear of \( \text{xc2} \). White to move would win easily with 1 \( \text{e2} \) or 1 \( \text{f2} \) but with Black to move it is more interesting.
1  \( \text{f3!} \)
Here it would be wrong to "take the opposition". If 1 ... \( \text{e3??} \) 2 \( \text{d1} \) and Black must choose between 2 ... \( \text{d4} \) 3 \( \text{e2} \) and 2 ... \( \text{f3} \) 3 \( \text{c1} \) \( \text{e3} \) 4 \( \text{b1} \) \( \text{d4} \) 5 \( \text{a2} \) and the king gets out on the queenside.
2  \( \text{d1} \)
If 2 \( \text{f1} \) \( \text{e3} \) 3 \( \text{g2} \) \( \text{d2}! \) and draws.
2  \( \text{e3} \)

Black has no square for his king and the white king will soon emerge via either \( \text{e3} \) or \( \text{a3} \).
4  \( \text{e4} \)
4  \( \text{c6} \) 5 \( \text{d2} \) etc.
5  \( \text{b2} \) \( \text{d5} \)
6  \( \text{a3} \) \( \text{c6} \)
7  \( \text{b4} \) etc.
In this position, in contrast to diag 21, White does not control e5. This gives the black king more freedom of movement. And by a surprising counter-attack against the white c-pawn he is able to force a draw.

1 ... \text{f}4
1 ... \text{e}4 is also okay.
2 \text{d}2 \text{e}4
3 \text{c}2 \text{d}5
4 \text{c}1 \text{d}6
5 \text{d}2 \text{e}6

5 ... \text{d}5 is also playable. In this position Black's main aim is to take the opposition as soon as the white king moves to the third rank. As long as he does this (and does not allow \text{a}4) then he will be okay.

6 \text{e}2 \text{f}6
7 \text{f}2 \text{e}6
8 \text{g}3

If 8 \text{f}3 \text{f}5 or 9 \text{e}3 \text{e}5 and as long as the black king stays in the pawn's square, b5 will never help.

8 ... \text{e}5!
The only move.

9 \text{g}4 \text{e}4
10 \text{g}3 \text{e}5

But not 10 ... \text{d}3? 11 \text{b}5 \text{xc}3 12 \text{b}6 \text{d}2 13 \text{b}7 \text{c}3 14 \text{b}8 \text{c}2 15 \text{b}2 \text{d}1 16 \text{f}2 \text{c}1 \text{e}2 mate. The white king was too near.

11 \text{g}4 \text{e}4
12 \text{g}5 \text{d}3

12 ... \text{e}5 was also okay. Black can never be forced to counter-attack; but why not?

13 \text{b}5 \text{xc}3
14 \text{b}6 \text{d}2
15 \text{b}7 \text{c}3
16 \text{b}8 \text{c}2

The position is drawn cf diag 16a, e.g.

17 \text{b}2 \text{d}1
18 \text{d}4+ \text{c}1
19 \text{f}4 \text{b}1
20 \text{b}4+ \text{a}2
21 \text{c}3 \text{b}1
22 \text{b}3+ \text{a}1! etc.

Protected Passed Pawn and Triangulation or Co-ordinate Squares

If the protected passed pawn is on the fifth rank then the stronger side always wins. In diag 23, White starts by forcing his king to the fourth rank.

1 \text{d}3 \text{d}5
2 \text{e}3 \text{e}5
3 \text{f}3 \text{d}5

Black cannot play 3 ... \text{f}5 since the king would leave the square of the b-pawn: 4 \text{b}6 and wins.

4 \text{f}4 \text{d}6
5 \text{e}4 \text{e}6
6 \text{d}4 \text{d}6
7 \text{c}4

Since the pawn controls c6 the king forces its way still further into the enemy camp.

7 ... \text{c}7
8 \text{c}5
8 \text{d}5 is quicker but this is more instructive.

8 ... \text{b}7 (23a)

Now 9 \text{b}6?? would be a terrible mistake since after 9 ... \text{a}6 10 \text{c}6 is stalemate. But if it were \text{Black to move} in diag 23a then he would clearly lose immediately, i.e. if "1" ... \text{a}7 2 \text{c}6 or 1 ... \text{c}7 2 \text{b}6+ \text{b}7 3 \text{b}5. We can state this more concisely:

Diagram 23a is a position of zugzwang.

White to move wins in diagram 23a by manoeuvring to lose a move: this he does by
using a very important technique: triangulation.

Coordinate Squares
In diagram 23b we have marked some numbers. At first these may seem rather baffling, but in fact the idea is really quite simple.

We already know that diag 23a is a position of zugzwang:
White to move: 1 b6?? c:a6=.
Black to move: 1 ... c:a7 2 c:c6 or 1 ... c:c7 2 b6+ wins.

Working from this we can see that the positions c:d6 vs c:b6 and c:d5 vs c:c7 are also zugzwang.

c:d6 v c:b6: 1 ... c:b7 2 c:c5!

But White to move cannot immediately make progress.

(c:d5 v c:c7: 1 ... c:b6 2 c:d6 or 1 ... c:b7 2 c:c5.

Again White to move cannot immediately make progress.

What about if the white king is on e5 or e6? Then in each case it can go immediately to either c6 or d6 and so the black king really wants to be on b7 in each case. Therefore both e5 and e6 correspond to b7 and we have marked them both “1”.

(In fact we could also have chosen “4” for these squares since in a sense Black has no square corresponding to either of them - there is nothing magical about these numbers - they are merely an aid).

The fact that both e5 and e6 correspond to b7 suggests an idea. White marches his king to one of these squares and then marks time. Black must move his king off b7 and thus loses the co-ordination. Unfortunately c6 is not available for his king and he is therefore lost.

One further point before the solution of diag 23a. The borders around the white and black zones are merely conventional aids to identify the main area of combat - they are nothing more than that.

The solution:

1 c:d5 c:c7
2 c:e6 c:b7 a winds.
3 c:e5!

Black is now in zugzwang and must lose the co-ordination, e.g.

3 ... c:c7
4 c:d5 c:b6
5 c:d6 c:b7
6 c:e5 and wins

Triangulation
If you do not like the idea of coordinate squares then there is a simpler way to look at this sequence.

In his 2nd-4th moves, the white king went along a triangle, thus losing a move. The black king was unable to emulate this, since c6 was unavailable to him. By losing a move, White transferred the move to Black and thus forced the win.
Pawn(s) v Pawn(s)  

Grigoriev 1933

White will win in this very interesting position if he can only activate his king. But he must be extremely careful about doing so.

If 1.b1 c3 2.c1 d4 and White is in zugzwang - whichever way his king goes the black king will follow, i.e. if 3.b1 d3 4.cxd3 cxb3! or 3.d1 d3 4.cxd3 cxd3!.

This zugzwang position is the key to the ending. As we have seen, White to play may only draw but it is not hard to see that Black to play would lose.

What about 1.b2? Black plays 1... d4 2.b1 (2.c1 c3 etc. as above) 2.d1 3.c4 cxb3 and if 4.c5? d2 and Black wins, so White must be content with a draw.

That leaves:

1.a1!! c3
1... d4 2.b2 and wins.
2.b1 b4
Or 2... d4 3.c1 and it is Black who is in zugzwang, viz. 3.d3 4.cxd3 and if 4... cxb3 5.d2 or 4... cxd3 5.b2.

Now there is obviously nothing better.

5.c1 and wins

Grigoriev 1936

This position may look like an easy win, but White has technical problems because Black can sometimes get counterplay by taking the g-pawn and then rushing his own h-pawn home. The key to this ending is the zugzwang position of diag 25a.

1.d2
Not 1.g4? h5!

2.e3
If 2.e2? e4 followed by h5 - h4. Or 2.d3? h5 3.e3 g4 and White is in zugzwang (see diag 25a).

2... h6
2... h5? 3.f3 or 2... g4 3.e4 etc.

3.f2!!
3.f3? h5 4.e3 (else Black will play 4... h4) 4... g4 etc. (see diag 25a).

3... g4
Or 3... e4 4.g2 h5 5.h3 f5 6.h4 g6 7.f5+ xf5 8.xb5 and wins.

4.e2!!

Not 4.e3? h5; nor 4.g2 h5 and 5... h4.

4... h5
Or 4... f5 5.e3 g4 6.e4 etc.

5.e3 (25a)

This is a position of mutual zugzwang. White to move could only draw for if 6.e4 xg3 and Black queens with check or 6.f2/e2 h4!. But, as we shall see, Black to move loses.

5... xg3
6.f5
Now Black does not get his check when he queens and White is able to win (cf diag Q1).

6... h4
7.f6 h3
8.f7 h2
9.f8 h1
10.g7+ h1
If 10... h2 11.f2!.
11.h6+ g2
12.g5+ h3
12... h2 13.f2; or 12... f1 13.f4+ g2 14.g4+ transposes.
Pawn(s) v Pawn(s)

Blockaded Passed Pawns and the Opposition - Critical Squares

If White is to move, then Black has the opposition and draws easily. With Black to move, conversely it is White who has the opposition. But here that does not matter since White cannot penetrate on the queenside - he has not got enough room over there (for the explanation of the Xs on the diagram see after 3 ... \textit{f7}!).

White to move:

1 \textit{f3} \textit{f7} \\
2 \textit{g3} \textit{e6}

But not 2 ... \textit{g7}?? 3 d5! and wins.

3 \textit{e3} \textit{f7}!

3 ... \textit{e7} would also draw (see diag 26 with Black to move). But 3 ... \textit{f5} would lose! After 4 \textit{e3} the black king cannot go to e5 and White manages to gain the opposition with his king on the fourth rank.

Why should it matter whether the white king is on the third or fourth rank when he gains the opposition? The point is that by gaining the opposition, a player forces the opposing king to give way. That is all very well, but it will only be important if he has to surrender an important square (or important squares).

In diag 26 we have put X's on a number of squares. These are the so-called “critical squares”, which the white king must reach in order to force the win. By inspecting the diagram you can see that White will win if he reaches any of the squares marked X (always assuming that the black king is not on the rampage at that stage).

4 \textit{e3} \textit{e7} \\
5 \textit{e4} \textit{e6} \\
6 \textit{d3} \textit{d7}

Not 6 ... \textit{d5}? 7 \textit{e3} \textit{e6} (7 ... \textit{c4} 8 \textit{e4} is also hopeless) 8 \textit{e4} and wins.

7 \textit{c4} \textit{c7} \\
8 \textit{b4} \textit{b7} \\
9 \textit{a5} \textit{a7} etc.

Black to move

1 ... \textit{f7}

2 \textit{d3}

If 2 \textit{f3} \textit{e7}, or 2 \textit{e4} \textit{e6} or 2 \textit{f4} \textit{f6}.

2 ... \textit{e7}!

3 \textit{c3} \textit{d7} \\
4 \textit{b4} \textit{c7} \\
5 \textit{a5} \textit{b7}

Black has defended the queenside - just in time - and so he draws.

Diagram 26a

Here zugzwang is decisive. White to play still cannot do anything but Black to play loses.

White to play:

1 \textit{f4} \textit{f6} \\
2 \textit{g4} \textit{e6}!

But not 2 ... \textit{g6}?? 3 d5.

Black to play:

1 ... \textit{d7}

If 1 ... \textit{f6} 2 d5! \textit{e7} 3 d6+!
Pawn(s) v Pawn(s)

and wins. Or 1 ... \text{e7} 2 \text{e5}.
2 \text{f5! e7}
3 \text{e5}

White takes the opposition again and forces his king further.
3 ... \text{d7}
4 \text{f6} and the c-pawn soon falls.

Here there is more space on the queenside and so even the distant opposition is decisive.

1 ... \text{g7}
2 \text{e3 f7}
3 \text{d3}
3 \text{d4 f6 4 d3} would also win.
3 ... \text{f6}

With the white pawns so far advanced this is an easy win, even if he has to move.
1 \text{e5}

But not 1 \text{c6+?} when 1 ... \text{bxc6+ 2 c5 d8 3 d6!} would win for White. But Black would play instead 1 ... \\
\text{c8! 2 d6 b8 3 d7 bxc6! and draws.}
1 ... \text{c8}

White wins by combining two threats.

a) To get his king to e4 after which ... \text{e6} will be answered with \text{h3!} gaining the opposition.

b) To play \text{h4} when Black cannot take it.

At the moment Black is defending against both of these threats. But in order to do this he is forced to play very exactly with his king. In fact as in diag 23, there is co-ordination between the kings and White wins by using triangulation to break this co-ordination.

E.g.
1 ... \text{d5}
Or 1 ... \text{f6 2 e4 e6 3 h3!}.
2 \text{g3 e5}
3 \text{h4 f6}

Or 3 ... \text{gxh4+ 4 xh4 f6 5 h5! and wins.}
4 \text{h5 and wins}

But White to move cannot make any immediate progress.

If 1 \text{e3 d5 2 d3 e5 3 e3 d5 etc.}

Or 1 \text{g3 f6} and 2 \text{h4?? only draws: 2 ... gxh4+ 3 xh4 g6 etc.}

Proceeding as in diag 23, we can make a co-ordinate square
diagram: diag 29a.

Black's problem is that he must meet either $\textcolor{red}{g2}$ or $\textcolor{red}{f2}$ with $\textcolor{blue}{e6}$. For $e5$ is the only square adjacent to both $e5$ and $f6$. And he must always answer $f3$ with $e5$ and $g3$ with $f6$.

Now the solution is quite easy.

1 $\textcolor{red}{g3}$
But not 1 $\textcolor{red}{g2}$? $\textcolor{red}{f4}$! 2 $h3$ $\textcolor{blue}{e5}$. White has lost his reserve tempo of $h2 - h3$ and can only draw, e.g. 3 $\textcolor{blue}{f3}$ $\textcolor{red}{f6}$! 4 $\textcolor{red}{e4}$ $\textcolor{blue}{e6}$ 5 $\textcolor{red}{f3}$ $\textcolor{red}{f6}$ etc.

1 ...
2 $\textcolor{red}{g2}$! $\textcolor{blue}{e6}$
3 $\textcolor{red}{f2}$! $\textcolor{red}{f6}$
Or 3 $\textcolor{red}{e5} 4 \textcolor{red}{f3}$!
4 $\textcolor{red}{g3}$! $\textcolor{red}{f7}$

If 4 $\textcolor{red}{e5}$ or 4 $\textcolor{red}{e6}$ then 5 $h4$! wins. 4 ...

Black to play: 1 $\textcolor{blue}{e5}$?

Here 1 $\textcolor{blue}{e5}$? $\textcolor{red}{c6}$ would lead to a draw, but White can win easily by going over to the kingside. As I emphasised before there is space on both sides of the pawns.

1 $\textcolor{red}{d3}$
But not 1 $d5$? $\textcolor{red}{c7}$! 2 $\textcolor{red}{c5}$
exd5 3 $\textcolor{red}{x} d5$ $\textcolor{red}{d7}$=.

1 ...
2 $\textcolor{red}{e3}$ $\textcolor{red}{d6}$
3 $\textcolor{red}{f3}$
But not 3 $f4$?? $\textcolor{red}{e5}$+!

1 $\textcolor{red}{d3}$ $\textcolor{blue}{e7}$

Or 1 ...
2 $\textcolor{red}{g5} 2 \textcolor{red}{d3} \textcolor{red}{f4}$
3 $e5$ $\textcolor{red}{f5}$
4 $\textcolor{red}{c4}$ $\textcolor{red}{e4}$
5 $\textcolor{red}{c5}$
6 $\textcolor{red}{f6}$ $\textcolor{red}{d6}$ and wins.

2 $\textcolor{red}{d3}$ $\textcolor{red}{d6}$
3 $\textcolor{red}{c4}$ $\textcolor{red}{c6}$
4 $e5$! $\textcolor{red}{b6}$
5 $d5$ $\textcolor{red}{c7}$
6 $\textcolor{red}{d6}$! and wins cf diag 19a.
In contrast to diag 30, there is now no room to break through on the kingside.

Black to play loses but White to play can only draw, i.e. diag 31 is zugzwang.

Black to play:

\[
\begin{align*}
1 & \ldots \texttt{f6} \\
& \text{Or } 1 \ldots \texttt{d6} 2 \texttt{f4} \texttt{e6} 3 \texttt{g5} \texttt{f7} 4 \texttt{h6} \texttt{f6} 5 \texttt{g5}+ \text{ etc.} \\
2 & \texttt{d5} \\
& \text{Not } 2 \texttt{f4}?? \texttt{g5}+. \\
2 & \texttt{e7} \\
3 & \texttt{f6} \\
4 & \texttt{d6} \\
4 \texttt{g5?? } \texttt{f7}= \text{ as Black has the opposition.} \\
4 & \ldots \texttt{f6} \\
5 & \texttt{g5+} \texttt{f7} \\
& \text{Or } 5 \ldots \texttt{f5} 6 \texttt{e7} \text{ etc.} \\
6 & \texttt{d7} \text{ and wins}
\end{align*}
\]

White to play:

\[
\begin{align*}
1 & \texttt{g4} \texttt{g6} \\
2 & \texttt{h4} \\
& \text{If } 2 \ldots \texttt{g5} \texttt{f4} \\
2 & \texttt{e5} \\
3 & \texttt{f4} \\
3 \texttt{g5} \texttt{d6} 4 \texttt{d4} \texttt{e6} & \text{ also achieves nothing.} \\
3 & \text{Or } 3 \ldots \texttt{f6} \\
4 & \texttt{f3} \texttt{f7}! \\
& \text{Black must aim to take the opposition as soon as the white king goes onto the e-file. (Here if it were his move then } \texttt{f6} \text{ would still be okay. The reason is that after } \texttt{f4} \text{ the backmated trick } \texttt{g5+} \text{ comes to Black's rescue.)} \\
5 & \texttt{e3} \texttt{e7} \\
6 & \texttt{d3} \texttt{d7} \\
7 & \texttt{c4} \texttt{c6+} \\
8 & \texttt{d4} \texttt{d6} \\
& \text{And there is no way to make progress.}
\end{align*}
\]

Tempo Moves

White must arrange to play \texttt{g6} when the black king is on \texttt{h8}.

Since the h-pawn has not moved, White can choose whether to play 1 \texttt{h3} or 1 \texttt{h4} and he therefore always wins.

\[
\begin{align*}
&+/+ \\
&B/W
\end{align*}
\]

Black to move:

\[
\begin{align*}
1 & \ldots \texttt{h8} \\
2 & \texttt{h4!} \texttt{g8} \\
3 & \texttt{h5} \texttt{h8} \\
4 & \texttt{g6} \texttt{hxg6} \\
& \text{Or } 4 \ldots \texttt{g8} 5 \texttt{g7} \text{ etc.} \\
5 & \texttt{hxg6} \texttt{g8} \\
6 & \texttt{g7} \text{ and wins.}
\end{align*}
\]

White to move:

\[
\begin{align*}
1 & \texttt{h3!} \\
& \text{But not } 1 \texttt{h4}? \texttt{h8} 2 \texttt{h5} \texttt{g8} 3 \texttt{g6} \texttt{hxg6} 4 \texttt{hxg6} \texttt{h8}=.
\end{align*}
\]

Diagram 32a

Here White does not have a choice and, if it is his move, then it is a draw, viz.

\[
\begin{align*}
1 & \texttt{h4} \\
& \texttt{h5} \texttt{g8} \\
4 & \texttt{g6} \texttt{etc.}
\end{align*}
\]

But, of course, Black to move would lose:

\[
\begin{align*}
1 & \ldots \texttt{h8} \\
2 & \texttt{h4} \texttt{g8} \\
3 & \texttt{h5} \texttt{h8} \\
4 & \texttt{g6} \texttt{etc.}
\end{align*}
\]
Grigoriev 1920

Unless White takes drastic action, Black will win by forcing his king to e3. He will then play ... f2+ and have a reserve tempo with the h-pawn to force White into decisive zugzwang.

But White to move can force a draw by making Black expend his reserve tempo prematurely.

A. Incorrect Passive Defence

1. $\text{f2}$ $\text{g4}$
2. $\text{f1}$ $\text{f4}$
3. $\text{f2}$ $\text{e4}$
4. $\text{e1}$

Or 4 $\text{f1}$ $\text{e3}$ 5 $\text{e1}$ $\text{f2}+ 6$ $\text{f1}$ $\text{f3} 7$ $\text{h4} (7$ $\text{h3} \text{g3} 8$ $\text{h4}$ $\text{h5}) 7 ... $ $\text{g3} 8$ $\text{h5} \text{h6}$ and wins.

4. ... $\text{e3}$
5. $\text{f1}$ $\text{f2}$

B. Correct Active Defence

1. $\text{f2}$ $\text{g4}$
2. $\text{e3}$ $\text{h6}$

Or 2 ... $\text{h5} 3$ $\text{f2}$ $\text{f4} 4$ $\text{f1}$. 3 $\text{f2}$ $\text{f4}$ 4 $\text{e1}$

But not 4 $\text{f1}?$ $\text{e3}$ 5 $\text{e1}$ $\text{h5} 6$ $\text{f1}$ $\text{h4} 7$ $\text{f1}$ $\text{f2}+ 8$ $\text{f1}$ $\text{f3} 9$ $\text{h3} \text{g3}$ and wins.

4. ... $\text{e3}$
5. $\text{f1}$ $\text{f2}$ 5 ... $\text{h5} 6$ $\text{f1}$ (but not 6 $\text{h3}$? - see diag 34) 6 ... $\text{h4} 7$ $\text{f1}$ $\text{f2}$ 8 $\text{h3}=$.

6. $\text{h3}! $ $\text{f3}$
7. $\text{h4}=$

This is a position of zugzwang. White wins by triangulation (cf diag 23).

1. $\text{d5}$ $\text{c8}$

If 1 ... $\text{b8}$ or 1 ... $\text{d8}$ then 2 $\text{d6}$ $\text{c8} 3$ $\text{c7}$ wins immediately. Thus $\text{d5}$ corresponds to $\text{c8}$.

2. $\text{c4}!$

As in diag 23, White moves backwards so as to put Black into zugzwang. 2 $\text{d4}$ would do just as well.

2. ... $\text{d8}$
3. $\text{d4}!$

Black is in zugzwang. If 3 ... $\text{c7} 4$ $\text{c5}$ so he must try:
3. ... $\text{c8}$

4. $\text{d5}! $ $\text{c7}$

Or 4 ... $\text{d8} $ $\text{b8} 5$ $\text{d6}$. 5 $\text{c5}$ and wins

On his 2nd, 3rd and 4th moves the white king described a triangle $\text{d5} - \text{c4} - \text{d4} - \text{d5}$. Black was unable to do likewise and therefore lost the coordination.

Diagram 34a

This is a coordinate square diagram (similar to diag 23b). As we saw Black loses because he has nowhere to go from d8 since d7 is inaccessible to his king.
Rather surprisingly, this position is zugzwang. The solution combines elements from the last few examples.

Black to play:
1 ... ♕c7
2 ♘d5 ♘d7
3 a5 ♘c7
4 ♗e6 ♗c6
5 a6!

This is a position of mutual zugzwang, i.e. White to play could only draw.
5 ... ♕c7
Or 5 ... ♗c5 6 ♘d7 ♞xc4 7 ♘c6! (shouldering) and wins.
6 ♗e7 ♗c6
Or 6 ... ♗c8 7 ♘d6 ♘d8 8 ♘c6 ♘c8 9 ♘e5 etc.
7 ♗d8 ♘d6
8 ♗c8 ♘c6
9 ♘b8 ♘b6
10 ♘c5+ and wins

White to play has various tries but nothing leads to a win, viz.

Finally, if the white a-pawn is already on a5 then, of course, the black king must retreat to b8 or d8, viz.
1 ♘a5 ♘c7
2 ♘c5 ♘d7
3 ♘c6+ ♘c7
4 a5 ♘d8!

Or 5 ... ♗b4 6 ♘d3 and Black is in zugzwang.
6 ♗e3! ♗a3
7 ♘e4 ♘xa2
8 ♘d5 and wins

Diagram 36a
Now the a-pawn is too exposed and White can only draw.
1 ♘b2 ♘a4
2 ♘a2 ♘a5
3 ♘b3 ♘b6
4 ♘c2 ♘c5
5 ♘d3 ♘a4
6 ♘e4 ♘xa3

And now both 7 ♘d5? ♘b4 and 7 ♘e5? ♘b3 lose (cf diag 11), so White must retreat with:
In order to win, White must either penetrate with his king or get the d-pawn moving.

This position looks very simple but contains the fiendish trap 1 d4? e4 2 c3 f5!.

In fact it turns out to be another example of corresponding squares (see diags 23b and 29a).

1 ... f4!

But not 1 ... e3 2 c3 and Black is in zugzwang and loses immediately. i.e. c3 v c3 is zugzwang.

Before proceeding further we should establish the other zugzwang positions:

\[ \text{d2 v f3. Black must let the white king round with 1 ... f4 2 e2.} \]
\[ \text{c2 v f4. c2 is next to c3 and d2; f4 is next to e3 and f3.} \]

What about the white king on b2 or b3? The black king must be next to e3 and f4, i.e. on f3.

We thus obtain diagram 37a.

White continues:

2 b3 c3
3 b2! 

Completing the triangulation begun on move 2. Of course c2 - b2 - b3 - c2 would have been just as good.

3 ... f4
4 c2 f3
5 d2 f4
6 e2 e5
7 e3 d5 (37b)

White now wins with a very typical endgame combination. He forces a queen one tempo ahead of Black and then wins the black queen with a skewer.

8 d4! c4
9 e4xb4
10 d5 c5

Or 10 ... a5 11 e5 b4 12 d6 and White queens with check, if 12 ... e6! does not help Black.

11 e5 b4
12 d6 c6
13 e6 b3
14 d7 b2
15 d8wb1w
16 c8+ and
17 b8+
Pawn(s) v Pawn(s)

“Crossing the Line”

If the queenside pawns were on the b-file then White would win very easily by abandoning his passed pawn (see diag 38a).

In the diagram, however, White can only draw since he will reach king and a-pawn v king with the black king getting to c8.

As we shall see, White wins analogous positions so long as his pawn has not “crossed the line” (i.e. the frontier a5 - c7 - h2 as depicted on the diagram).

Diagram 38

1. ... g6 2 f5 xg5 3 e5 f5 4 b5 e6 5 xa5 d7 6 b6 c8=

Diagram 38a

1 e5 2 g6! does not help White.

Diagram 38b

1 g6 g8! 2 d5 xg5 3 c5 f5 4 b5 e6 5 xa5 d7 6 b6 c8=

Diagram 39

By analogy with diag 38, there are also winning zones if the pair of rooks’ pawns is further up (or indeed down) the board.

Note that it is to “White’s” advantage to have his rook’s pawn further advanced.

Diagram 39a

The white g-pawn is too far advanced, so it is a draw.

Diagram 39b

Here the g-pawn is just on the line and White wins.
Pawn(s) v Pawn(s)

Diagram 39c
The b-pawn is outside the KP zone (it needs to be on b1!)

Note that if we shift the white pawn from b2 to c2 (i.e. $\text{d2, c2, h2 v d4, h3}$) then White wins easily: 1 $\text{e2 c3}$
2 $\text{f3 xc2 3 g3 d3 4 xh3 e4 5 g4 etc.}$

A practical example:
White to play wins with 1 a5!.
But Black to play draws with 1 ... a5!.

N.B. The further advanced the white rook’s pawn, the larger is the winning zone.
In both diagrams White wins by carefully hoarding tempi.

1 a3!

But not 1 a4? c7? (1 ... c7? 2 a5 wins) 2 a6 (now both 2 c5 and 2 a5 are clearly hopeless) 2 ... c6 3 c7 c8=.

1 ... c7
2 a6 c6 is no better.

4 a7 c6
5 b8! and wins, viz. 5 ... d6 6 b7 c5 7 c7 xc4 8 xb6 b4 9 a5.

Grigoriev 1936

White has to decide which way to go with his king. It looks as if this should not be important. But in fact one way wins whilst the other only draws.

The point is this:

a) In order to make progress, White has got to advance his forward f-pawn.

b) One of Black's main defensive tries will then be to block with ... f6 or ... f5.

c) White must then win by penetrating with his king.

d) Clearly this is easier via the queenside/centre.

e) But if Black's king is already well placed in the centre then the white king will get blocked.

Therefore, paradoxically, White goes first to the less important side, the kingside. If Black then blocks the pawns, White will get his king to a good square on the queenside. Moreover, the black king will not operate effectively on the cramped kingside.

A.

1 e4 e6
2 f4? 2 f4 still won.

2 ... f6!

This is a position of mutual zugzwang - White to play is unable to win but Black to play would clearly lose, e.g.

If 3 f5+ d6 4 f4 d5 5 g3 e5! 6 g4 e4 7 f3+ e5 (zugzwang)

Or 3 f3 f5! 4 e3 d5 5 d3 c5 6 e3 d5 7 f3 e6! (but not 7 ... d4? 8 g2! d5 9 h3! and White wins) 8 g3 f6 9 h4 g6=.

B.

1 g4! g6
2 f4 f6

If 2 ... f5+ 3 f3 f6 (3 ... h5 4 e2!) 4 e3 e6 5
**Technical Ideas and Procedures**

In this short section, we examine some of the technical ideas which underlie all pawn endings.

---

**Pawn(s) v Pawn(s)**

\( \text{white} \) \( \text{black} \)

\( \text{K}d4 \text{K}d6 \text{f3 and wins.} \)

Or 2 ... \( \text{Kf6} \) 3 \( \text{f5} \ \text{Ke5} \) 4

\( \text{Kg5} \ \text{Kd5} \) 5 \( \text{f6} \) (5 \( \text{Kf6} \ \text{Ke4} \) 5

... \( \text{Ke5} \) 6 \( \text{f3} \ \text{Ke6} \) 7 \( \text{f4} \) and wins.

3 \( \text{f5}+ \)

3 \( \text{Kf3} \ \text{Kf7} \) 4 \( \text{f5} \ \text{Ke7} \) 5

\( \text{Ke4}! \) transposes to the text.

3 ... \( \text{Kf7} \)

4 \( \text{Kh5} \ \text{Kg7} \)

\( \text{K}d4 \text{K}d6 \text{f3 and wins.} \)

5 \( \text{f3}! \ \text{Kh7} \)

6 \( \text{g4} \ \text{Kg7} \)

Or 6 ... \( \text{Kh6} \) 7 \( \text{f4} \ \text{Kf4} \) 8 \( \text{Ke3}! \).

7 \( \text{f4} \ \text{Kh6} \)

7 ... \( \text{Kf7} \) 8 \( \text{Ke4} \ \text{Kb7} \) 9 \( \text{Kd5} \)

\( \text{K}d7 \) 10 \( \text{f4}! \).

8 \( \text{Ke3}! \ \text{Kh5} \)

9 \( \text{d4} \ \text{Kg5} \)

10 \( \text{K}e4 \) and wins.

---

**Reserve Tempi**

It often happens that there is zugzwang on one side of the board, whilst both players strive to exhaust the opponent's moves on the other.

Diagram 43

White's king is nearer the kingside but it is his move. If Black plays correctly, then he will force his opponent into zugzwang, e.g.

\( 1 \text{f3}+ \text{hx6} \) would be similar.

Nor does 1 \( \text{g3} \) help, e.g. 1 ...

\( \text{g6} \) 2 \( \text{f4} \) (2 \( \text{h4} \ \text{f5}! \), 2 \( \text{f3} \ \text{h6}! \), 2 \( \text{g4} \) 3 \( \text{h6} \) 2 ... \( \text{h5} \) 3 \( \text{h3} \) \( \text{f6} \) 4 \( \text{g4} \) \( \text{h4} \)

5 \( \text{f5} \) \( \text{g5} \) etc.

Black can try:

A.

1 ... \( \text{f6} \) 2 \( \text{f4} \ \text{f5} \)

3 \( \text{h3} \ \text{h6} \)

4 \( \text{g4}! \)

\( \text{Of course not 4 \( \text{h4} \) \( \text{h5} \) 5 \( \text{g3} \).} \)

4 ... \( \text{g6} \)

5 \( \text{g5}! \ \text{hxg5} \)

Not 5 ... \( \text{h5} \) 6 \( \text{h4} \).

6 \( \text{fxg5} \ \text{f4} \)

B.

1 ... \( \text{h6}! \)

2 \( \text{f4} \ \text{h5} \)

3 \( \text{f5} \ \text{h4} \)

4 \( \text{g4} \ \text{hxg3} \)

4 ... \( \text{g5} \) is also good.

5 \( \text{hxg3} \ \text{g5}! \)

6 \( \text{f6} \)

6 \( \text{g4} \) \( \text{f6} \) is no better.

6 ... \( \text{g4} \)

7 \( \text{d5} \ \text{xb3} \)

and wins by a tempo.

Diagram 43a

If we "move the queenside up a rank", however, then everything changes:

1 \( \text{f4} \ \text{h5} \)

Black forces "zugzwang" but White has two extra tem-
Pawn(s) v Pawn(s)

pi: his king is one move nearer the kingside, the black pawn one further from queening.

With the white king further advanced 1 ... f5 was not so bad, viz. 2 h3 h6 3 g4 g6 4 g5 hxg5 5 fxg5 f4 6 e4 d4 f3 7 e3 e4 b4 h4 c3 c5! 9 h5 b4 10 hxg6 b3 etc. But, of course, White is better in this line too.

2 f5 h4
3 g4 hxg3
4 h4 g4
5 f5 h5
6 f4 g4
7 hxg4 hxg4
8 f5 h4
9 f4 g5
10 f5 h5
11 f4 g6

Besides calculating the res serve tempi, we must also check when and if it could be zugzwang.

The Opposition, Triangulation and Corresponding Squares

In king and pawn endings it often happens that the two kings exert an invisible but potent force on each other, both trying to force the other to give way. The most common instance of this is the opposition.

The Opposition

We have already met this in many previous examples (e.g. diags 2-5, 9-10, 26-7 etc).

When the two kings face each other with one square in between, then whoever is to move will have to give way. The player not to move is then said to hold the opposition.

Diagram 45

In diag 45 we can see four different forms of the opposition

a) Vertical Opposition. This is the most common form.

b) Horizontal Opposition.

c) Diagonal Opposition.

This can easily lead to a) or b), e.g. if 1 ... f7 2 e5: a) or 1 ... e6 2 g6: b)

d) Distant Opposition. Here the kings are an odd number of squares apart. It is still a disadvantage to move first: With Black to move White can force his king to h1 or h3, e.g. 1 ... g1, g2, g3 2 e1, e2, e3: b) or 1 ... h3 2 e1! g2 3 e2 g3 4 f1 h2 5 f2.

In this "variation" Black
Pawn(s) v Pawn(s)

Capablanca 1921

White wins by taking the distant opposition and converting it into "full" opposition.

A.

1. $\text{f}2! \quad \text{g}7
2. $\text{f}3 \quad \text{g}6
3. $\text{f}4 \quad \text{g}5
4. $\text{f}5 \quad \text{g}4=

Not 4 $\text{d}5? \quad \text{f}5 5 \text{c}c5 \text{g}4=.

5. $\text{f}5 \quad \text{g}7

With the help of the opposition White has driven off the black king. Now both 6 $\text{d}5$ and 6 $\text{f}5 \text{h}6 7 \text{f}6 \text{h}7 8 \text{g}5 win easily.

B. 1 $\text{e}2! \quad \text{d}8

A much more subtle defence. If now 2 $\text{d}3? \text{d}7$ or 2 $\text{e}3? \text{e}7$ Black takes the opposition and draws, e.g. 2 $\text{e}3? \text{e}7 3 \text{e}4 \text{e}6 4 \text{f}4 \text{f}6! 5 \text{e}4 \text{e}6 6 \text{d}4 \text{d}6$ etc.

Instead White plays:

2 $\text{f}3! \quad \text{e}7

A "bypass". Having given way with 1 ... $\text{d}8$ the black king is unable to go to f7.

2 $\text{f}5 \quad \text{e}7

3 $\text{e}3!

Distant opposition as in A.

3 $\text{e}6

4 $\text{e}4$ etc, as in A.

Neustadt 1947

White can defend by taking the opposition with:

1 $\text{h}!!$

But not 1 $\text{f}1?! \text{d}2 2 \text{f}2 \text{d}3 3 \text{g}1 (it cannot go to f3) 3 ... $\text{e}3 4 \text{e}2 \text{e}2 5 \text{g}3 \text{f}1 6 \text{h}3 \text{f}2 7 \text{g}4$

1 ... $\text{g}2$ and wins.

1 ... $\text{d}2

1 ... $\text{g}4 2 \text{g}2! \text{d}2 3 \text{fx}g4=.

2 $\text{h}2 \quad \text{d}3

3 $\text{h}3 \quad \text{e}3

4 $\text{e}3 \quad \text{e}2

5 $\text{g}2=$

Triangulation

We have already seen several examples of this (cf diags 23, 29, 34, 37).

Triangulation occurs when one side's king moves along a triangle so as to lose a move. With his opponent unable to match him, he can transfer the move to his opponent thus gaining the opposition (or coordination).

Since diags 23, 29, 34 and 37 should explain this sufficiently, we have chosen a less static example here.

Diagram 48

Behling 1900

If 1 $\text{e}4? \text{c}5 2 \text{d}3 \text{e}8 3 \text{c}4 \text{d}7$ and White can make no progress. He therefore plays the "tempo move":

1 $\text{f}3! \quad \text{c}6
Pawn(s) v Pawn(s)

If 1 \( \text{c6} \) \( \text{e8} \) (1 \( \text{c5} \) 2 \( \text{c4}! \) comes to the same thing) 2 \( \text{c4}! \) \( \text{c5} \) 3 \( \text{c3} \) \( \text{d3} \) etc. White lost a move by playing \( \text{f4} \) - \( \text{f3} \) - \( \text{e4} \).

2 \( \text{f4}! \) \( \text{c5} \)
3 \( \text{f4}! \) \( \text{e4} \)

Actually, White's king did not describe a triangle in this case: \( \text{f4} \) - \( \text{f3} \) - \( \text{f4} \) - \( \text{e4} \). The reason is that Black also had a tempo to lose ... \( \text{c7} \) - \( \text{c6} \) - \( \text{c5} \).

The important thing is that Black's king is totally restricted - he cannot possibly lose a move since he has only a narrow walkway; whereas White's king can choose when to go to \( \text{e4} \).

4 \( \text{d3} \)
5 \( \text{c4} \) \( \text{e8} \)
6 \( \text{d6} \) \( \text{d2} \)
7 ... \( \text{f7} \) \( \text{d7} \) \( \text{d2} \) 9 \( \text{e8} \) \( \text{+} \)
8 \( \text{e6} \) \( \text{d1} \)
9 \( \text{f7} \) mate

Diagram 48a

Diagram 48a shows the coordination between the kings once ... \( \text{c5} \) has occurred. As we saw White was able to "take the coordination" by refusing to play his king to \( \text{e4} \) until the right moment.

\( \text{c4} \), \( \text{e4} \) vs \( \text{d7} \), \( \text{f7} \) are zugzwang, as is \( \text{d3} \) vs \( \text{e8} \).

Diagram 49

Ebnese 1935

White to move is able to advance his king far up the board. But in order to win he must play according to a number of zugzwang positions.

Following the Method of Corresponding Squares we first find the fundamental zugzwang positions.

a) Find the fundamental zugzwang positions.

b) Interpolate to find other positions of zugzwang.

This is not a topic which we can cover fully here - these positions are difficult and occur only very rarely.

But by working through one example we hope that we can provide a basis for the reader who is suddenly forced to tackle such a position. (See also diags 23, 29, 34, 37 where some simpler systems of corresponding squares occur.)

Diagram 49a

\( \text{d5} \) vs \( \text{d7} \). If 1 ... \( \text{c7} \) (or 1 ... \( \text{e7} \) 2 \( \text{c6} \) etc.) 2 \( \text{c5} \) \( \text{d7} \) 3 \( \text{c6} \) \( \text{e8} \) 4 \( \text{g7} \) \( \text{e7} \) 5 \( \text{h7} \) \( \text{f8} \) \( \text{g6} \) and wins.

\( \text{f6} \) vs \( \text{f8} \). Obviously this is the only square for the black king.

With the white king on \( \text{f5} \) Black must be able to answer 1 \( \text{f6} \) with 1 ... \( \text{f8} \) and 1 \( \text{e5} \)
What about if the white king is on e4? Then Black can defend with his king on either e6 or d8. With the king on e6 if 1...\textbf{e7}! or 1...\textbf{e8}!.

We thus get the fundamental zugzwang positions

\begin{align*}
&d5 \text{ v } d7 \\
e5 \text{ v } e7 \\
f5 \text{ v } e8 \\
e4 \text{ v } d8 \\
f6 \text{ v } f8
\end{align*}

It turns out that Black can always defend with his king on one of the four squares d7, e7, e8 and d8, only moving off there if the white king heads for b5 or goes to f6.

We can then extrapolate backwards, looking for which squares are next to which, to reach a set of zugzwang positions which can be recorded as in diag 49a.

For instance d4 is next to 1, 2 and 4 and is therefore a "3".

Diag 49a is a "corresponding square diagram" to record the information that we have discovered (obviously one could not use such a diagram during play; but it could be very useful during adjournment analysis).

Note that diag 49a doesn't record all the information we have gleaned, e.g. the zugzwang positions f6 v f8; d4 v d6; e4 v e6 have been omitted for purposes of clarity.

c8 and c7 are labelled in brackets since they are good defensive squares against rear positions but not against forward ones.

E.g. \textbf{f5} v \textbf{c8} and \textbf{e5} v \textbf{c7} are not zugzwang: 1...\textbf{f6}! in each case.

But \textbf{f3} v \textbf{c8} is zugzwang: 1...\textbf{e3}! 2...\textbf{e4} (or 2...\textbf{d4} \textbf{d6}!) 2...\textbf{d8} etc.

Now the solution of diag 49:

\begin{center}
<table>
<thead>
<tr>
<th>Eberse 1935</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 \textbf{d2}! \textbf{d8}</td>
</tr>
<tr>
<td>2 \textbf{e2} \textbf{e8}</td>
</tr>
<tr>
<td>3 \textbf{f3} \textbf{e7}</td>
</tr>
<tr>
<td>4 \textbf{e3} \textbf{d7}</td>
</tr>
<tr>
<td>5 \textbf{f4} \textbf{d8}</td>
</tr>
<tr>
<td>6 \textbf{e4} \textbf{e8}</td>
</tr>
<tr>
<td>7 \textbf{f5} \textbf{e7}</td>
</tr>
<tr>
<td>8 \textbf{e5} etc</td>
</tr>
</tbody>
</table>
\end{center}

White took the correspondence and held it according to diagram 49a.

This position is extremely difficult. But with the aid of diagram 49a it is not impossible!

\begin{center}
1.20.11:15
\end{center}
The Pawn Breakthrough

This is a vital weapon in all endings. But it is especially important in king and pawn endings. For without any other pieces to interfere, a sufficiently distant passed pawn will automatically become a queen.

**KP 50**

*Cozio 1766*

White easily creates an unstoppable passed pawn.

1. c5! bxc5
2. a5 c4
3. a6 c3
4. d1!

But not 4 a7?? c2 and wins.

1. c5! bxc5
2. a5 c4
3. a6 c3
4. d1!
5. d2 and wins

Black to move easily stops White with:

1... c5!

This wins easily but not 1... e4?? (or 1... e3??) 2 c5!.

Note that after 1... e3?? 2 c5 bxc5 3 a5 c4 White must play 4 d1! c3 5 d1 etc; but not 4 a7?? c3 5 d1 c2.

**KP 51**

This is a very famous example.

White to move forces a queen with:

1. b6 axb6
2. c6! bxc6

1... cxb6 2 a6!

1... cxb6 2 a6!

and White saves the game by meeting...

1. b6!

But not 1... a6? 2 c6! or 1... c6? 2 a6. And king moves could be met by 2 b6!

2. axb6 axb6
3. cxb6 cxb6

1... cxb6 2 a6!

2. c6! bxc6
3. a6

White saves the game by meeting...

1. b6!

But not 1... a6? 2 c6! or 1... c6? 2 a6. And king moves could be met by 2 b6!

2. axb6 axb6
3. cxb6 cxb6

And White saves the game by meeting...

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3. cxb6 cxb6

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And White saves the game by meeting...

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And White saves the game by meeting...

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And White saves the game by meeting...

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And White saves the game by meeting...

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But not 1... a6? 2 c6! or 1... c6? 2 a6. And king moves could be met by 2 b6!

2. axb6 axb6
3. cxb6 cxb6

And White saves the game by meeting...

1. b6!

But not 1... a6? 2 c6! or 1... c6? 2 a6. And king moves could be met by 2 b6!
Evaluating an Extra Pawn

An extra pawn should be enough to win in a pawn ending unless there is a good reason to the contrary.

### Averbakh

This position is a very easy win:

1. White centralises his king. Then he sets up a passed pawn on the queenside to deflect the enemy monarch. Finally the white king has a tasty meal on the kingside.

```
1. b4+ e5
2. e2
3. d3
```

3 b4 is also good of course.

```
3. ... c5
4. d4
```

Completing the first stage.

```
4. ... f5
Black's moves are almost irrelevant. White simply carries out his plan.
```

```
5. b5
6. b3
7. a4+
8. c4 g6
```

### Zapata - Speelman

**Mexico 1980**

This position arose out of a queen ending. It is much harder than the previous example since with the pawns only on one side of the board there is no question of deflecting the white king.

Black is just able to win by *penetrating with his king*. He forces the enemy king back and then finally gets to the white pawns by seizing the opposition using a reserve tempo.

```
1. ... g6
```

Not 1 ... h4? 2 h3 h5? 3 g2 g4 4 hxg4 hxg4 5 fxg4

```
2. f2 f5
3. e2 e5
4. d3 d5
```

Black has the opposition but for the moment he cannot force his way through.

```
5. h3
6. c3 h5 6 h3 (or 6 d3 g4) comes to the same thing.
```

```
5. ... h5
6. c3 c5
7. d3 d4!
8. d4
d4 10 xg5 (10 h4 gxh4 11 xf4 d3) 10 ... e3 11
```

If 8 e4 c4 9 f5 (or 9 h4 gxh4 10 xf4 d3 and White is in zugzwang) 9 ...

```
9. d4 10 xg5 (10 h4 gxh4 11 xf4 d3) 10 ... e3 11
```

```
10. xh5 xf3 and wins by a tempo.
8. ... b3
```

But not 8 ... h4?? 9 e4
c4 10 f5 d4 11 xg5
e3 12 g4! and wins. Black must keep control of g4 for the moment.
Pawn(s) v Pawn(s)

9 \( \textd{ed}3 \) \( \textd{eb}2! \)

Here White resigned. The point is that after 10 \( \textd{ed}2 \), Black can now play 10 ... \( \text{h}4 \) since the white king cannot go to \( \text{e}3 \) and therefore loses a tempo, viz. 10 ... \( \text{h}4! \) 11 \( \textd{ed}3 \) \( \text{c}1! \) 12 \( \text{e}4 \) \( \text{d}2 \) 13 \( \text{f}5 \) \( \text{cl}! \) 12 \( \text{e}4 \) \( \text{d}2 \) 13 \( \text{f}5 \) \( \text{e}3 \) 14 \( \text{g}4 \) \( \text{f}2 \) etc.

\( \text{e3} \) 14 \( \text{g}4 \) \( \text{f}2 \) etc.

Passive defence also obviously fails since the f3-pawn will soon fall (cf diag 9), i.e. if 10 \( \text{d}2 \) \( \text{h}4 \) 11 \( \text{d}3 \) \( \text{c}1 \) 12 \( \text{e}2 \) \( \text{c}2 \) 13 \( \text{e}1 \) \( \text{d}3 \) 14 \( \text{f}2 \) \( \text{d}2 \) 15 \( \text{f}1 \) \( \text{e}3 \) 16 \( \text{g}2 \) \( \text{e}2 \) etc.

---

Passed Pawns

Quite obviously, different passed pawns are more or less valuable. In general it is possible to say that:

A passed pawn gets more valuable the further it goes up the board - as long as it has adequate support.

"Outside passed pawns" are generally better than "inside passed pawns".

Protected passed pawns are usually better than either of the above.

---

**KP 55**

Although the black king is further advanced, White's outside passed pawn gives him a very easy win.

1 \( \text{a}3+ \)

1 \( \text{c}2 \) would do just as well.

1 ... \( \text{a}4 \)

1 ... \( \text{b}5 \) or 1 ... \( \text{c}5 \) would not help.

2 \( \text{c}3 \) \( \text{x}a3 \)

3 \( \text{xc}4 \) \( \text{b}2 \) 4 \( \text{d}4 \) \( \text{c}2 \) 5

\( \text{e}4 \) 6 \( \text{f}5 \) \( \text{e}2 \) 7

\( \text{gx}5 \) \( \text{f}2 \) 8 \( \text{xf}4 \) \( \text{gx}2 \) 9

\( \text{g}4 \) etc.

---

**KP 56**

Actually White would still win even with one tempo less:

1 \( \text{c}4 \) \( \text{c}2 \) 2 \( \text{d}4 \) \( \text{d}2 \) 3

\( \text{e}4 \) \( \text{e}2 \) 4 \( \text{f}5 \) \( \text{f}2 \) 5

\( \text{gx}5 \) \( \text{gx}2 \) 6 \( \text{g}4! \)

(zugzwang) and if 6 ... \( \text{f}2 \) 7

\( \text{hx}4! \) or 6 ... \( \text{h}2 \) 7 \( \text{xf}4! \).
Pawn(s) v Pawn(s)  

**Philidor 1777**

White's enormous protected passed pawn on c5 is invulnerable. Moreover, it seriously restricts Black's king which must stay in its square (cf diag 1).

White wins trivially by taking the h5-pawn: 1 \( \text{e}3 \text{e}5 
2 \text{f}3 \text{f}5 3 \text{g}3 \text{e}5 (or 3 ... \text{g}5 4 \text{c}6) 4 \text{h}4 \text{f}5 5 \text{xh}5 (cf diag 23) 5 ... \text{f}6 6 \text{g}4 \text{e}5 7 \text{g}5 \text{e}6 8 \text{f}4 \text{f}6 9 \text{e}4 \text{e}6 10 \text{d}4 \text{d}7 11 \text{d}5 etc.

![Diagram 57a](image)

*The black passed pawn is now nearer to the square of the white c-pawn. The black king can therefore take part in the defence of the g-pawn. And with correct play he can now draw.*

1 \( \text{e}3 \text{e}5 
2 \text{f}3 \text{f}5 
3 \text{g}3 \text{e}5!

But not 3 ... \text{g}6? 4 \text{g}4! zugzwang and wins.

4 \( \text{g}4 \text{f}6=

Black to move can still draw:

1 \( \text{e}3 \text{e}5 
2 \text{f}3 \text{f}5 
3 \text{g}3 \text{e}5!

**Pawn Majorities and the Creation of Passed Pawns**

Passed pawns do not just appear out of thin air. You have to work to create them. Sometimes a passed pawn can be manufactured by means of a combination - a pawn breakthrough cf diags 50-52 and diag 60 below etc.

But there is also a calmer procedure available. This is the *methodical creation of a passed pawn* through the evaluation of a "pawn majority".

**Tal - Durasevic**

**Varna 1958**

In diag 53, White won by creating an extra pawn on the queenside. In diag 58 the same sort of thing happens.

White has several important advantages:

a) His pawn majority of 3 v 2 on the queenside will be easier to convert into a passed pawn than Black’s more cumbersome 4 v 3.

Other things being equal, the nearer you are to creating...
A passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.

Passed pawn, the better.
Racing - The Struggle to Promote with Check

In the previous example, diag 58, White finally won by forcing his opponent's king onto a square where he could promote with check. We have already seen other instances of this, e.g. diag 14. Later on, diag 70 will be another excellent example.

Diagram 59

Grigoriev 1930

This is a famous study by Grigoriev. White wins by advancing his pawns in tandem.

1 f4!

Not 1 g2? b3 or 1 ... d5 with a draw; nor 1 h4 d5!.

1 ... b4

2 h4!

Not 2 g2?? a5! and Black wins!

2 ... d5

3 f5 c5

4 h5

Not 4 g2? d6.

4 ... d4

5 f6

Unfortunately, 5 g2 also wins here, for if 5 ... c4 6 f6 d3 7 f7 d2 8 f8+w d1w 9 wfl+! etc.

5 ... d6

6 h6 d3

7 f7 e7

8 h7 d2

9 f8+w+ xf8

10 h8+w and wins

Diagram 59a

In Pawn Endings, Averbakh and Maizelis suggest several ways of correcting this study to eliminate the dual 5 g2. None of them seems very satisfactory. It strikes me that the device employed in diag 59a, i.e. h2 - h3; add black pawn h2 will do very simply.

KP

Stoltz - Nimzowitsch
Berlin 1928

Black seems to be in trouble. But with an excellent breakthrough he completely turns the tables.

1 ... f4!

2 gxf4+

If 2 a5 d6!.

2 ... d6!!

On this square the king can hold up the enemy passed pawns for just long enough, e.g.

3 a5

3 f5 g3 4 f6 g2 5 f7 e7 etc.

3 ... g3

4 a6 c7

5 f5 g2

and wins
More Positional Advantages

**Better Pawn Structure**

Pawn structures can be deformed in a variety of ways: there are doubled pawns, isolated pawns and backward pawns.

A. Black's pawns are doubled.
B. Black's pawns are isolated.
C. Black's g-pawn is backward.

In each of the three cases A, B and C, Black is unable safely to create a passed pawn, i.e. the weak pawns are not working properly.

In a pawn ending the kings are obviously the most powerful single units. But one must also strive to make all of one's pawns work. Clearly it is a grave disadvantage if some of one's pawns are not working efficiently.

**Doubled Pawns**

Doubled pawns are usually okay defensively - as long as the enemy king cannot sit in front of them. But a pawn majority is often crippled by doubled pawns, i.e. it will be impossible to create a passed pawn.

Ed. Lasker - Molle
Berlin 1904

The game continued 1 ... h6?
2 f4! f6 3 g5 d4 and White resigned. But 1 ... h6? was a blunder since White should have played: 2 f6! gxf6 3 f4 d4 4 g5 fxg5 5 fxg5 e5 6 gxh6 f6 7 c2 (zugzwang) and wins.

The correct move was:
1 ... f6!
2 ... h6

Otherwise Black plays 2 ... h6! with a complete blockade.

2 ... gxf6
3 f4 d5
and wins easily.

A. Black's doubled pawns defend excellently. In the absence of the kings, White cannot create a passed pawn without giving Black one, further advanced, of his own.

E.g. after 1 c3 or 1 a3 Black takes and the two isolated pawns are restrained by the one black pawn on b5.

B. Here Black's pawn structure is disastrous. He quickly loses the f6-pawn and the game.

For example:
1 h3
But not 1 g4?? h6 2 xf6? stalemate.
1 ... h5
2 h4 f5 moves
3 xf6 etc.
Pawn(s) v Pawn(s)

Black can easily defend by setting up a passed pawn on the queenside. But how should he start?

A. The correct move is:

1 a6!

1 ... $\text{f6}$ is also okay, but not 1 ... $\text{b6}$ (see below).

2 f5+ $\text{f6}$

3 $\text{e4}$ a5

5 bxa5 bxa5=

B. But:

Botvinnik - Flohr
Moscow 1944

White's doubled b-pawns are perfectly good defensively on the queenside.

The most important features here are Black's kingside pawn majority and the white d-pawn.

On the move, White is able to cripple the black kingside majority and this gives a decisive advantage.

1 g4!

Now both ... f5 and ... h5 are effectively prevented. White's plan is to undermine the black pawn structure by playing h5. He will thus gain f5 for his king.

N.B. If the black h-pawn were on h7 then this plan could not succeed and Black would be at least equal.

Thus in the circumstances, the move ... h7 - h6 has drastically weakened Black's pawn structure!
Better King Position
Given that your king has not got to defend against rampant passed pawns then it is always an advantage to have it in an active position further up the board than the opposing monarch. (The previous example, diag 65, was a good example of this.)

Botvinnik 1952
White's only advantage is his active king; but it is sufficient for victory. His plan is to reach diag 66a on the move. First let us examine that position.

White to move wins easily with:
1 f5! g5
If 1 ... gxf5 2 gxf5 f6 (2 ... g8 3 f6) 3 e6.
2 e8! f6
3 f8 and wins

Note that since White is so much further advanced any Black "counterattack" is totally hopeless.

Black to move:
1 ... g8
2 d8
Or 2 d7, but not 2 f5?? gxf5 3 gxf5 g7=.
3 h7
If 2 ... g7 3 e8 d6 (3 ... g8 4 f5! g7 5 e7 etc.) 4 f5!

White wins by a tempo because his pawn started further up the board.

White's king is further advanced but he has yet to cause real damage. White wins with the following very typical plan:

a) He forces the enemy king to a passive position and his own to a very active one.

b) He undermines Black's queenside pawn structure gaining access to some critical squares.

c) He penetrates with his king, wreaking havoc.

1 b5!
1 d4? e6 leads nowhere.

1 c7
If 1 ... e5 2 a6 f5 3
Pawn(s) v Pawn(s)  

\( \text{Pawn(s)} \) v \( \text{Pawn(s)} \)

\( \text{f6} \) etc., White queens too quickly.

2 \( \text{a6} \) \( \text{b8} \)

The end of part a of the plan.

3 \( \text{a5!} \)

The second stage.

3 \( \text{bxa5} \)

If 3 ... \( \text{c7} \) 4 \( \text{xb6+} \) \( \text{xb6} \) 5 \( \text{b3!} \) and wins.

4 \( \text{xa5} \) \( \text{b7} \)

If 4 ... \( \text{c7} \) then simplest is

5 \( \text{a6} \) \( \text{b8} \) 6 \( \text{b3!} \) \( \text{c7} \) 7 \( \text{b4} \)

\( \text{b8} \) 8 \( \text{b5} \) \( \text{a8} \) 9 \( \text{b6} \) and wins.

5 \( \text{b5} \) \( \text{a6} \)

Or 5 ... \( \text{c7} \) 6 \( \text{a6} \) \( \text{b8} \) 7

b3! etc.

6 \( \text{a5} \)

The simplest; 6 \( \text{c5} \) \( \text{c7} \) 7

\( \text{d5} \) \( \text{d7} \) (7 ... \( \text{b6} \) 8 \( \text{e5} \)

\( \text{e7} \) 9 \( \text{b4} \)! also wins very easily.

6 \( \text{a7} \)

7 \( \text{b4}! \)

8 \( \text{b5} \) \( \text{axb5} \)

9 \( \text{xb5} \)

And White has the opposition (cf diag 9): 9 ... \( \text{c7} \) 10

\( \text{c5} \) \( \text{d7} \) 11 \( \text{d5} \) \( \text{e7} \) 12

\( \text{e5} \) \( \text{f7} \) 13 \( \text{d6} \) \( \text{f8} \) 14

\( \text{e6} \) \( \text{g7} \) 15 \( \text{e7} \) \( \text{g8} \) 16

\( \text{f6} \) \( \text{h7} \) 17 \( \text{f7} \) etc.

moves: \( \text{d2} \) - \( \text{d3} \) - \( \text{d4} \) - \( \text{c5} \) - \( \text{d6} \)

- \( \text{c7} \) - \( \text{b7} \) x \( \text{a7} \) x \( \text{b6} \) - \( \text{c6} \) - \( \text{b4} \) - \( \text{b5} \) - \( \text{b6} \) - \( \text{b7} \) - \( \text{b8} \).

Thus although White starts first his pawn only reaches the sixth rank after Black has queued.

3 ... \( \text{h4} \)

4 \( \text{f1} \) \( \text{h3} \)

5 \( \text{g1} \)

The completion of part a.

5 ... \( \text{e5!} \)

This excellent move practically paralyses White's kingside pawns by preventing 6 \( \text{f4?} \) exf4 7 exf4 \( \text{g4} \); nor is 6 \( \text{e4} \) very enticing.

6 \( \text{h1?} \)

6 \( \text{b5} \) was better or 6 \( \text{a4} \).

Now Black gets a chance to fix the enemy queenside pawns and leave himself a reserve tempo there. He would still have been winning even without this but on principle it should not have been allowed.

6 ... \( \text{b5!} \)

7 \( \text{g1} \) \( \text{f5} \)

Black starts part b of his plan - undermining the white kingside pawns.

8 \( \text{h1} \) \( \text{g5} \)

9 \( \text{g1} \) \( \text{h5} \)

\( \text{KP 68} \)

Cohn - Rubinstein
St. Petersburg 1909

This famous ending is an excellent example of better king position and pawn structure. Black wins with a plan very similar to White's in diag 67 above:

a) he forces his king to a very active position and White's to a very passive one.

b) He undermines White's kingside pawn structure gaining access to critical squares and weakening White's pawns.

c) He penetrates with the king and mops up.

1 ... \( \text{f6} \)

2 \( \text{d2} \) \( \text{g5} \)

3 \( \text{e2} \)

The first point is that White does not have time to counter-attack, i.e. if 3 \( \text{d3} \) \( \text{h4} \) 4 \( \text{d4} \) \( \text{h3} \) 5 \( \text{c5} \) \( \text{hx2} \) 6 \( \text{d6} \) \( \text{h5} \) 7 \( \text{c7} \) \( \text{b5!} \) or 7 \( \text{b5} \) \( \text{h4} \) 8 \( \text{c7} \) \( \text{b6!} \).

We could also have verified this by counting: Black takes nine moves to queen \( \text{g5 - h4 - h3 x h2 - g2 and h7 - h1w plus one defensive move b7 - b6 = 10. White takes 13 moves: d2 - d3 - d4 - c5 - d6 - c7 - b7 x a7 x b6 - c6, b4 - b5 - b6 - b7 - b8.} \)

Thus although White starts first his pawn only reaches the sixth rank after Black has queued.
10...g4

Another good plan is 10...

h4 11...g1 e4 12 fxe4 fxe4 13...h1 (if 13 f3 exf3 14 e4 g4 and Black is much too fast) 13...
g4 14...g2 h3+ 15...g1 f3 16...f1 g4 and wins. Note that Black did not need his reserve tempo ...a7 - a6 in this variation.

11...fxg4

In the game Cohn tried 11 e4 fxe4! 12 fxe4 h4 13...g1 g3 14 hxg3 hxg3 0-1 since if 15 f4 exf4 Black queens too soon and otherwise the e-pawn falls - see the column.

11...fxg4

Several endgame books give the variation 11...hxg4? 12...g1 f4 13 exf4 exf4 14...h1 g3? (14...f3! still wins because of Black's reserve tempo, viz. 15...g1...h4 16...f1...h5 17...g1...g5 18...h3 gxh3 19...h2...g4 20...h1...f4 21...h2...e4 22...xh3...d3 23...g4...e2 24...g3 a6!) 15...hxg3 fxg3 and the simplest is 16...g1! though even 16...fxg3 draws: 16...xg3 17...g1...f3 18...f1...e3 19...e1...d3 20...d1...c3 21 a4! a6 22 axb5 axb5 23...c1...xb4 24...b2=.

Returning to our main line (only two moves from diag 68a). This can easily transpose back into the game, e.g.

12.e4

Or 12...g1 e4 followed by ...

h4, ... g3.

12...h4

13...g1 g3

This is the actual position where Cohn resigned.

14...hxg3 hxg3

15...fxg3

If 15...f3 g2 16...f2...h2 or 15...fxf3 16 e5 f3 etc.

15...xg3

And the e-pawn soon falls.

As we have seen there are several ways of carrying out part b of the plan - but some care is required.

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**Defensive Ideas**

![Stalemate Diagram](image)

**Stalemate**

This is a very important defensive tool. Indeed diag 2 itself depends on stalemate. Sometimes the defender can find a stalemate defence in more complex positions.

*Chigorin - Tarrasch*

*Ostend 1905*

White played 1...gxf6? gxf6 2...g4...e4 but here he resigned. After 3...h5 4...xf5 4...h6 5...xh7 Black can play not 5...f5? 6...g6= but 5...

h5! and wins.

Maroczy pointed out that White does have a defence:

1...g4

2...g6!

3...h6

And Black has no way of proceeding since 3...

xf5 would be stalemate!
Theoretical Draw

**Nimzowitsch - Chigorin**
**Carlsbad 1907**

In this very interesting position Black played the weak 1 ... f5? and lost quickly after 2 exf5 fxe5 3 dx e5 d3 4 ef5 e3 5 dx e3 ef6 6 f5 1-0.

The main interest centres on the other move.

1 ... c6

White is then very close to victory, but Black is able to hang on with one of the main lines ending in an important theoretical draw.

2 h3!

Much the most dangerous.

If 2 h4 d3 e5 4 c5 f5 5 g5 hxg5 6 hxg5 d7 f7 f5 f4. Both sets of pawns are invulnerable.

2 ... d6

But not 3 ... e6? 4 c5 f5 g5 etc. - on h4 the pawn supports this admirably.

There are now two lines:

A.

4 h5 d6
5 g5 fxg5
6 fxg5 c6
7 g6 f6
8 exd5

Perhaps this is why Chigorin rejected 1 ... c6. But of course it is a theoretical draw (diag 19). For White can do no better than give stalemate, e.g.

8 ... g7 9 e6 g8 (9 ... f8 10 f6 g8 11 g7 h7 12 f7) 10 f6 f8 11 g7+ g8 12 g6.

B.

4 g5

This is more exciting. There now follows an extremely close race.

4 ... fxg5

If 4 ... hxg5 5 fxe5 6 d6? trying to avoid the race, then White wins: 6 h5 e7 7 h6 f7 8 h7 g7 9 gxh6+ (or 9 g6) 9 ... hxh7 10 xd5 g8 11 e6 f8 12 f7.

5 fxg5 hxg5
6 h5 f4
7 c3!

7 h6 g3 8 c3 d4+ is a simple draw, i.e. 9 f3 d3 10 h7 d2 11 e2 g2=.

8 f4 c6!
9 c4
10 e3
11 h6

Here Nimzowitsch concluded that White wins since if 11 ... c3? White queens with check. But a Soviet player, I. Romanov, found instead:

11 h7
Or 12 e3 c2.
12 d2=  

The Blockade

**Eliskases - Schmidt**
**Bad Oeynhausen 1938**

Although the position is very blocked Black is in great danger. For White has a most dangerous plan.

a) Play the king to a5 answering 1 ... a7 with a4. In view of White's reserve tempo f2 - f3, this will force the king to b6.

b) Undermine the black queenside pawn structure with a4, b5. Black must exchange twice on b5 and then answer ... c7.

c) Using the reserve tempo f2 - f3 White can force b6 and c6 after which the plan of
Pawn(s) v Pawn(s)

First let us observe this plan in action if Black does not react quickly enough.

1 ... \textcolor{red}{\textbf{d}7}
2 \textcolor{red}{\textbf{e}3} c7?

This is already a losing move – see B.

3 \textcolor{red}{\textbf{d}3} \textcolor{red}{\textbf{b}8}

If 3 ... a5 4 \textcolor{red}{\textbf{c}4} \textcolor{red}{\textbf{b}8} (4 ... a4 5 b5 wins easily or 4 ... axb4 5 \textcolor{red}{\textbf{x}b}4!) 5 \textcolor{red}{\textbf{b}3} a7 6 \textcolor{red}{\textbf{a}4} a6 7 f3! axb4 8 \textcolor{red}{\textbf{x}b}4 a7 9 a5 \textcolor{red}{\textbf{a}8} (if Black had not got the b7-pawn then he would draw with 9 ... \textcolor{red}{\textbf{b}7!) 10 \textcolor{red}{\textbf{b}6} and a4 - a5 - a6 wins easily.

4 \textcolor{red}{\textbf{c}4} a8
4 ... a5 transposes into the line above.
5 \textcolor{red}{\textbf{b}3} a7
6 \textcolor{red}{\textbf{a}4} (71a)

Black has two possibilities:

a) To submit to White’s plan:

6 ... a8
7 a5 a7
8 a4 a8

We should note that if the white f-pawn were on f3 then this whole plan would be suicidal. Black could play 8 ... b6+ 9 \textcolor{red}{\textbf{c}6}+ \textcolor{red}{\textbf{b}7} 10 b5 axb5 11 axb5 c5 and wins!

Here, of course, if 8 ... b6+ 9 \textcolor{red}{\textbf{c}6}+ \textcolor{red}{\textbf{b}7} then simply 10 f3.

9 \textcolor{red}{\textbf{b}6} \textcolor{red}{\textbf{b}8}

Part a is completed.

10 b5 axb5
11 axb5 cxb5
12 \textcolor{red}{\textbf{x}b}5 c7

As envisaged under part b.

13 f3! \textcolor{red}{\textbf{b}8}
14 \textcolor{red}{\textbf{b}6} c8
15 c6 \textcolor{red}{\textbf{c}6}

16 \textcolor{red}{\textbf{c}6} and wins

b) To seek counterplay:

6 ... b5+
7 \textcolor{red}{\textbf{x}b}6+

Of course he must take. If 7 \textcolor{red}{\textbf{b}3?} there is a total blockade and 7 \textcolor{red}{\textbf{a}5??} would even lose!

7 ... \textcolor{red}{\textbf{x}b}6
8 f3!

But not 8 \textcolor{red}{\textbf{b}3} c5=.

8 ... \textcolor{red}{\textbf{b}7}

If 8 ... c5 9 \textcolor{red}{\textbf{x}c}5+ \textcolor{red}{\textbf{c}5} 10 \textcolor{red}{\textbf{a}5} White queens too soon, e.g. 10 ... \textcolor{red}{\textbf{d}4} 11 \textcolor{red}{\textbf{e}4} \textcolor{red}{\textbf{g}7} 12 a4 \textcolor{red}{\textbf{x}f}3 13 a5 \textcolor{red}{\textbf{g}4} 14 \textcolor{red}{\textbf{b}5} \textcolor{red}{\textbf{f}3} 15 a6 g4 16 a7 g3 17 a8 \textcolor{red}{\textbf{g}2} 18 \textcolor{red}{\textbf{a}7}! If Black instead chose 14 ... \textcolor{red}{\textbf{b}3} then White would play 19 \textcolor{red}{\textbf{h}8}+ \textcolor{red}{\textbf{g}8} 20 \textcolor{red}{\textbf{f}6} g1t; 21 \textcolor{red}{\textbf{g}7}+ \textcolor{red}{\textbf{b}2} 22 \textcolor{red}{\textbf{g}1}+ etc.

9 \textcolor{red}{\textbf{b}3} c7
10 \textcolor{red}{\textbf{c}4} b6
11 a4 c7!

Slightly better than 11 ... \textcolor{red}{\textbf{b}7} 12 \textcolor{red}{\textbf{c}5} \textcolor{red}{\textbf{c}7} 13 a5.
12 \textcolor{red}{\textbf{c}5} b7
13 \textcolor{red}{\textbf{d}6} b6
14 \textcolor{red}{\textbf{e}6}
14 \textcolor{red}{\textbf{d}7} c5 15 \textcolor{red}{\textbf{x}c}5+ \textcolor{red}{\textbf{c}5} 16 \textcolor{red}{\textbf{c}6} also wins - White gets a won queen ending.

14 ... a5

Now 14 ... c5 lost outright - White has an extra tempo on the above note.

15 bxa5+ \textcolor{red}{\textbf{c}5}
16 \textcolor{red}{\textbf{d}6!} b6
17 a5+ and wins

Note in this line the constant possibility of White obtaining a- v c-pawns cf diag 55.

B.

Returning to diag 71 Black can draw if he takes immediate action. 

1 ... \textcolor{red}{\textbf{d}7}
Pawn(s) v Pawn(s)  

Or 1 ... a5 immediately. 
2  \( \text{e}3 \) a5! 
Now 3 bxa5 would merely block the position so White tries 
3  \( \text{d}3 \) axb4 
4  a4 
4 axb4  \( \text{c}7 \) 5  \( \text{c}3 \) b5! 6  cxb6+  \( \text{xb6} \) 7  \( \text{c}4 \)  \( \text{b}7 \) 8  \( \text{c}5 \)  \( \text{c}7 \) 9  f3  \( \text{d}7=\). 
4 ... b6! 
5  cxb6  c5 
6  \( \text{c}4 \)  \( \text{c}6 \) 
7  a5= 

Both sets of pawns are vulnerable - after 7 ...  \( \text{b}7 \) 8  \( \text{b}5?? \) is too slow and would lose.

Diagram 71b 

One further point. If the white a-pawn were on a2 then Black's defence line B would fail and he would be quite lost! 
E.g. 
1 ...  a5 
2  \( \text{e}3 \) axb4 
3  \( \text{d}3 \) b3 
4  a4! and wins 
Or 4 a3 and wins. 

Some Final Examples

KP 72 

Speelman - Cummings 
Brighton 1980 
Black has just recaptured on d5 with the e6-pawn - a difficult decision. 
White has the advantage since he can force his king to d4. 
However, Black should be able to hold the draw because: 
a) He can control e5 with ... f6 thus preventing the position  \( \text{d}4 \) vs  \( \text{d}6 \) from being zugzwang. 
b) The a-pawn is extremely valuable. In many variations Black can get counterplay by abandoning the kingside and playing ...  \( \text{xb3} \) followed by the advance of the a-pawn. 
Moreover, White cannot arrange to exchange the a-pawn since b4? will always be met by ... a4. 
However, in time trouble I succeeded in extracting a win from the position. 
1  c3 
To stop ... d4 or ...  \( \text{d}4 \). However, e.g. 1 g4 was also interesting since both these moves would still be bad. White would be greatly helped later if he still had the reserve tempo c2 - c3. 
1 ...  \( \text{d}6 \) ?! 
This could be necessary eventually. But he could also consider playing on the kingside with 1 ... h5. 
2  \( \text{d}4 \) f6? \( x \) 
2 ... h5! was better. If then 3 f5 f6 and White can never undermine e5 or 3 h3 f5! and Black holds the opposition. 
3  g4  \( \text{c}6 \) 
4  h3! < 
If 4 h4  \( \text{d}6 \) 5 g5 hxg5 6 fxg5 fxg5 7 hxg5 g6 and Black draws easily. 
4 ...  \( \text{d}6 \) ?! 
In time trouble Black fails to appreciate the danger. 4 ... g5! \( x \) drew easily since if 5 f5  \( \text{d}6 \) 6 c4 dxc4 7  \( \text{xc}4 \)  \( \text{c}6 \) Black has the opposition, or 5 fxg5 hxg5 (5 ... fxg5 6  \( \text{e}5 \)  \( \text{c}5 \) 7 b4+= wins) 6 c4 dxc4 7  \( \text{xc}4 \)  \( \text{b}6 \) 8  \( \text{d}4 \) (8  \( \text{d}5 \) actually loses!) 8 ...  \( \text{b}5 \) 9  \( \text{d}3!=\).
Pawn(s) v Pawn(s)

This is the losing move. Black could still draw with 5 ... g6! (the only move): 6 c4 dxc4 7 dx e 4 c 6 8 g5 fxg5 9 hxg5! hxg5! (9 ... h5 loses: 10 f5 d6 11 fxg6 e7 12 d5 f6 13 e5 g8 14 f4 f1 15 g3 g7 16 h3! etc.) 10 fxg5 b6 11 d5 b5= (Black queens first).

6 g5! hxg5
If 6 ... h5 7 g6 d6 8 f5 c6 9 c4 dxc4 10 dx e 4 d6 11 b5 e5 12 xa5 xf5 13 b4 xc6 14 b5 d7 15 a6! and wins.

Instead 6 ... d6 7 g6! is very similar.

But 6 ... fxg5 would make White's task somewhat harder: 7 fxg5 d6 8 gxh6 gxh6 9 h5 and:

a) 9 ... c6 10 a5 c 5 11 f6 d4 12 x d 4+ x d 4 13 g6 c3 and White answers 17 a2 with 18 h8 wins.

b) 9 ... a6 10 c4! (10 c5 a5 11 b5 e4 12 xa5 d3 13 b4 c2 is less clear) 10 ... dxc4 11 x c4 f5 12 b5 White wins by a tempo.

7 fxg5!

Not 7 hxg5?? d6 8 gx f6 (8 g6 f5) 8 ... xf6 9 f5 c6 10 c4 dx c4 11 xx c4 b6 12 b5 c5=.

7 ... fxg5
This, Black's 41st move, was in fact sealed.

8 hxg5 d6
9 g6 (72b)

By advancing the g-pawn, White has decisively improved his chances in the race which follows.

9 ... c6
Or 9 ... e6 10 c5 f6 (10 ... e5 11 b5 e4 12 xa5 d3 13 b4 c2 14 c5 wins easily - contrast the note to 6 ... hxg5. Now there are no rook's pawns) 11 d5 xe 4 12 xe 6! h7 (12 ... h6/ h5 13 c4 g5 ... 17 c8 g1 18 h8+ and 19 g8+.

This is a very typical variation.) 13 c4 g5 14 f5 and wins.

10 f5= c5
11 e6 d4
12 xd4+ xd4
13 x f7 c3
14 x g7 x b3
15 x f6 a4
16 g7 a3
17 g8=+ 1-0

This position arose in a county match and had to be adjudicated.

Clearly White is not worse; the question is merely whether he can force a win.

We can quickly eliminate 1 e4 since then Black can draw immediately: 1 ... dx e 4+ 2 xe4 xe4 3 e5 d7 4 f6 h5!.

1 f5? is dangerous only for White: 1 ... gx f5 2 gx f5 e5 and:

a) 3 f4 d6 4 g4 (4 e4=, but not 4 g5? e5 when White can only just force a draw: 5 f6! e6 6 f4 and if 6 ... x f6 7 e4 d4 8 e5+; or 6 ... h5 7 g5!; or 6 ... h6 7 f7! x f7 8 e5=) 4 ... e7! (4 ... e5?? 5 g5 - zugzwang - 5 ... d6 6 f6) 5 f4 f6 6 e4=.

b) 3 g4 d6 4 h5 (4 f4 h6 5 e4!) 4 ... e7 (4 ... e5?? 5 g5) 5 g5 f7 6 f4 f6 7 e4=.

54
The outside passed h-pawn was a potent force in all these variations.

If 1... e2 2 d3 d6 (2... h5? 3 f5!) 3 g5 (3 d4? h5) 3... c5 4 c3 c6 5 d4 d6=.

That leaves:

1... g3

A.

1... c5

This is the natural move but it loses. If 1... c4 2 h4 h6 (2... d4) 3 f5! wins.

2... h4 d4

If 2... h6 3 g5! wins easily.

3 exd4+ xd4

4 f5 gxg5 (73a)

4... e5 5 fxg6 hxg6 6 g5 and wins.

5 gxf5

Rather remarkably, this position is lost for Black. The problem is that g5 vs e5 is decisive zugzwang and Black cannot avoid this position on move.

5... d5

6 h5 d6

7 h6 e5

Or 7... e7 8 g7=.

8 g5! d6

Black was in zugzwang - obviously White to move could only draw.

If 8... d5 9 f6 h5 10 g5 (also 10 g7 h4 ... f8+ and 14 a8+!) 10... e5 11 f6 etc.

Or 8... h6+ 9 g6 h5 10 f6 etc.

9 f6 h5

10 g7 h4

11 f6 h3

12 f7 h2

13 f8+ (CHECK)

B.

Returning to diag 73 after 1 g3 Black does have another possibility:

1... g5!!

By sacrificing a pawn Black prevents 2 h4. If White takes then he will lose his passed f-pawn and the black king is sufficiently active to just hold the draw.

2 fxg5

2... f3 c4 e2 (3 fxg5 d3 see below: 3 f5 c5 4 e4 d6 5 e3 e5 6 exd5 xd5 and ... e5 ... h5=) 3... gxg4 4 exf4 d4 5 f3 c3 6 f5 (6 d2 d4) 6... d4=.

After 2 f5 c5 is even less dangerous than after 2 f3 c4 3 f5.

2... c4 (73b)

If Black is careful then he can draw this position, e.g.

3 d4

Not 3 h4?? d3 4 h5 xe3 5 h6 f4 6 xh7 xg5 and wins.

If 3 f3 d3 4 f4 then Black can simply play 4... e2 (also 4... c3/4... c4)

5 e4 dxe4 6 xe4 f2 7 f4 g2=

3... d3

4 f3

4 g6 hxg6 5 g5 d4=.

4... c3

Or 4... c4= but not 4... d2? 5 e4 dxe4+?? 6 xe4 e2 7 g6 hxg6 8 g5 and wins.

5 f4

5 e2 c2 or even 5... d4.

5... d3=

Thus diagram 73 really should be a draw with best play.
Knight v Pawn(s)

Knight v One Pawn

1. b7 d6+  
2. c7 b5+  
3. b6 d6  
4. a7 c8=  

A key motif that the knight must often use when combating a passed pawn. The fork allows the knight an extra route to defense.

And the pawn queens. A graphic illustration of the knight's proverbial helplessness against rook's pawns. (This is also the point behind a thematic tactic; with e5, Pa5 vs d8, Pb7 - 1 x b7.)

Zelman Sila 1941

1. h6 d6  
2. h7 f7+  
3. e7 h8  
4. f6++  

A basic win in which the king on f6 dominates both black pieces.

Grigoriev 1932

1. b4 h5  
2. c6  

Not 2 d5+? f3 (diagonal opposition).  
Or 2 ... h3 3 e5 h4 4 f4 g6+ 4 g4+ and the knight succeeds in halting the pawn on the sixth rank.  
3 a5!!  

Visually paradoxical, but since f1 is now the best square for the knight, easy to understand.

Black cannot prevent d2-f1 or e5-g4. (Not 4 b3? e3 erecting a king barrier. Similar to the diagonal opposition, the king negates the knight's two most active moves.)

Le Cavalier doit ouvrir de la force sur la diagonale d'opposition.

56
Knight v Pawn(s)

6 $\square f1++$

Another example of how the knight, despite its inherent clumsiness, can prove agile if it can create a dual route to a key defensive square.

Grigoriev 1938

1 $\square c7+$ $\square c4$
2 $\square e8$

Since the route via a3 is blocked, the knight heads for d2.

= 2 ... $\square c5$
Or 2 ... b3 3 $\square d6+$ $\square b4$ (to prevent $\square b5$-a3) 4 $\square e4$.
3 $\square f6$ $\square d4$

To prevent $\square e4$-d2. This diagonal opposition to the knight is a key motif and must be noted. It forces the knight to travel to reenter the relevant zone of the board and places the king three moves away from a possible check.

4 $\square e8$ $\square e5$
5 $\square c7$ $\square d6$

White has finally achieved a square with access to both defensive routes.

NP
5

1 $\square c7+$ $\square c4$
2 $\square e8$

Not 6 $\square b5+$ $\square c5$ 7 $\square c7$ b3
8 $\square e6+$ $\square c4$ $\square c4$

6 $\square e8+$

8 $\square f6$ $\square d4$
9 $\square e8$ b3
10 $\square d6$

Averbakh

At first sight the advanced connected pawns look very dangerous for Black, but he can still make a draw with accurate play.

1 ... $\square g6$!

The only way to draw. Not:

a) 1 ... $\square e8$ 2 f7+ $\square f8$ 3 e7+ $\square x e7$ 4 $\square d7$;
b) 1 ... $\square f3$ 2 f7 with e7+ and $\square d7$ to follow (if 2 ...

Knight v Two Pawns

Averbakh

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b) 1 ... $\square f3$ 2 f7 with e7+ and $\square d7$ to follow (if 2 ...
Knight v Pawn(s)

NP Belenki 1955
7 1 ♗d4 a3
    2 ♗e1+! ♗d2
    If the king moves to the b-
    file then 3 ♗d3=.
    3 ♗f3+ ♚c1

NP Prokes 1963
8 1 ♗h4 e5
2 ♗e6 e4
3 ♗f5 e3
4 ♗g4 e2

Knight v Three Pawns

NP Horwitz 1880, Averbakh 1954
9 1 ... ♗c6!!
    Alternatives let the win slip:
    a) 1 ... a2? 2 ♗e3+ ♗e4 3
   ♗c2 ♗d3 4 ♗a1 ♗d2 5
   ♗xa2 c4 6 ♗b3+ ♗c2 7
   ♗d4+ ♗d3 8 ♗b3=.
   b) 1 ... ♗d4 2 ♗d6 ♗d3 3
   ♗c4 ♗e2 4 ♗d6 ♗d1 5 ♗e4
   c4+ 6 ♗xb4 a2 7 ♗c3+. 2
   ♗c2 Or 2 ♗e3 ♗b5 3 ♗c4 a2
   (see also diag 11).
10 ♗e2+ Alternatives:
   a) 10 ♗a1? b2+ (10 ... ♗xe3??=) 11 ♗xb2 a1w+ 12
   ♗xa1 ♗xe3+.
   b) 10 ♗a4 c3+ 11 ♗xc3
   a1w+.
   c) 10 ♗b5 ♗d3 11 ♗a1
   ♗c2 12 ♗d4+ (12 ♗a3+
   ♗c3! 13 ♗b5 ♗d3 14 ♗b2
   c3+ 15 ♗xc3 a1w+) 12 ... ♗d2! (12 ... ♗c3? 13 ♗xb3!)
13 ♗b2 ♗d3 (13 ... c3+ 14
   ♗a1 b2+ 15 ♗xa2 c2 JT) 14
   ♗b5 c3+ 15 ♗xc3 a1w+.

This is Horwitz's position

NP 9a
2 ♗c2 ♗b5
3 ♗d6+ ♗a4
4 ♗c4 ♗b3+
5 ♗e3 a2
6 ♗b2 ♗b4
7 ♗e3 c4
8 ♗d5+ ♗c5
9 ♗e3 ♗d4 (9a)

58
Knight v Pawn(s)

**Averbakh 1954**

Here White manages to set up a blockade.

1. $\text{Na2} \text{Nd5}$
2. $\text{Nc4+ Ne4}$

Black can make no progress.

**Marble 1914**

If the position were one rank up, this move would lose to ... a2. Without this possibility the pawns cannot be blocked and Black wins.

2. $\text{...Na5}$

Or 2 ... $\text{Na7} 3 \text{Nc5 a3 4 Nb3! a2 5 Nb4 Nc6 6 Nb3}$

and the a-pawn falls.

**Möhring - Pribyl, Hradec Kralove 1977**

A practical example of the Averbakh fix of the Fine rule.

As Averbakh pointed out, all pawns need to reach the fifth rank to guarantee a win.

Fine's rule of two pawns is not enough, as demonstrated by Averbakh and in this example from practical play.

58. ... $\text{Nc3}$
59. $\text{Ne4}$
60. $\text{Nf4}$
61. $\text{Ne4}$
62. $\text{Nf3}$

Or 62 ... $\text{Nc3}$
63. e6+ $\text{Nc7}$
64. $\text{g5+}$

5. $\text{c3}$
6. $\text{b4+}$
7. $\text{c4}$

Or 4 ... $\text{a3 5 Nb3+ a4 6 Nc5+}$

A standard motif - a waiting move that allows the defender to transpose into a drawn pawn ending.

5. $\text{c3}$
6. $\text{xb3}$
7. $\text{xb3=}$

Black defends in accordance with the rule.

70. $\text{e3}$
71. $\text{d4}$
72. $\text{d5}$
73. $\text{c4}$

Now the blockade suffices to hold.

74. $\text{d4}$
75. $\text{d5}$
76. $\text{e4}$
77. $\text{f4}$
78. $\text{f3}$
79. $\text{g3}$
80. e6+

To stop the e- and g-pawns (from e8) if White tries to break through with g5.

83. $\text{h6}$
84. $\text{h5}$
85. $\text{h4}$

Nouveau de balancer, pour les blancs

Le c'est !

59
As we have seen, when the pawns reach the fifth rank they should win and this practical example provides no exception.

3 ... e7
Or 3 ... d6 e3 4 g3 f4+.

Much better is 5 ... g4 6 d5 e3 7 g1 f3 winning immediately. White gets no checks or chances of a blockade.

6 f5+ g4

Black has created a barrier that allows him to bring up his king and win. (Not 1 ... h2? 2 g2 f3 3 h1=.)
Knight v Pawn(s)

Knight and One Pawn v Pawn

\[ \text{NP} \quad \text{Knight and One Pawn} \quad \text{v} \quad \text{Pawn} \]

1. h3
   Or 1... g5+ g4=.
      1 ... g3
      2  e4 g3
      3 d4 f4
   Or 4 ... g2 5 g5 g3 6 e5.
      5 d5 f5
      6 c3!
      Not 6 f2 f4 7 e6 (or 7 d4 f3 8 e5 xf2 9 f4 e2! 10 g4 e3 11 xh4 f3=) 7 ... g3 8 f5 xf2

2. g3
   2 ... e4

3. e4
   After 1 ... c4 2 e4! White will lead play into the main note, i.e. 2 ... c3 (2 a3 a3 a2 or 2 b4 3 d4 a3 4 e4 b2 5 b4 a3 6 a4 xc1 7 xa3 c4 8 b4+-) 3 e3 transposing to the note to White's second move.
   2 ... c3?
   White should play 2 c3.
   2 ... b2 3 d2 a3 4 d3!! xa2 5 c2 (a position known even in the thirteenth century, and called the "Carvajal") 5 ... a1 6 c1 a2 7 b3 f3 d3 c3 4 d4 c4 5 c1! (The king works forward and the knight works from the rear. The knight belongs behind passed pawns in such endings.) 5 ... c6 d5 b2 7 c4 xc1 8 b4+-.

4. f3!
   Not 2 ... c3 2 c3 xc1 4 c3
   White is a tempo down from the winning line.
   4 ... a3
   5 b3 d2
   6 xa3 c3
   7 e5 1-0

With Black to move:
   1 ... g3!
   2 d1 f3!
   Not 2 ... f2 3 d2 f3 4 d3 f4 5 d4 f3 6 e5 xe3 7 f6+-.

3 d2 f2
4 d3 f3
5 d4 f4

\[ \text{W/B} \quad +/-. \]

18
Blackburne - Zukertort
Match 1881

1 ... f2! g5
   Or 1 ... e4 2 e2+.
   1 ... g3
   2 ... e4
   3 ... d2
   Or 3 ... d4 4 g2 e4 5 e2+.
   4 d3 f3
   5 d4 f4
   6 d5! xe3
Knight v Pawn(s)

Plachetka - Hardicsay
Stary Smokovec 1982

49 \text{e}1 \text{c}2
50 \text{d}2 \text{c}1
51 \text{e}2 \text{c}2
\frac{1}{2}-\frac{1}{2}

Another example of this helpless knight formation with one pawn each. The transfer of the white king to the white pawn is impossible. One factor is that advancing the pawn puts it on one of the worst squares for the knight, which needs three moves to protect it there.

Grigoriev 1933

White to move wins:
1 \text{a}2! \text{g}8
2 \text{g}6 \text{h}8
3 \text{b}4 \text{g}8
4 \text{h}7+ \text{h}8
5 \text{c}6 \text{a}2
6 \text{d}8 \text{a}1\text{w}
7 \text{f}7+ and wins

Black to move draws:
1 \ldots \text{g}8!

Gulko - Grigorian,
USSR ch 1974

A practical example of di-ag 20.

59 \ldots \text{h}6
60 \text{h}5 \text{h}7

Gulko - Grigorian, USSR ch 1974

A practical example of di-ag 20.

59 \ldots \text{h}6
60 \text{h}5 \text{h}7

Note that White only draws here because the knight has no squares to the left of the a-file.

With a c-pawn (\text{b}6 \text{e}5 v \text{b}6 \text{e}7) the knight could move to a7, and Black would win

W/B

NP

NP

NP
Knight v Pawn(s)

Averbakh 1955

1. g5 f7
2. b1 g7

Or 2... e6 3. g6 e5 4. h4 e4 5. h5 d3 6. h6 c2 7. h7 xbl 8. h8+-

3. d2! h7
4. f5! h6
5. e4 h5
6. d3 h4

With the black pawn less advanced and White's pawn more advanced, White's winning method usually involves releasing the passed pawn and using the bishop to win a promotion race. (See also diag 24.)

Nimzowitsch - Malishauskas 1992

1. g4 b4 g5
2. g2 h4
3. c2 g5
4. g3 h5
5. h4 g6
6. g4 h6
7. h5 g7
8. g5 h7
9. h6 g8
10. g5 h8

For example, 88... e7 89... d8+ e6 90... d6+.

Knight and One Pawn v Two Pawns

Pomar - Andersson 1972

1. g4

A clear example of the simplest knight and pawn against pawn winning process.

Otherwise... f3 absorbs the kingside pawns.

71... hxg4 0-1
72. h5 e4
73. h6 f4+
74. g3 f5
75. h7 g6

The knight is used as a source of tempi in what is a pawn ending at the other end of the board.
Knight v Pawn(s)

NP Reti and Mandler 1924
1 \( \text{Ng1} \) \( \text{Nd2} \).
If 1 ... \( \text{Nc3} \) 2 \( \text{Nf3} \) \( \text{e3} \) 3 \( \text{Nf1} \) \( \text{d2} \) 4 \( \text{c2} \) transposes.
2 \( \text{Nf3+} \) \( \text{d3}! \).
3 \( \text{Nf1} \).
Not 3 \( \text{Nf1}+ \) \( \text{e3} \) 4 \( \text{d2} \) \( \text{Nc3} \) 5 \( \text{b4} \) \( \text{e3} \) 6 \( \text{d5+} \) \( \text{e4} \) 7 \( \text{f6+} \) \( \text{e3} \) intending ... \( \text{f3} \)=.
8 \( \text{f1} \) \( \text{c2} \)!! transposes.

NP Hasek 1951
1 \( \text{f2} \) \( \text{f5} \).
2 \( \text{e3} \) \( \text{e5} \).
3 \( \text{c3} \)
Not 3 \( \text{f4} \) \( \text{f5} \) 4 \( \text{f3} \) \( \text{d4} \) and ... \( \text{e4} \)=.
4 ... \( \text{f5} \).
5 \( \text{d3} \) \( \text{f4} \).
6 \( \text{c4} \) \( \text{f3} \).
7 \( \text{d1} \) \( \text{e4} \).
8 \( \text{f1} \) \( \text{e4} \).
9 \( \text{h2} \) \( \text{f2} \).
10 \( \text{d2}! \) \( \text{d4} \).
11 \( \text{c4} \) \( \text{e5} \).
12 \( \text{f1} \) \( \text{e5} \).
This motif of forcing the passed pawn forward is slightly reminiscent of a line in Smyslov-Persitz (diag N71).

NP Averbakh 1980
1 \( \text{c4} \).
2 \( \text{g4} \).
Averbakh only gives this move but worth noting is 2 \( \text{g5} \) \( \text{d2} \) 3 \( \text{g4} \) \( \text{b3} \) 4 \( \text{g5} \)

NP M Kovacs - Ftacnik
Trnava 1979
1 \( \text{d6} \) \( \text{f2} \).
2 \( \text{f5+} \) \( \text{f3}! \).
Or 2 ... \( \text{f4} \) 3 \( \text{g3} \) \( \text{f3} \) 4 \( \text{f1} \) \( \text{f4} \) 5 \( \text{h2} \) \( \text{e3} \) 6 \( \text{g2} \) \( \text{e2} \) 7 \( \text{f1} \) \( \text{e1} \) 8 \( \text{g3} \) (zugzwang) 8 ... \( \text{h5} \) 9 \( \text{f3}! \) (again the technique of forcing the defending king far up the board, to create action in the opposite direction, is seen) 10 \( \text{f1} \) \( \text{f4} \) 11 \( \text{xf1} \) \( \text{xf1} \) 12 \( \text{g4} \).

Knight v Pawn(s)

Or 6 \( \text{g}2 \text{f}1 \text{w}+ \) 7 \( \text{xf}1 \text{g}4= \) 7 \( \ldots \) \( \text{g}3 \) 8 \( \text{h}5 \) \( \text{h}4 \).

6 \( \ldots \) \( \text{f}3 \)
7 \( \text{h}5 \) \( \text{f}4 \)
8 \( \text{g}3 \) \( \text{f}3 \)

Averbakh

1 \( \text{g}e5 \)

Not 1 \( \text{xf}5? \) \( \text{c}5 \).

1 \( \ldots \) \( \text{d}3 \) \( \text{d}4 \).

2 \( \text{e}1+! \)

White must avoid:

a) 2 \( \text{xf}5 \) \( \text{e}3 \) 3 \( \text{g}4 \) \( \text{e}4 \) intending \( \text{c}3, \ldots \) \( \text{d}5 \).

b) 2 \( \text{d}6 \) \( \text{e}3 \) 3 \( \text{xc}6 \) \( \text{f}3 \) 4 \( \text{d}5 \) \( \text{f}4 \) 5 \( \text{d}6 \) \( \text{g}2 \) 6 \( \text{d}7 \) \( \text{f}3 \) 7 \( \text{d}8 \) \( \text{f}2 \).

2 \( \ldots \) \( \text{c}4 \)

Or 2 \( \ldots \) \( \text{e}3 \) 2 \( \ldots \) \( \text{d}2 \) 3 \( \text{g}2 \) 3 \( \text{e}2+ \) \( \text{d}3 \) 4 \( \text{b}4+ \) \( \text{e}3 \) 5 \( \text{xc}6 \) \( \text{f}4 \) 6 \( \text{d}5 \) \( \text{f}3 \) 7 \( \text{e}5 \).+

3 \( \text{g}2 \) \( \text{d}3 \)

White places the knight behind the pawn.

9 \( \text{...} \) \( \text{c}4 \)
10 \( \text{f}4 \) \( \text{c}3 \)
11 \( \text{e}4 \)

Now the king relieves the knight.

11 \( \ldots \) \( \text{c}2 \)
12 \( \text{e}2+ \)

The knight stops the pawn.

Grünefeld - Rukavina

\[ \text{Belgrade GMA Open 1988} \]

65 \( \text{e}2 \) \( \text{h}3 \)
66 \( \text{c}7 \) \( \text{g}3 \)
67 \( \text{e}6 \) \( \text{g}2 \)
68 \( \text{e}5+ \) \( \text{g}3 \)
69 \( \text{f}3 \) \( \text{f}4 \)
70 \( \text{f}2 \) \( \text{e}4 \)
71 \( \text{g}xg2 \) \( \text{e}3 \)
72 \( \text{g}3 \) \( \text{b}4 \)
73 \( \text{g}4 \) \( \text{e}4 \)

Alternatively:

a) 73 \( \ldots \) \( \text{b}3 \) 74 \( \text{cxb}3 \) \( \text{d}3 \) 75 \( \text{d}2 \);

b) 73 \( \ldots \) \( \text{e}2 \) 74 \( \text{f}4 \) \( \text{d}1 \) 75 \( \text{d}4 \) \( \text{d}2 \) 76 \( \text{e}4 \) \( \text{c}3 \) 77 \( \text{d}5 \) \( \text{b}2 \) 78 \( \text{c}4 \) 79 \( \text{c}6 \).

Very thematic - knight behind the pawn, king circling to the other side of the pawn(s).

1-0
Knight v Pawn(s)

Averbakh

Here the knight is well-placed to force a blockade of the pawns on its own.

1...b3 f3

Liberzon - Benzion

Israel 1974

White's task is to bring the king to the pawn, and blockade the kingside with the knight. This should not be possible with vigilant defence.

47...g4 d6 48 h5 d5 49 g4 d6 50 c3 c5

Liberzon suggests 50...

e5! 51 e4 e6! (51...d5 52 f5d5 52 f3 (52 h5 d5) 52...d5 53 e3 g4=

Play might then continue 54 f4 h5 55 g3 (55 f5 g3) 55...e6 56 h4 d5 with mutual zugzwang.

51 f5 b6?

Black should play 51...d6!

52 e4 (52 e2 c5 53 d4 d5 54 b6 d6=) 52...c5= (Liberzon)

52 e6 c5

Or 52...g4 53 d5 g3 54 c4 g2 55 e2+ (Liberzon).

53 d7 b6

Or 53...g4 54 c7 g3 55 b6 g2 56 e2+

54 d6 h5

55 d5 h4

56 c4 g4

57 e2 1-0

After 57...h3 (57...g3 58 g2 59 h3+=) 58 g3 h2 59 h1 b7 60 c5 c7 61 b6+ b7 62 b5 b8 63 c6 c8 64 b7+ b8 65 g3 White wins easily.

Knight and One Pawn v Three Pawns

Rayner - Adams

London (Nat West) 1987

With the pawns paralysed, the knight has no difficulties despite the tenuous material balance.

56...c4+

57 d3 d6 58 e3 f5+

59 f2

Or 59 e2 f4 60 f2 e3 61 g1 g3+.

59...f4

60 g1 g3

61 h1 e3

62 f4 xf4

63 h2 f5

64 g1 g3

65 h1 e3

66 g1 xg2

67 h1 f4

68 g1 xh3+

69 f1 f2

0-1
Knight v Pawn(s)

**NP Beliavsky - Eingorn**

USSR ch, Lvov 1984

The knight is helpless against the advance of the pawns.

59 h4 \( \text{f}5 \)

64 g4 1–0

---

**NP Muñoz 1941**

The alternatives let the win slip:

a) 1 \( \text{c}7 \) c5 2 dxc5 d4 3 \( \text{e}3 \) \( \text{d}4+ \);

b) 1 \( \text{b}7 \) \( \text{d}6 \) 2 \( \text{b}6 \) \( \text{d}7 \) 3 \( \text{g}4 \) \( \text{d}6 \) 4 \( \text{e}5 \) e3 5 \( \text{f}3 \) e2

1 ... \( \text{e}7 \)

Also winning for White is 1

---

**NP Halasz - Borkowski**

Porabka 1987

Though the pawns look dangerous, the knight proves very nimble.

55 \( \text{f}6 \) c6

56 \( \text{g}8! \)

This looks like the wrong direction but e7 is the best defensive square for the knight.

56 ... \( \text{c}3 \)

Alternatively:

a) 56 ... e4 57 \( \text{e}1 \).

b) 56 ... \( \text{d}2 \) 57 \( \text{e}7 \) c5 (57 ...

Knight and One Pawn v Four Pawns

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67
Knight v Pawn(s)

Vitolins - Gleizerov
Uzhgorod 1988

Black's position looks grim but the a-pawn paralyses
White's forces.

41 d5

The white king cannot approach the a-pawn, and b5 is met by d6 and dxb5.

41 ... d5
42 b5 d6+
43 d4 c4

Or 44 dxa4 c3+.

44 ... d6
45 c5

For example, 52 ... e6 53 c5 e7 54 c6 e8=.

Knight and Two Pawns v Two Pawns

Vainerman - Timoshchenko
Norilsk 1987

This looks analogous to diag 20: 7 ... g2 (if instead 7 ...
8 e4 h4 9 f4 h3 10
9 g4 g2 11 h4+ or 7 ...
8 f4 d2 h4 9 d3 g4 10
9 e3 h3 11 f1 g2 12
e2 and wins, cf diag 17) 8
9 e3 f1 9 f4+ h4 10
g4 f2 11 xh4.

Khuzman and Vainerman.

Nunez - Valdes
Cuba 1990

This looks analogous to diag 17) 8
g3 f2 10 d3
g4 d3+ g5=.

Khuzman and Vainerman.

68
Knight v Pawn(s)

\[ \text{Mission accomplished: } 1-0 \]

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NP Boudre - Plachetka
Paris 1989

A practical example of task switching. The white king must escort the pawn, and the knight must blockade the black pawns.

1 ... b4
Or 1 ... a3 2 \( \text{c}d4! \) a2 3 \( \text{b}3 \)
\( \text{xe}7 \) 4 \( \text{d}3+ \).
2 \( \text{d}3 \) b3
3 \( \text{c}3 \) \( \text{d}7 \)
4 \( \text{d}4! \)

White misses his chance in the time scramble: 6 \( \text{e}5! \)

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NP Szabo - Groszpeter
Hungary 1984

1 a5 \( \text{bxa5} \)
Or 1 ... \( \text{c}4 \) 2 \( \text{a}6! \) \( \text{d}6 \)
\( \text{xb}6 \) h4 4 \( \text{c}5 \) h3 (4 ... \( \text{c}8 \)
5 \( \text{b}6+ \) ) 5 \( \text{a}7 \) \( \text{b}7+ \) 6 \( \text{b}4 \) h2
7 a8\( \text{w} \) h1\( \text{w} \) 8 \( \text{h}8++ \).
2 \( \text{b}6 \) \( \text{c}4 \)
3 \( \text{b}7 \) \( \text{e}5 \)
4 \( \text{b}8!! \) \( \text{xe}8 \)

An astonishing study-like move. Since the knight does not reach real control of \( \text{b}8 \) it loses. Not 4 \( \text{e}6+? \) \( \text{e}8= \) when Black threatens to jettison his pawns and stalemate himself, and the white pawns are so far advanced that the knight is too tied to their defence to transfer to the blockade.

4 ... \( \text{xe}7 \)
5 \( \text{b}5 \) \( \text{b}2 \)
6 \( \text{a}3 \) \( \text{e}6 \)
7 \( \text{d}4 \)

Mission accomplished.
1-0
Knight v Pawn(s)

Petrosian - Kurajica
Banja Luka 1979

White's h-pawn will prove a vital distraction.

45 ... c4?!?

A better try is 45 ... a6!? (not 45 ... b5 46 axb5 axb5 47 axb5 c4 48 e5 49 dxe5 dxe5 50 f5+ c8 51 exf6 e7 52 e5+ c7 53 e4 d5 54 b6 c6 55 d3 e5 56 f2 f5 57 g4 g5 58 h5 h5 59 h6 f4 60 h7+ h8 61 h8=+; b) 45 ... a5 46 bxa5 bxa5 47 a6 c3 48 dxc3 dxc3 49 c5 dxe2 50 c6 e4 51 a7 e3+ 52 c7 d1 53 d8=+).

46 a4!

Black gets considerably more counterplay if he can achieve ... b5.

46 ... a6

Or 46 ... b5 47 a5 c3 48 dxc3 d2 49 d4 c2 50 f5+-.

47 e5 c3

48 d4 d6

49 f5

50 e4 e6

51 e5 e5

52 dxe5 c4

53 dxe5 c5

54 dxe5 d5

55 e6 d4+--.

Knight and Three Pawns v Pawns

Ghinda - Ionescu
Romanian ch 1985

A typical situation. Black has won material but this distant action has allowed the white king to become threateningly active.

50 ... d2

51 d5

52 e5

53 f6

54 g6

55 e6

Black has returned his forces in good time.

60 f6

61 e6

62 g6

63 g7

64 h6

65 e6

66 d6

67 c6

68 b6

69 a6

70 f6

56 e5

57 fxe5

58 g6

59 h5

60 h6

61 e6

62 d6

63 c6

64 b6

65 a6

66 g6

67 h5

68 g4

69 f4

70 e4

1-0
Knight v Pawn(s)

**NP 45**

**Kr. Georgiev - Zlatilov**

Pleven 1987

1 \( \text{g}f4 \) \( a3 \)
2 \( \text{g}d3 \) \( h4! \)
3 \( \text{g}b5 \) \( \text{c}3 \) \( ? \)
4 \( \text{g}b4 \)

Or 4 \( \text{c}c1 \) \( g2 \) 5 \( \text{b}4 \)
6 \( \text{g}xg2 \) 10 \( \text{g}xh7 \) \( \text{h}xh3 \) 11 \( \text{c}5 \)
12 \( \text{c}6= \).

4 ...
5 \( \text{b}6! \)

**NP 46a**

**Kharitonov - Chekhov**

Irkutsk 1983

A good example of the battle to set up a blockade against a pawn mass.

1 \( \text{g}f3 \) \( d4 \)

Or 1 ...
2 \( \text{g}e5 \) \( f4+ \)
3 \( \text{g}d6 \) 4 \( \text{g}e6 \) and
4 \( \text{d}4, \text{b}4 \) +-
2 \( \text{g}e3 \) 3 \( \text{b}3 \)
4 \( \text{a}4 \) \( \text{f}6 \) 4 \( \text{d}4 \) \( \text{c}6 \) and:

a) 5 \( \text{f}4?! \) \( \text{g}6 \) and:

a1) 6 \( \text{c}3?! \) \( \text{c}6 \) (6 ...
7 \( \text{g}b2 \) \( \text{d}4 \) 8 \( \text{g}b6 \) \( \text{c}5 \) 9 \( \text{d}7+ \)
10 \( \text{c}e5 \) \( \text{c}5 \) 11 \( \text{c}e2 \)
12 \( \text{d}2 \) \( \text{c}5 \) 13 \( \text{d}7+ \)
14 \( \text{d}6 \) 15 \( \text{g}8+ \) 7
15 \( \text{b}4 \) \( \text{e}6 \) (7 ...
16 \( \text{h}6 \) 8 \( \text{h}3 \) 9 \( \text{h}9 \)
10 \( \text{h}4 \) \( \text{g}6 \) 10 \( \text{g}b5 \) 8 \( \text{b}5 \) 5 \( \text{h}9 \)
11 \( \text{h}4 \) 3 \( \text{c}3 \) 10 \( \text{g}xh3 \) \( d4 \) (10 ...
12 \( \text{d}3 \) \( \text{b}4 \) 12 \( \text{d}4++ \);

a2) 6 \( \text{c}3 \) \( b2 \) 7 \( \text{b}1 \) \( \text{c}6 \) 8 \( \text{c}3 \) and:

a21) 8 \( \text{b}5 \) 9 \( \text{a}3+ \) \( \text{a}4 \)
10 \( \text{g}xb2 \) \( \text{d}4 \) (10 ...
11 \( \text{c}c3 \) +-) \( \text{c}2++ \);

a22) 8 \( \text{c}5 \) 9 \( \text{a}3 \) \( d4+ \) 10 \( \text{g}xb2 \) \( \text{d}5 \) 11 \( \text{c}2 \) \( \text{d}5 \) 11 \( \text{g}e4 \) \( \text{g}4+ \)
12 \( \text{g}b1 \) \( \text{g}b1 \)
13 \( \text{g}d5 \) 13 \( \text{e}2 \) \( \text{c}5 \) \( 14 \)
13 \( \text{b}1 \) \( \text{c}3 \) 15 \( \text{d}3 \) \( \text{b}4 \) 16 \( \text{c}2 \)
17 \( \text{c}a3+ \) \( \text{b}4 \) 18 \( \text{b}1 \)
19 \( \text{g}4 \) \( \text{c}4 \) 12 \( \text{c}3 \) (12 ...
20 \( \text{d}5 \) 12 \( \text{b}4 \) 13 \( \text{b}3 \) \( \text{a}3 \) \( \text{c}x3 \)
14 \( \text{g}xh3 \) \( \text{d}5 \) \( \text{d}5 \) 15 \( \text{c}d3 \)
16 \( \text{a}5 \) \( \text{g}3 \) (16 ...
17 \( \text{d}4+ \) 17 \( \text{g}d6 \) \( \text{e}2 \) \( 18 \)
19 \( \text{f}5 \) 20 \( \text{c}3 \) \( d2 \) \( 20 \)
20 \( \text{d}4++ \);

b) 5 \( \text{c}3 \) \( b2 \) 6 \( \text{g}5 \) \( f4 \) (6 ...
14 \( \text{e}5 \) 7 \( \text{f}4+ \) 7 \( \text{d}4 \) (with the idea of \( \text{f}3, \text{b}1, \text{c}3 \) +)
8 \( \text{h}3 \) 9 \( \text{b}6 \) 10 \( \text{c}3 \)
11 \( \text{a}3+ \) \( \text{d}4+ \) 12 \( \text{g}xb2 \)
13 \( \text{c}5 \) \( \text{c}2 \) \( \text{c}5 \) \( 14 \)
15 \( \text{b}4 \) 15 \( \text{d}2 \) \( \text{d}3+ \) 16 \( \text{d}1 \)
17 \( \text{e}3 \) 18 \( \text{c}5 \) \( \text{g}3 \) 19
Knight v Pawn(s)

17 ∆xf3 ∆b3 18 ∆e5++.  
2 ∆e6 d3  
3 ∆d4 ∆c3  
Or 3 ... b4 4 ∆c6 b3 5 ∆e5++.  
4 ∆e3 c2  
Or 4 ... d2 f e2 b4 6 ∆c2 b3 7 a3 b2(7 ... f4 8 f3) 8  
47 Fischer - Taimanov  
Vancouver (4) 1971  
Black’s remaining pawns are weak, White’s king is active, and the knight has no decent squares: it is an easy win for the pawns:  
65 b4 axb4  
66 cxb4 c8  
67 a5 c6  
This is the only circuit with any future for the knight. (Not ∆d1 with the idea of ∆bl.  
5 ∆b3 g5  
6 f3 f4+  
7 ∆xd3 h5  
8 ∆xc2 1-0  
An excellent example of the knight’s qualities.

Further Examples from Practice

A. Ivanov - Arkhipov  
USSR 1985  
1 ... a5  
If instead 1 ... b4 2 ∆xa7 ∆e6 3 ∆b5 ∆d5 4 f4 gxf4 5 h4 ∆c4 6 g5 hxg5 7 hxg5 ∆d3 (7 ... ∆b5 8 g6 b3 9 g7 b2 10 g8w b1w 11 ∆wb8+) 8 d5 f3 d6 f2 10 ∆g2 e2 11 ∆d4+ ∆e1 12 ∆f3+ ∆e2 13 ∆h2+ (A. Ivanov).  
2 ∆d6 b4  
3 f4!  
To create an outside passed pawn to restrain the black king.  
3 ... gxf4  
4 h4 a4  
5 ∆c4 a3(?!)

Slightly easing White’s task by allowing a blockade. A better try was 5 ... ∆e6? and now:

a) 6 ∆h3? and:  
a1) 6 ... ∆d5?? 7 g5 hxg5 8 hxg5 a3 9 g6 a2 (9 ... ∆e6 10 ∆d2 a2 11 ∆b3 ∆f6 12 ∆g4+) 10 g7 a1w 11 g8w+ ∆e4 (11 ... ∆c6 12 ∆e5+ ∆c7 13 ∆f7+ ∆b6 14 ∆e6+ ∆b7 15 ∆f7+ 12 ∆g6+ ∆xd4 (12 ... ∆f3 13 ∆g2+ or 12 ... ∆d5 13 ∆b6+) 13 ∆f6++;  
a2) 6 ∆a3 7 ∆d2 a2 8 ∆b3 ∆d5 9 g5 hxg5 10 hxg5 ∆c4 11 ∆a1 b3;  
b) 6 ∆g2?! ∆d5 7 ∆b6+ ∆xd4 8 ∆xa4 ∆e4 and:  
b1) 9 ∆f2 f3 10 g5 hxg5 11 h5 and now:  
b11) 11 ... g4?? 12 h6 g3+ 13 ∆xg3 ∆e3 14 ∆e2 b2 ∆e2 (14 ... f2 15 ∆d1+ ∆d2 16 ∆xf2 ∆xd1 17 h7) 15 ∆d3+ ∆xd3 (15 ... f2 16 ∆xf2 b3 17 ∆d3) 16 ∆xf3 b3 17 h7 b2 18 h8w b1w 19 h7++;  
b12) 11 ... ∆f5= 12 ∆xf3 g4+ 13 ∆g3 ∆g5;  
b2) 9 ∆c5+ ∆d4;

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Knight v Pawn(s)  

\[ \text{Knight} \text{ v Pawn(s)} \]

\[
\begin{align*}
&c) 6 \text{ } \text{ } \text{d}2! \text{ } a3 \text{ (6 ... } \text{e}5 7 \text{ } g5 \\
&\text{hxg5 8 } \text{h}xg5 \text{ } \text{e}6 9 \text{ } \text{h}3 \text{ } \text{f}5 \\
&10 \text{ g}6 \text{ } \text{e}xg6 11 \text{ } \text{g}4 \text{ } \text{f}6 12 \\
&\text{d}xf4 \text{ } \text{e}6 13 \text{ } \text{e}4 \text{ } \text{d}6 14 \\
&\text{d}3 \text{ } \text{d}5 15 \text{ } \text{c}4 a3 16 \text{ } \text{e}3+ \text{ } \text{c}6 17 \text{ } \text{c}4 a2 18 \text{ } \text{c}2++ \\
&7 \text{ } \text{b}3 \text{ transposing to the game.} \\
&6 \text{ } \text{d}2 \text{ } \text{e}6 \\
&7 \text{ } \text{b}3 \text{ } a2 \\
&\text{Or 7 ... } \text{d}5 8 \text{ } g5 \text{ } \text{hxg5} 9 \\
&\text{hxg5 } \text{c}4 (9 ... \text{e}6 10 \text{h}3 \\
&\text{d}5 11 \text{ } g6 \text{ } \text{g}6 12 \text{ } \text{g}4++ \\
&10 \text{ } g6 \text{ } \text{e}xg6 11 \text{ } g7 \text{ } \text{b}2 12 \\
&\text{g}8\text{w} b3 13 \text{ } \text{g}2+ \text{ } \text{b}1 14 \\
&\text{f}1+ \text{ } \text{a}2 15 \text{ } \text{c}4 \text{ } \text{b}2 16 \text{ } d5 \\
&a2 17 \text{ } \text{d}4+ \text{ } \text{b}1 18 \text{ } \text{d}3+ \\
&\text{b}2 19 \text{ } d6 \text{a}1\text{w} 20 \text{ } d7 (A.
&\text{Ivanov).}
\end{align*}
\]

\[
\begin{align*}
&\text{Zichichi - Hort} \\
&\text{Venice 1969} \\
&\text{Black has just played 1 ...} \\
&\text{hxh3! (not 1 ... } \text{g}4 2 \text{ } \text{hxg4+} \\
&\text{gxh4 3 } \text{g}1 \text{ } \text{g}3 4 \text{ } \text{f}1= \text{ (Maric) to which White obviously replied 2 } \text{h}xh3.} \\
&2 \text{ } ... \text{ } \text{f}4 \\
&3 \text{ } \text{g}2 \\
&\text{Or 3 } \text{g}2+ \text{ } \text{f}3 4 \text{ } \text{h}2 \\
&\text{e}2. \\
&3 \text{ } ... \text{ } \text{e}3 \\
&\text{Black's advantage is obvious} \\
&\text{as the knight has no counter} \\
&\text{targets.} \\
&4 \text{ } \text{f}3 \\
&\text{After 4 } \text{f}1 \text{ } \text{g}4 the black} \\
&\text{king gains access to e2 or d3.} \\
&4 \text{ } ... \text{ } \text{d}3 \\
&5 \text{ } \text{f}2 \\
&\text{Instead 5 } \text{f}xg5 \text{ } \text{xc4 (5 ...} \\
&\text{c2?! 6 } \text{f}3) 6 \text{ } \text{f}3 \text{ } \text{b}3 7 \\
&\text{e}e4 \text{ } \text{xb}2 8 \text{ } \text{e}6 \text{ } \text{b}3 (8 ... \\
&\text{c}3 9 \text{ } \text{f}4 \text{ } \text{c}4 10 \text{ } \text{d}5++) 9 \\
&\text{d}3 \text{ } \text{f}4 10 \text{ } \text{c}4 \text{ } \text{a}3 11 \\
&\text{f}4 \text{ } \text{a}4 12 \text{ } \text{d}5 \text{ } \text{b}2 13 \text{ } \text{xb}6 \\
&a3 14 \text{ } \text{a}4+ \text{ } \text{c}2 15 \text{ } \text{xc}5 \text{ } a2 \\
&16 \text{ } \text{b}3 \text{ } \text{b}2! \text{ transposes} \\
&\text{to the game.} \\
&5 \text{ } ... \text{ } \text{xc}4 \\
&6 \text{ } \text{e}2 \text{ } \text{b}3 \\
&7 \text{ } \text{e}xg5 \text{ } \text{xb}2 \\
&\text{Or 7 ... } \text{xa}4 8 \text{ } \text{d}2 \text{ } \text{b}3 9 \\
&\text{c}1. \\
&8 \text{ } \text{d}3 \text{ } \text{b}3 \\
&9 \text{ } \text{e}4 \text{ } \text{xa}4 \\
&10 \text{ } \text{c}4 \text{ } \text{a}3 \\
&11 \text{ } \text{f}6 \text{ } a4 \\
&12 \text{ } \text{d}5 \text{ } \text{b}2 \\
&13 \text{ } \text{xb}6 \text{ } a3 \\
&14 \text{ } \text{a}4+ \text{ } \text{c}2 \\
&15 \text{ } \text{xc}5 \text{ } a2 \\
&16 \text{ } \text{b}3 \text{ } \text{b}2! \\
&0-1 \\
&\text{Of course not 16 ...} \\
&\text{d}3 17 \\
&\text{a}1+ \text{ } \text{b}2 18 \text{ } \text{xd}3=.
\end{align*}
\]
To create a wedge with f5, or to disrupt Black’s kingside pawns. The rigidity of the black pawn structure gives the knight the advantage, despite three pawns.

35 ... $\text{e}f7$

Or 35 ... $\text{g}4$ 36 $\text{f}5$ $\text{h}4$ 37 $\text{d}3$ $\text{h}3$ 38 $\text{e}2$ $\text{h}2$ 39 $\text{g}3$ $\text{f}7$ 40 $\text{f}4$ $\text{g}7$ 41 $\text{xg}4$ $\text{d}6$ 42 $\text{h}3$ c5 43 $\text{xh}2$ $\text{cxb}4$ (43 ... $\text{c}4$ 44 $\text{e}2$+ or 43 ... $\text{cd}4$ 44 $\text{g}2$ $\text{e}5$ 45 $\text{f}3$ d3 46 $\text{e}3$ d2 47 $\text{xd}2$ $\text{f}4$ 48 $\text{e}e2$+ 44 $\text{axb}4$ $\text{c}6$ ($44 ... \text{a}5$ 45 b5 a4 46 $\text{e}2$ a3 47 $\text{c}3$+) 45 $\text{h}5$ a5 46 bxa5 $\text{bxa}5$ 47 $\text{xf}6$ a4 48 $\text{g}4$ a3 49 $\text{e}3$ a2 50 $\text{c}2$+.

36 $\text{f}5$ $\text{e}7$

37 $\text{g}3$ $\text{f}6$

38 $\text{d}3$ b5?!

Alternatively, 38 ... $\text{d}7$?! 39 a4 $\text{d}6$ 40 a5 $\text{d}7$ 41 $\text{d}6$ 42 b5 $\text{cxb}5$ (42 ... $\text{c}5$?? 43 $\text{dxc}5$+ $\text{c}5$ 44 $\text{bxa}5$ $\text{bxa}5$ 47 $\text{xf}6$ a4 48 $\text{g}4$ a3 49 $\text{e}3$ a2 50 $\text{c}2$+.

39 $\text{f}5$ $\text{d}7$

40 $\text{g}3$ $\text{f}6$

41 $\text{g}7$ $\text{h}4$

42 $\text{e}6$ $\text{e}7$

43 $\text{b}4$ $\text{d}6$

44 $\text{c}5$ $\text{e}7$

45 $\text{d}3$ $\text{f}7$

46 $\text{c}1$ $\text{e}7$

47 $\text{b}3$ $\text{e}8$

48 $\text{d}2$ $\text{f}7$

49 $\text{h}5$ $\text{g}7$

50 $\text{f}3$ $\text{h}7$

51 $\text{h}2$ $\text{g}7$

52 $\text{g}4$! a6? Or 52 ... $\text{f}7$ 53 $\text{h}6$ $\text{e}7$ ($53 ... \text{h}3$ 54 $\text{g}5$ $\text{c}5$ 55 $\text{dxc}5$ d4 56 $\text{f}2$+- JT) 54 $\text{g}6$! with the idea forcing of forcing a transposition to the above variation. This is more accurate than 54 $\text{g}7$? $\text{h}3$ 55 $\text{h}2$ c5! 56 $\text{bxc}5$ a5 57 $\text{c}6$ b4 58 $\text{axb}4$ axb4 59 $\text{c}7$ $\text{d}7$ 60 $\text{d}6$.
Knight v Pawn(s)

\[ \text{Knight} \rightarrow \text{Pawn(s)} \]

\[ \text{Botvinnik - G Thomas} \]

\[ \text{Nottingham 1936} \]

40 b4

To play b5, undermining the pawn chain and creating pressure against c6.

40 ... \text{g5}

41 \text{g3} \text{f5}

42 \text{h3} \text{f6}

43 a4 \text{f5}

44 \text{f4} \text{f6}

45 b5 axb5

46 axb5

Intending \text{xd5}, c6, b6++.

46 ... \text{e7}

47 b6 \text{d7}

48 \text{h5!} \text{d8}

49 \text{f6} h6

50 \text{g4} h5

51 \text{f2}

Blockading f3 - the white king takes care of the h5-pawn.

51 ... \text{d7}

52 \text{h4} \text{d8}

53 \text{hx5} \text{e7}

54 \text{g4} \text{e6}

55 \text{g3} \text{d7}

56 \text{h3} \text{d8}

57 \text{f4}

Perhaps better is 57 \text{g5}!? \text{e7} 58 \text{xf3} 59 \text{xf3} \text{g5} 60 \text{e4} \text{dxe4} 61 \text{gxe4} \text{dxe4} 62 d5+ cxd5+ 63 \text{c4} \text{d7} 64 \text{e7} 65 \text{d6} 66 \text{d6} \text{e6} 67 \text{g5} \text{f5} 68 \text{f4} \text{g6} 69 \text{b5} \text{b5} 70 \text{c6} \text{c6} 71 \text{bxc6} 72 \text{d7} \text{d7} 73 \text{c7}++ (Fine).

Instead 54 \text{g4} \text{h6} 55 \text{f2}+\) (Hecht) is perhaps simpler but Petursson has an instructive technique planned.

54 ... h3

55 \text{f2} h2

56 \text{h1!} \text{g7}

57 \text{g3} \text{h7}

58 \text{g4} \text{g7}

59 \text{f3}!

Not 59 ... \text{h3}?! \text{h6} 60 \text{xf2} \text{g4} and ... \text{f4}.

59 ... \text{h6}

White's clever manoeuvring has forced Black to allow the capture of the h2-pawn with the black king on the seventh, or to try the game continuation.

59 ... \text{g4+}

60 \text{g4} \text{g7}

61 \text{f2} \text{h6}

62 \text{f3} \text{g6}

63 \text{g2} \text{h6}

64 \text{h3}!

60 ... \text{f4+}

61 \text{xf4} \text{g6}

62 \text{f3} \text{h6}

63 \text{g2} \text{f6}

64 \text{h3}!

Botvinnik - G Thomas

Nottingham 1936

40 b4

To play b5, undermining the pawn chain and creating pressure against c6.

40 ... \text{g5}

41 \text{g3} \text{f5}

42 \text{h3} \text{f6}

43 a4 \text{f5}

44 \text{f4} \text{f6}

45 b5 axb5

46 axb5

Intending \text{xd5}, c6, b6++.

46 ... \text{e7}

47 b6 \text{d7}

48 \text{h5!} \text{d8}

49 \text{f6} h6

50 \text{g4} h5

51 \text{f2}

Blockading f3 - the white king takes care of the h5-pawn.

51 ... \text{d7}

52 \text{h4} \text{d8}

53 \text{hx5} \text{e7}

54 \text{g4} \text{e6}

55 \text{g3} \text{d7}

56 \text{h3} \text{d8}

57 \text{f4}

Now White aims to force ... f2, loosening the pawn from the chain.

57 ... \text{e7}

58 \text{f4!} \text{b8}

59 \text{f3} \text{d7}

60 \text{f5} \text{c8}

61 \text{d6} \text{b8}

62 \text{f5}!

After ... f2 the white king comes and collects the f-pawn, winning.
Knight v Knight

Knight and One Pawn v Knight

1. **Averbakh**
   A basic drawing position.
   
   1 ... 4f8+
   2 4d8 4e6+=

2. **Averbakh**
   A basic winning position.
   
   1 ... 4f6+
   2 4d8 4e8
   3 4e6 4d6

3. **Cheron 1926**
   Another basic win.
   
   1 4a5 4f5
   2 4c4 4g5
   3 4d6+ 4e5

4. **Cheron 1955**
   
   1 4e6
   Not 1 4g3? 4e5=.
   1 ... 4d8+
   2 4d6 4f6
   If 2 ... 4f7 3 4c7 4e7 4
   4f2 4e6+ 5 4c8 4d8 6
   4d3 4b7 7 4e7 4d8 8 4e5.
   3 4f2 4b7+
   4 4c7 4c7
   5 4d3 4d8

   Or 3 ... 4f6 4g5+ 4g7 5 4e4.
   4 4d7 4e8
   5 4g5+ and wins

   4 4c8 4e6
   5 4e8
   With the idea of 4c7 winning.

   4 4c8 4e6
   5 4e8
   6 4e6 4c5+
   7 4e5 4e6+
   8 4c8 4d6
   9 4f4 and wins

   Note the helplessness of the knight against an escorted pawn on the seventh (Fine's rule) - even the feeble white knight cannot save Black.
Knight v Knight

**Dobrescu 1973**

1. \( \text{Nh4} \) g1\( \text{N} \)
2. \( \text{Ng2} \) e2
3. \( \text{Ne1} \) \( \text{Nf4} \)
4. \( \text{Nf3} \)

For 4 ... \( \text{Ne3} \) see the next diagram.

5. \( \text{Nd4} \) \( \text{e3} \) 6. \( \text{b4} \) \( \text{f1} \)
7. \( \text{d3} \) \( \text{d1} \).

**Tisdall/Dobrescu 1990**

1. \( \text{Nf2} \)

Alternatively:

a) 1 \( \text{c2}+ \) \( \text{d2} \) 2 \( \text{b2} \) \( \text{f3} \)
3. \( \text{d3} \) (3 ... \( \text{d4}+? \) 4 \( \text{xd4} \) e1\( \text{N} \) 5 \( \text{f3}+\) 4 \( \text{b2} \) (4 \( \text{b4}+ \) \( \text{e4} \) 5 \( \text{c2} \) \( \text{d4}+\) 4
... \( \text{d4} \) 5 \( \text{e1}+ \) \( \text{d2} \) 6 \( \text{g2} \)
7. \( \text{f3} \) \( \text{b3} \) (7 \( \text{h4} \) \( \text{e3} \)) 7 ...
8. \( \text{f4} \) \( \text{h4} \) \( \text{f3} \);

b) 1 \( \text{c3} \) \( \text{f3} \) and now:

b1) 2 \( \text{f2}+\) 3 ... \( \text{e1}+\;

b2) 2 \( \text{d3} \) \( \text{e5} \) 3 \( \text{e1} \) \( \text{f2} \)
4. \( \text{c2} \) (4 \( \text{d2} \) \( \text{c4}+\) 4 ...
5. \( \text{g4} \) \( \text{d4} \) \( \text{e3} \) 6 \( \text{b4} \) \( \text{f1} \)
7. \( \text{d3} \) \( \text{d1} \);

b3) 2 \( \text{c2}+ \) \( \text{f2} \) 3 \( \text{c4} \) (3 \( \text{b2} \) \( \text{d4} \) 4 \( \text{b4} \) \( \text{f1} \) 5 \( \text{d3} \)
6. \( \text{e6} \) 3 ...
7. \( \text{e5}+ \) 4 \( \text{d5} \) \( \text{g4} \)

**Halberstadt 1938**

An example of pure tactics and knight barriers.

1. \( \text{a3}!! \)

Alternatively:

a) 1 \( \text{c7} \) \( \text{f6} \) 2 \( \text{d5}+ \)
3. \( \text{xe5} \);

b) 1 \( \text{c4} \) \( \text{e5}+ \) 2 \( \text{d5} \)
3. \( \text{g6} \);

c) 1 \( \text{a4} \) \( \text{c5}+ \) 2 \( \text{a3} \) \( \text{e6} \);

b) 1 ... \( \text{c6} \)

Or:

a) 1 ... \( \text{a5} \) 2 \( \text{b2} \) \( \text{a4} \) 2 ...
3. \( \text{b4} \) \( \text{f6} \) 4 \( \text{d5}+\) 3 \( \text{a2} \) \( \text{a5} \) 4 \( \text{a3} \) \( \text{b6} \) 5 \( \text{c7} \)
6. \( \text{f6} \) \( \text{d5}+\); b) 1 ... \( \text{c7} \) 2 \( \text{b2} \) \( \text{b8} \) 3 \( \text{c2} \) \( \text{a7} \) 4 \( \text{d2} \) \( \text{b8} \) 5 \( \text{e2} \)
6. \( \text{f2} \) \( \text{b8} \) 7 \( \text{g3} \) \( \text{a7} \)
8. \( \text{f4} \) \( \text{b6} \) 9 \( \text{f5} \) \( \text{c6} \)
10. \( \text{f6} \);

2. \( \text{a2}!! \)

Not 2 \( \text{b2} \) \( \text{b6} \) 3 \( \text{d6} \) (3 \( \text{f6} \) \( \text{d4}+ \) 4 \( \text{c3} \) \( \text{d6} \) 5 \( \text{d3} \) \( \text{e8} \)) 3 ...
4. \( \text{e4}+ \) 4 \( \text{xc4} \)
5. \( \text{d7} \);

2. ... \( \text{b6} \)

Or 2 ... \( \text{c5} \) 3 \( \text{d6} \) \( \text{f6} \) 4 \( \text{e4}+. \)

3. \( \text{c7} \) \( \text{f6} \)
4. \( \text{d5}+ \) and wins

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Knight v Knight

Kling 1867, Averbakh

1 \( \text{\texttt{\#e6}} \)
2 \( \text{\texttt{\#f8! \#e5}} \)
3 \( \text{\texttt{\#a8}} \)

Not 3 \( \texttt{\texttt{\#b8? \#c6+=.}} \)

Or 4 ... \( \texttt{\texttt{\#d6 5 \#b6! \#c7}} \) (5 ... \( \texttt{\texttt{\#c5 6 \#c8 and \#a7 winning}} \)) 6 \( \texttt{\texttt{\#d5+ \#d6 7 \#b4+=.}} \)

5 \( \texttt{\texttt{\#b6 \#d6}} \)
6 \( \texttt{\texttt{\#e8+ \#c7}} \)
7 \( \texttt{\texttt{\#a7 \#b8}} \)
8 \( \texttt{\texttt{\#b5+ and wins}} \)

Hasek 1929

Knights are notoriously poor defenders against rook's pawns, as the next two examples demonstrate.

1 \( \texttt{\texttt{\#d1 \#c2}} \)

Or 1 ... \( \texttt{\texttt{\#xd1 2 \#d3 \#c1 3}} \)

Not 3 \( \texttt{\texttt{\#b8? \#c6+=.}} \)

6 \( \texttt{\texttt{\#b6}} \)
7 \( \texttt{\texttt{\#c4.}} \)

Halberstadt 1951

1 \( \texttt{\texttt{\#f5 \#e3}} \)

Or 1 ... \( \texttt{\texttt{\#xe1 2 \#e4 \#c7 3 \#d3!+=.}} \)

2 \( \texttt{\texttt{\#e6}} \)

Not 2 \( \texttt{\texttt{\#e5 \#b6=}} \).

Averbakh 1955

6 \( \texttt{\texttt{\#c7 \#g5}} \)

Or 6 ... \( \texttt{\texttt{\#f5 7 \#d5 \#g5 8 \#e6 \#f8+ 9 \#e7 \#g6+ 10 \#e8 \#h6 11 \#e7.}} \)

7 \( \texttt{\texttt{\#e6 \#h6}} \)
8 \( \texttt{\texttt{\#f6 \#h7}} \)
9 \( \texttt{\texttt{\#e6 \#h6}} \)
10 \( \texttt{\texttt{\#f4 \#f8}} \)
11 \( \texttt{\texttt{\#e7 \#h7}} \)
12 \( \texttt{\texttt{\#d5 \#g7}} \)
13 \( \texttt{\texttt{\#f6 and wins}} \)

"Etc." - Averbakh, presumably following Fine's guideline that an escorted pawn on the seventh nearly always wins. However, it is worth analyzing a little further, since the winning method is fundamental.

5 ... \( \texttt{\texttt{\#g6}} \)

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Knight v Knight

Halberstadt 1939

1 c7 $\textbf{\textit{e}}7
2 d6 $\textbf{\textit{e}}2$

If 2 ... d2 3 b2 $\textbf{\textit{e}}2$ 4 $\textbf{\textit{c}}2$ or 2 ... $\textbf{\textit{c}}2$ 3 $\textbf{\textit{a}}3$ $\textbf{\textit{c}}3$
4 $\textbf{\textit{a}}4$.

3 $\textbf{\textit{b}}3$

Not 3 $\textbf{\textit{a}}3$? $\textbf{\textit{f}}3$ 4 $\textbf{\textit{a}}4$ $\textbf{\textit{d}}5$ or 3 $\textbf{\textit{b}}2$? $\textbf{\textit{f}}3$ 4 $\textbf{\textit{a}}4$

Averbakh 1955

A very tricky example in which Black just manages to hold the balance.

1 ... $\textbf{\textit{h}}7$
2 c4 $\textbf{\textit{g}}6$

Not 2 ... $\textbf{\textit{h}}8$ 3 d6 $\textbf{\textit{g}}8$ 4 $\textbf{\textit{e}}8$ $\textbf{\textit{h}}7$ 5 $\textbf{\textit{d}}7$ $\textbf{\textit{h}}8$ 6 $\textbf{\textit{d}}8$
$\textbf{\textit{h}}7 7 $\textbf{\textit{e}}8 $\textbf{\textit{g}}8$ 8 $\textbf{\textit{e}}7 $\textbf{\textit{h}}7$
9 $\textbf{\textit{e}}4$ $\textbf{\textit{f}}3$ 10 f7 $\textbf{\textit{e}}5$ 11 $\textbf{\textit{f}}6$+.

3 d6 $\textbf{\textit{h}}5$
4 $\textbf{\textit{e}}4$ $\textbf{\textit{f}}3$
White must not allow the pawn to travel safely to the seventh rank, cf diag 14.

1... g4 2 e5+ g5 3 g6 g2

Or 3... g2 4 f4+ h2 5

\[ Ulig 1970 \]

White must not allow the pawn to travel safely to the seventh rank, cf diag 14.

1... g4 2 e5+ g5 3 g6 g2

Or 3... g2 4 f4+ h2 5

\[ Réti 1929 \]

1. h4 g1
2. g4 g2
3. e3+ h2
4. c2

Or 4... f1+ g1 5 g3

5. f3+ g2

6. h4+ f2

Instead 5 e3 f4 6 g4+

\[ Reti 1929 \]

The starting position is zugzwang: Black to move loses after 1... b8 2 b4 c6+ see diag 17.

1... b5

Or 1... c5 2 d4! (2 b4? b5+) 2... xd4 3 b6.

2 b4 a5

\[ Reti 1929 \]

The starting position is zugzwang: Black to move loses after 1... b4 2 b6 c4 3 c3! d6 4 c7 e8+ 5 c6+-.. So White contrives to reach the diagram with Black to move, something not immediately obvious from the solution.

1 c5 b4

Instead 1... d6+ 2 c7 b5+ 3 c6 transposes to the text.

2 b6 d6

Or 2... c4 3 e4 b4 4 c3 d6 5 c7.

\[ Reti 1929 \]

The starting position is zugzwang: Black to move loses after 1... b4 2 b6 c4 3 c3! d6 4 c7 e8+ 5 c6+-.. So White contrives to reach the diagram with Black to move, something not immediately obvious from the solution.

1 c5 b4

Instead 1... d6+ 2 c7 b5+ 3 c6 transposes to the text.

2 b6 d6

Or 2... c4 3 e4 b4 4 c3 d6 5 c7.
Knight v Knight

Cheron 1955
Yet again the knight struggles to prevent a rook’s pawn from promoting.

1. \( \Box g6 \) \( \Box e7+ \)
   If 1 ... \( \Box e6 \) 2 \( \Box g3 \) \( \Box xg3 \)
   h6 or 1 ... \( \Box h4+ \) 2 \( \Box g7 \) \( \Box f5+ \)
   3 \( \Box f7 \) \( \Box h6+ \) 4 \( \Box g6 \) transposing to the text.

2. \( \Box g7 \) \( \Box f5+ \)
3. \( \Box f7 \) \( \Box h6+ \)
4. \( \Box g6 \) \( \Box g4 \)
   Or 4 ... \( \Box f5 \) 5 \( \Box g3 \).

N Voiya and Nestorescu 1951
Obviously if the extra pawn is still on its starting square the chances of a draw are significantly increased. Here is one winning position.

1. \( \Box d5 \)
   Not 1 \( g4 \) \( \Box c4 \) 2 \( g5 \) \( \Box c5+ \)
   \( \Box e5 \) \( \Box d7+ \) 4 \( \Box f5 \) \( \Box f8 \)
   \( \Box g4 \) \( \Box d5 \) 6 \( \Box f6+ \) \( \Box d6 \)
   \( \Box h7 \) \( \Box e6= \) or 1 \( \Box f7 \) \( \Box c5+ \) 2
   \( \Box f5 \) \( \Box d4 \) 3 \( g4 \) \( \Box d5 \) 4 \( g5 \)
   \( \Box e6= \)
1. ... \( \Box d3 \)

N Vilela - Augustin
Prague 1980

1. \( \Box c5! \)
   Not 1 \( a5 \) \( \Box d6 \) 2 \( a6 \) \( \Box e5 \).
1. ... \( f5 \)
   Or 1 ... \( \Box e5 \) 2 \( a5 \) \( \Box d7+ \) 3
   \( \Box c6 \).

Knight and One Pawn v Knight and One Pawn

Vilela - Augustin
Prague 1980

1. \( \Box c5! \)
   Not 1 \( a5 \) \( \Box d6 \) 2 \( a6 \) \( \Box e5 \).
1. ... \( f5 \)
   Or 1 ... \( \Box e5 \) 2 \( a5 \) \( \Box d7+ \) 3
   \( \Box c6 \).
Knight v Knight

Knight and Two Pawns v Knight

Taimanov - Spassky
Leningrad 1952

1 \( \text{Nf3} \) \( \text{g4} \)

Or 1 ... \( \text{e5} \) 2 \( \text{Nh4+} \) \( \text{g5} \) (2)

... \( \text{g4} \) 3 \( \text{xf6} e4 \) 4 \( \text{f5} \) 3

\( \text{f3+} \) \( \text{g4} \) 4 \( \text{xf6} e4 \) 5

Intending \( \text{e3xf5=} \).

Vitolins - Kochiev
USSR 1979

A good example of knights and two split pawns against knight.

63 ... \( \text{c7} \)

64 \( \text{e4} \) \( \text{b5} \)

65 \( \text{d4} \) \( \text{b6} \)

66 \( \text{c3} \) \( \text{e6} \) \( \text{e5} \) \( \text{exf5} \)

67 \( \text{d5+} \) \( \text{a5} \) \( \text{exf5} \)

68 \( \text{e7} \) \( \text{a4} \)

69 \( \text{b2} \)

Or 69 \( \text{d5} \) \( \text{a3} \) 70 \( \text{b4} \)

\( \text{d4=} \) 71 \( \text{a6} \) \( \text{c6} \) 72 \( \text{c7} \)

b4+ 73 \( \text{c4} \) \( \text{e5+} \) 74 \( \text{d5} \)

b3 75 \( \text{b5+} \) \( \text{b4} \)

69 ... \( \text{b4=} \)

Heading for c5 to accompany the d5-pawn forward, so that both pawns advance as a team.

70 \( \text{d5+} \) \( \text{c5} \)

Rogers - Sax
Adelaide 1986

Another double split pawn advantage. The rook’s pawn makes it slightly more difficult to win.

48 ... \( \text{c5} \)

49 \( \text{g4} \) \( \text{e4} \)

50 \( \text{e3} \) \( \text{d6+} \)

51 \( \text{c3} \) \( \text{c5} \)

52 \( \text{b3} \) \( \text{b5} \)

53 \( \text{c2} \) \( \text{a4+} \)

54 \( \text{a3} \) \( \text{c4+} \)

55 \( \text{a2} \) \( \text{c5} \)

Again both pawns are methodically advanced.

56 \( \text{e1} \) \( \text{e5} \)

57 \( \text{c2} \) \( \text{c4!} \)

58 \( \text{a3} \) \( \text{c3!} \)

59 \( \text{a1} \)

If 59 \( \text{e3} \) \( \text{c4+} \) or 59 \( \text{e1} \) \( \text{d2} \) intending ... \( \text{c4+} \).

59 ... \( \text{c4} \)

60 \( \text{a2} \) \( \text{d3} \)

61 \( \text{b1} \) \( \text{b4} \)

0-1
Knight v Knight

Paoli - M. Kovacs
Hungary 1971
A straightforward, but important, example.
1 ... e3
2 f3 h3
3 h2 f2

Prokes 1938
1 b7
If 1 e7 f7 2 b7 d6+ 3 e5 xh7=
1 ... d6+
2 d4
Or 2 d5 xh7 with zugzwang: 3 e7 f7.
2 ... xh7

Pongrach 1887
1 e4 xh7
2 d2 g7
3 c4 b1
Or 3 c2 b5 e1 5 b6.
4 d4
If 4 b5 c3.
4 ... f7

Knight and Two Pawns v Knight and One Pawn

Tiller - D. Gurevich
Gausdal 1982
1 ... f6
Also possible is 1 ... h7?? 2 xh5 h6 3 f4! (3 g4 g6= e.g. 4 f4+ h6 5 g2 g6 6 e1 h6 7 f3
4 g6 8 g5 f5 9 h5 f4 10 g6 g3+ 11 h6 f5+ 12 h7 xh7 f3+ 3 ... f2 4 e2 (intending c3, g4, g2) 4 ... e4 5 g1 f2 6 f3 e4
7 e5! g7 8 d3! h6 9
Knight v Knight

The misplaced knight on h3 renders Black's position critical.

42 $\text{e}3$ $\text{e}6$
43 $\text{e}4$!

Black must try 43 ... $g5$! now (this is really the main line, the game is tragic) 44 $f5+$ (intending $d3/e2$ trapping the knight on h3. White seems to win the $g5$-pawn at the price of extricating the knight on h3, but Black has chances to create difficulties by erecting a blockade) and now:

a) 44 ... $f6$ 45 $c3$ $g7$ (45 ... $f4$) 46 $e2$+-;

b) 44 ... $e5$ 45 $c3$ (45 $c5$ $f6$ 46 $d3$+-) 45 ... $g1$ 46 $e2$+-;

c) 44 ... $d6$ 45 $c3$ $f4$ 46 $e4$+ $e5$ 47 $xg5$ $d5$+ 48 $f3$ $e7$ (incredibly, there is almost no theory on two pawns against none with a blockade - see also diags 29 and 53) 49 $f7+$ $f6$
50 $d6$ $e5$ (50 ... $g5$ 51 $e4+$ $h4$ 52 $f4$ $d5$+ 53 $e5$ (intending $g5$) 53 ... $xg4$ 54 $f6$+ 51 $c4$+ and now:

c1) 51 ... $d4$ and:

   c11) 52 $f6$ $g6$ 53 $g5$!
   $xc4$ (53 ... $d5$ 54 $g4$
   $e6$ 55 $h5$ $f4$+ 56 $h6$
   $d5$ 57 $g7+$) 54 $e4$ (54 $g4$ transposes to the other note) 54 ... $e5$ 55 $f5$ $h4$+ 56 $e6+$ intending $f7$, $f6$;

   c12) 52 $e3$ $e5$ transposing to the critical position discussed in c21 below.

   c2) 51 ... $f6$ 52 $e3$ and:

   c21) 52 ... $e5$ (a restraining move) (30a) 53 $g3$ $e4$ 54 $h4$! (White cannot mobilise his pawns by methodical means: 54 $f6$ $g6$ 55 $c4$
   $d5$ 56 $g5$ $xc4$ 57 $g4$
   $d5$ 58 $h5$ $e5$ 59 $g6$ - 59
   $h6$ $e6$ 60 $g7$ $d7$ 61 $f7$
   $e7$ 62 $g6$ $f8$ 63 $h6$
   $xg6$ 64 $xg6$ $f8$ - 59 ...
   $e6$ 60 $g7$ - 60 $g5$ $f7+$ -
   60 ... $f7$=). However, he can exploit Black's active knight position by starting action behind it.) 54 ... $xe3$ (55 $g5$
   was threatened) 55 $f6$ $c6$ 56
   $g5$ (56 $f7$ $e5$) 56 ... $e5$ 57
   $h5$ $f4$ 58 $g6$+-;

   c22) 52 ... $g5$ (30b) Another critical position (see also diag 55). This is not a real blockade since the white king can get active and succeed - I believe - in getting around the blockade: 53 $e4$ $g8$ 54
   $e5$ $f6$ 55 $e6$ and now:

   c221) 55 ... $e8$ 56 $d5$
   $g7+$ (56 ... $h4$ 57 $e7$
   $xg4$ 58 $e3$+) 57 $e5$
   $xg4$ 58 $f6$;

   c222) 55 ... $e4$ 56 $d5$
   and:

   c2221) 56 ... $xg4$ 57
   $f6$+;

   c2222) 56 ... $c5+$ 57 $e7$
   $xg4$ (57 ... $e4$ 58 $f6$+) 58
   $f6$ $d3$ 59 $d6$+-;

   c2223) 56 ... $h4$ 57 $e5$
   (57 $f6$ $xg4$+) and:

   c22231) 57 ... $g5$ 58 $e3$
   $g3$ (58 ... $f7+$ 59 $f4$
   breaks the blockade) 59 $f6$
   $f3$ 60 $f5$+;

   c22232) 57 ... $f2$ 58 $e3$
   $g5$ 59 $f6$ $d3$+ 60 $e6$
   $f4$+ 61 $f7$+;

   c22233) 57 ... $c5$ 58 $f6$
Knight v Knight

\[ \text{N} \]

Mititelu - Stoica
Romanian Ch 1985

1 \( \text{d}6 \)
2 \( \text{d}3 \) a5
3 \( \text{f}3 \) b4!

Not 3 ... \( \text{b}6 \) 4 \( \text{c}1 \) c5 (4 ... \( \text{d}5 \) 5 \( \text{b}3 \) e4 6 \( \text{f}4 \) e5+ 7 \( \text{f}5=\) 5 \( \text{b}3+ \) \( \text{b}4 \) 6 \( \text{d}4 \) e5 (6 ... \( \text{x}a4 \) 7 \( \text{e}4=\) or 6 ... \( \text{x}a4 \) 7 \( \text{x}e6 \) c3 8 \( \text{g}3 \) e4 9 \( \text{d}4=\) 7 \( \text{g}6=\).
4 \( \text{f}4 \) a6!
5 \( \text{e}2 \)

If 5 \( \text{d}3 \) c5 6 \( \text{b}2 \) d5 7 \( \text{e}3 \) e5 8 \( \text{d}2 \) d4=.
5 ... \( \text{e}5 \) \( \text{c}5 \) \( \text{c}1 \) \( \text{c}4 \) \( \text{e}3 \) \( \text{f}4 \) \( \text{f}3 \) \( \text{b}4 \) \( \text{g}4 \)

Alternatively:

a) 7 \( \text{e}5 \) c5 8 \( \text{d}6 \) c4

and now:

a1) 9 \( \text{f}4 \) x \( \text{a}6 \) 10 \( \text{x}e6 \)
\( \text{c}3 \)

11 \( \text{c}5 \) b5! 12 \( \text{d}3 \) (12 \( \text{b}3 \) a4 13 \( \text{a}3 \) a3 14 \( \text{e}5 \) c4 15 \( \text{f}4 \) b5 16 \( \text{e}3 \) c3= or 12 \( \text{f}4 \) c2 15 \( \text{d}4 \) c4 14 \( \text{g}5 \) \( \text{b}5 \) 12 ... a4 13 \( \text{g}3 \) a3 14
\( \text{c}1 \) \( \text{c}4 \) and ... \( \text{e}2 \) wins;

N

\[ \text{B} \]

D. Gurevich - Dlugy
USA 1984

1 \( \text{h}4! \)

Alternatively, 1 h4 \( \text{f}3= \) 2 \( \text{g}5 \) \( \text{e}3= \) or 1 \( \text{e}5 \) \( \text{g}2 \) or 1 \( \text{h}4 \) \( \text{f}3 \) 2 \( \text{h}5 \) \( \text{g}3 \) 3 \( \text{h}4 \)

Based on analysis by Stoica.
Black cannot cope with threats to both flanks, despite the reduced material.

\[1 \ldots \text{g}3+\]
Alternatively, \[1 \ldots \text{h}7 2 \text{d}4\] and now:

\[a) 2 \ldots \text{g}3+ 3 \text{g}4 \text{e}4 4 \text{f}5 \text{d}6+ (4 \ldots \text{g}3+ 5 \text{f}4 \text{f}1 6 \text{f}3 \text{g}6 7 \text{e}4 \text{g}3+ 8 \text{d}5 - \text{JT}) 5 \text{e}5 \text{e}8 (5 \ldots \text{c}4+ 6 \text{f}6) 6 \text{d}5 \text{g}6 7 \text{f}3 \text{f}5 8 \text{c}6 \text{f}4 9 \text{b}6 \text{x}f3 10 \text{a}x6 \text{f}4 11 \text{b}6 \text{x}g5 12 \text{c}6;\]

\[b) 2 \ldots \text{d}6 3 \text{g}6+ \text{f}7 4 \text{e}8 (4 \ldots \text{e}8 5 \text{c}7 \text{c}4 6 \text{h}6 \text{w} with the idea of \text{e}8) 5 \text{c}7 \text{g}7 6 \text{a}x6 \text{c}4 7 \text{e}7 \text{x}a5 8 \text{e}8+ \text{f}8 (8 \ldots \text{g}8 9 \text{h}6) 9 \text{g}7+ \text{f}7 10 \text{h}6 \text{c}6 11 \text{h}7 \text{e}7 12 \text{d}6+ \text{f}6 13 \text{e}8.\]

\[2 \text{g}4 \text{e}4 3 \text{e}7 \text{f}7\]
Alternatively, \[3 \ldots \text{c}5 4 \text{f}5\] and now:

\[a) 4 \ldots \text{b}7 5 \text{g}6 \text{d}6+ (for 5 \ldots \text{c}5 6 \text{c}6 see 4 \ldots \text{b}3 or 5 \ldots \text{a}x5 6 \text{g}5) 6 \text{g}5 \text{e}4+ 7 \text{f}4 \text{c}5 8 \text{f}5 \text{f}8 9 \text{d}5 \text{g}7 10 \text{c}7 \text{g}8 11 \text{g}5 \text{g}7 (11 \ldots \text{e}4+ 12 \text{g}6 \text{d}6 13 \text{b}6 \text{c}4 14 \text{c}5 \text{a}x5 15 \text{e}4) 12 \text{e}8+ \text{f}8 13 \text{g}6 \text{e}6 14 \text{f}6 \text{e}7 15 \text{d}5+ \text{f}8 (15 \ldots \text{d}6 16 \text{b}4 \text{c}5 17 \text{a}x6+ \text{b}5 18 \text{c}7+ \text{x}c7 19 \text{g}7) 16 \text{b}4;\]

\[b) 4 \ldots \text{b}3 5 \text{c}6 \text{c}5 6 \text{g}6 and:\]

\[b1) 6 \ldots \text{h}6 7 \text{f}6 \text{e}4+ 8 \text{f}7 and now:\]

\[b11) 8 \ldots \text{d}6+ 9 \text{e}7 \text{c}4 10 \text{f}6 \text{d}6 11 \text{b}4 \text{e}8+ (11 \ldots \text{c}4+ 12 \text{f}7 \text{g}3+ 13 \text{e}7 is a tempo worse than 8 \ldots \text{g}5+) 12 \text{f}7 \text{d}6+ 13 \text{e}6 \text{b}7 14 \text{f}6;\]

\[b12) 8 \ldots \text{g}5+ 9 \text{e}7 \text{a}x6 10 \text{b}4 \text{e}4 11 \text{a}x6 \text{f}5 12 \text{g}7 \text{e}5 13 \text{c}6 \text{d}4 14 \text{c}7 \text{c}5 15 \text{e}6+ \text{x}e6 16 \text{a}6;\]

\[b2) 6 \ldots \text{b}3 7 \text{g}5 \text{c}5 8 \text{d}4 \text{e}4+ 9 \text{f}4 \text{c}5 10 \text{f}5 \text{b}7 11 \text{g}5 \text{x}a5 12 \text{h}5 (12 \ldots \text{f}5+ \text{h}8 13 \text{f}6 \text{c}6 14 \text{h}6 \text{e}7 15 \text{g}7+ \text{h}7 16 \text{a}4 \text{f}5) 12 \ldots \text{c}4 (12 \ldots \text{b}7 13 \text{f}5+) 13 \text{f}5+ \text{f}6 (13 \ldots \text{g}8 14 \text{h}6) 14 \text{g}7 \text{f}7 15 \text{h}6 \text{e}5 16 \text{h}7.\]

\[4 \text{d}5 \text{g}6 5 \text{f}4+ \text{f}7\]
Or \[5 \ldots \text{g}7 6 \text{g}6+.
Not \[6 \text{h}5 \text{x}g5 7 \text{x}g5 \text{e}7=.
6 \ldots \text{g}7 7 \text{f}5 \text{d}6+ 8 \text{g}5 \text{e}4+ 9 \text{g}4 \text{h}6\]
Alternatively:
\[a) 9 \ldots \text{g}8 10 \text{h}5 \text{g}3+ 11 \text{g}5 \text{f}8 12 \text{h}5 \text{e}4+ 13 \text{h}6 \text{g}8 14 \text{g}7;\]
\[b) 9 \ldots \text{f}6 10 \text{h}5 \text{g}7 11 \text{e}6+ \text{f}6 12 \text{c}7 \text{g}7 13 \text{a}x6 \text{a}3+ 14 \text{g}4 \text{e}4 15 \text{f}4 \text{d}6 16 \text{c}7 \text{x}g6 17 \text{a}6 \text{c}8 18 \text{e}5 \text{f}7 19 \text{d}5 \text{e}7 20 \text{c}6 \text{d}8 21 \text{e}6+ \text{e}7 22 \text{c}7 \text{d}6 23 \text{d}4;\]
\[c) 9 \ldots \text{d}6 10 \text{h}5 \text{c}4 11 \text{g}5 \text{x}a5 12 \text{h}5+ \text{f}8 13 \text{h}6 \text{c}6 14 \text{g}7+ \text{f}7 15 \text{h}7 \text{e}7 16 \text{f}4 \text{g}8 17 \text{d}5 a5 18 \text{e}3 \text{e}6+ (18 \ldots \text{e}7 19 \text{a}4 \text{g}8 20 \text{c}5 \text{e}7 21 \text{b}7 \text{a}4 22 \text{d}6+ \text{f}6 23 \text{c}8) 19 \text{h}8 \text{g}8 20 \text{e}4 \text{a}4 21 \text{d}6+ \text{e}7 22 \text{x}g8 \text{a}3 23 \text{f}5+;\]
\[10 \text{f}5 \text{d}6+ 11 \text{g}6 \text{e}4\]
Or \[11 \ldots \text{c}4 12 \text{f}6 \text{d}6\]
Knight v Knight

13 \( \text{e}6 \).
12 \( \text{d}5 \) \( \text{c}3+ \)
13 \( \text{c}6 \) \( \text{a}2 \)

Notes largely based on those of Ulybin and Volovik.

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<tr>
<th>N</th>
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<tr>
<td>Hecht - Quinteros</td>
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<tr>
<td>Vrsac 1973</td>
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<td>1</td>
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<td>Black could also have tried 2 ... ( \text{f}3+3 ) ( \text{h}1 ) and now:</td>
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<td>a) 3 ... ( \text{h}4 ) 4 ( \text{g}7 ) ( \text{g}3 ) 5</td>
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<tr>
<td>( \text{e}6 ) ( \text{g}4 ) 6 ( \text{f}4 ) ( \text{g}5 ) 7 ( \text{e}2 )</td>
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<tr>
<td>( \text{e}6 ) 8 ( \text{h}2 ) ( \text{h}4 ) 9 ( \text{g}3 ) ( \text{g}4 ) 10 ( \text{e}2 )</td>
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<tr>
<td>b) 3 ... ( \text{f}5 ) 4 ( \text{f}4 ) (4 ( \text{g}7+ ) ( \text{f}4 ) 5 ( \text{e}6+ ) ( \text{e}3 ) 6 ( \text{g}d4! )</td>
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<tr>
<td>( \text{g}5 ) 5 ( \text{e}2 ) ( \text{e}6 ) transposing to the previous variation;</td>
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<td>c) 3 ... ( \text{g}3 ) 4 ( \text{f}4! ) ( \text{f}2 ) 5</td>
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<tr>
<td>( \text{e}2) (5 ( \text{g}3 ) 6 ( \text{g}d4! )</td>
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<tr>
<td>3 ( \text{d}8 ) ( \text{a}5 )</td>
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<tr>
<td>Not 3 ... ( \text{c}5 ) 4 ( \text{c}6 ) ( \text{e}6 ) 5</td>
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<tr>
<td>( \text{e}5 )</td>
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<tr>
<td>4 ( \text{g}1 )</td>
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<td>4 ( \text{f}7 ) ( \text{c}6 ) 5 ( \text{h}6 ) ( \text{f}4 ) 6</td>
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<td>( \text{g}h3 ) ( \text{e}5 ) is dangerous but</td>
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<tr>
<td>6 ( \text{g}7 ) 4:Ja6+</td>
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<tr>
<td>7 ( \text{h}6 ) ( \text{f}4 )</td>
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</table>

Another key type of knight and pawn vs pawn position, (cf diags NP18-19) 9 ... \( \text{c}7 \) 10 \( \text{d}5 \) \( \text{b}6 \) 11 \( \text{c}4 \) (Hecht).

<table>
<thead>
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<tbody>
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<td>Sanguinetti - Padvesky</td>
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<td>Nice OJ 1974</td>
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<td>1</td>
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<td>Or 1 ... ( \text{f}5+ ) 2 ( \text{g}x ) ( \text{f}6 ) 3</td>
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<tr>
<td>( \text{d}5+ ) ( \text{g}5 ) 4 ( \text{f}6 ) ( \text{e}8 ) 5</td>
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<tr>
<td>( \text{e}5 )</td>
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<tr>
<td>2</td>
<td>( \text{d}5 ) ( \text{c}7+ )</td>
</tr>
<tr>
<td>3</td>
<td>( \text{c}6 ) ( \text{a}6 )</td>
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<tr>
<td>4</td>
<td>( \text{d}3 ) ( \text{g}7 )</td>
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<tr>
<td>5</td>
<td>( \text{d}6 )</td>
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<tr>
<td>Not 5 ( \text{g}7 ) ( \text{g}h6 ) 6 ( \text{g}x ) 6 ( \text{f}5 )</td>
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<td>7 ( \text{g}x ) ( \text{h}5 )</td>
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<tr>
<td>5 ... ( \text{f}7 )</td>
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<tr>
<td>Alternatively, 5 ... ( \text{h}6 ) 6</td>
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<tr>
<td>( \text{g}7 ) ( \text{g}5 ) 7 ( \text{f}2 ) and now:</td>
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</tr>
<tr>
<td>a) 7 ... ( \text{c}5 ) 8 ( \text{f}7 ) ( \text{f}5 ) 9 ( \text{g}x )</td>
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<tr>
<td>( \text{g}5 ) (9 ( \text{g}x ) ( \text{x}5 ) 10 ( \text{h}6 ) ( \text{e}6 ) 11</td>
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<tr>
<td>( \text{h}3 ) ( \text{d}8 ) 12 ( \text{g}7 ) ( \text{e}6 )</td>
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</tr>
<tr>
<td>13 ( \text{g}8 ) ( \text{f}8 ) 14 ( \text{f}4 ) ( \text{g}5 )</td>
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</tbody>
</table>

\( \text{g}7 \) 10 \( \text{e}7 \) (The black king is boxed out. This is an optimal opposition of white king against knight, and the king is ideally posted as well.)

10 ... \( \text{g}5 \) (10 ... \( \text{a}6 \) 11 \( \text{f}6 \) \( \text{c}7 \) 12 \( \text{f}7 \) \( \text{d}5 \) 13 \( \text{d}6 \) 11 |
| \( \text{f}6 \) \( \text{f}5 \) (11 ... \( \text{d}7 \) 12 \( \text{e}4 \) |
| 12 \( \text{f}7 \) \( \text{e}6 \) 13 \( \text{g}4 \) (13 \( \text{d}3 \) |
| b) 7 ... \( \text{f}5 \) 8 \( \text{g}3 \) 9 |

6 \( \text{d}7 \) \( \text{g}7 \) |

If 6 ... \( \text{b}8+ \) 7 \( \text{c}7 \) \( \text{a}6+ \) 8 \( \text{b}7 \) \( \text{g}7 \) 9 \( \text{a}6 \) \( \text{h}6 \) 10 |

\( \text{f}4 \) 7 \( \text{e}7 \) \( \text{c}7 \) |

Or 7 ... \( \text{b}8 \) 8 \( \text{b}4 \) |

8 \( \text{f}4 \) \( \text{a}6 \) |

9 \( \text{e}6+ \) 1-0
Knight v Knight

A. Zaitsev - Polugaevsky
Vladimir 1969
White has a strong single pawn. Black must abandon the queenside to cope with the g-pawn and after ...
66... $g5
a draw was agreed.

Timoshchenko - Yusupov
USSR 1981
White is (should have been) thwarted by his bad knight position.
52 b4 $b7
53 b5 $c7
54 $b4 $b6
55 a5+ $c7
56 $c4 $b7
57 $d5 $c7+
58 $c5 $e6+
59 $c4 $c7

Black should have played 59 $a7?!! leaving c7 for the knight (Timoshchenko) e.g.
60 $d5 $c7+ 61 $c6 $e6 and now:
   a) 62 a6 $d4+ 63 $c5 $e6+ 64 $d5 (64 $b4 $b6=) 64... $c7+ intending $xa6;
   b) 62 b6+ $a6 and:
      b1) 63 $d6 $d8= (63...
          $xa5?? 64 b7);
      b2) 63 $g5 $d8!? 64 $c7

and:
   b21) 64... $b7 65 $e6! (65 $e4 $g6= with zugzwang, not 65... $xa5 66 $c5+$b5 67 $b3 $c6 68 $b7 $g5 69 $d4+)

   and now:
     b211) 65... $xa5 66 $c5+
     b212) 65... $g5! 66 $xg5
     b213) 65... g6 66 $d4 g5 67 $c6 $g4 68 $b4+$xa5 (68...

Or 63...

63... $b7 64 $c5+ $c7 65 $b6+ $c6 66 $b7 $c7 67 $a6 $b5 68 $d7.
64 $b6 $a4
65 $d4 $g5
66 $e5

Not 66 $xg5?? $b7=.
1-0
Knight v Knight

Kholmov - Hort
Leningrad 1967

The primary factor in this ending is the extent to which White is distracted by the b-pawn.

57 g5 £h4
58 f5 £g7
59 £e6+
Perhaps 59 £f4!?

59 ... £f7
60 £d4 £g7
61 £f4 £g2+
62 £e5 £h4
63 £e4

White could also try a direct approach: 63 £e6?? b3 and now:

a) 64 £xb3 £f3 65 g6 £h4
66 f6+ £xg6 67 £d4 (67 f7 £g7 68 £d4 £g6 69 £f5+ £f8=) and now:
  a1) 67 ... £b6 68 £f5+ £xf5 69 £xf5 £h7 70 £e6;
  a2) 67 ... £b7 68 f7 £g7 (68 ... £g6 69 £f5 £f8+ 70 £e7 £g6+ 71 £e8 £h8 72 £e7) 69 £e7 £g6+ 70 £e8 £f6 71 £f3 intending £b4+;
  a3) 67 ... £g2! 68 £e2 £h4 69 £f4+ (69 f7 £g7 70 £f4 £f5+) 69 ... £h6 70 £f7 £g7 71 £h5+ £f8 72 £f6 £g2 (72 ... £f5? 73 £f4) 73 £e6 £h4 74 £f4 £g7 75 £h5+ £f8 76 £f6 £g7 77 £d7 £g6=;

b) 64 f6+! and now:
  bl) 64 ... £h7 65 £xb3 and:
    bll) 66 ... £g6 and now:
      blll) 66 f7 £g7 67 £d4 £g6 (this position with Black to move is easily won, see 64 ...
          £g6) 68 £e2 (68 £f5+ £xf8 69 £d6 £g7) 68 ... £h8;  
      bll2) 66 £d4! and:
          bll21) 66 ... £h7 67 f7 £g7 (67 ... £g6 68 £f5 £f8+ 69 £e7 £g6+ 70 £e8) 68 £e7 £g6+ 69 £e8+–;

b2) 64 ... £g6 65 f7 £g7 66 £xb3 £g6 67 £d4 and now:
    b21) 67 ... £h8 68 £f5+ £f8 69 £d6 £g6 (69 ... £g7 70 £e7 £g6+ 71 £e8 £f8 72 £f5+);
    b22) 67 ... £f4+ 68 £e7 £d5+ 69 £e8 £e7+ 70 £d7 £d5 (70 ... £xf7 71 £e7 £g6 72 £h3) 71 £g6+–.

63 ... £g2
Also possible was 63 ...

£f7? 64 £e5 £g2 (64 ...
£g7 65 £e6 transposes to the above, and 64 ...
£e7 loses to 65 £g6++) 65 £e6+ £h6 and now:

a) 67 £g7 £h7 68 f6 £g8 69 £d4 £e3 (69 ... £f7 70 £f5) 70 £c6 £f7;
  b) 67 £f6 £e3 68 £g7 £g4+ 69 £f7 £e5+ 70 £f8 £d7+ 71 £e7 £h7 72 f6 (72 £xd7 b3 73 £f6 b2 £f7).

64 £g6+ £g8
64 ... £f7 65 £c5 £h4 66 £f4 £g2+ 67 £f3 £h4+ (67 ...
£e1+ 68 £g4 and £g6+ +) 68 £g4 transposes.

65 £e5 £h4
66 £f4 £f7

Or 66 ...
£g7 67 £g4 £g2
68 £g6 £e3+ 69 £g5 £d5 70 £e6+ £e8 71 £d4 £g7 72 £f6+ £xf6 73 £f5++ £h8 74 £xf6 b3 75 £g7+ £h7 76 £f7.

67 £g4 £g2
68 £g6+ £f6
Knight v Knight

Or 68 ... 769 g5+\ldots.\ f6+.
69 d7+ e7 70 f6+ 1-0
Or 69 ... g7 70 g5 b3 71

Knight and Two Pawns v Knight and Two Pawns

Gines - Trias
corr 1981
With limited material, Black surprisingly embarks on a mating attack.
1 ... g4!
2 xg6

Notes expanded on those by Zlotnik.

V. Kovacevic - Zlotnik
Belgrade 1988
1 ... d7
2 e4
Or 2 g6 d6 3 xh6 e5 4 a2 b6 5 g4 a5 6 c3 b4=.
2 ... d6
3 d4 c6!

Black must use the king against the a-pawn, the knight is best suited to fighting the other pawn. (Note 3 ... e5 4 e4+ e6 5 d2)
4 xc4 b6
5 d1
Or 5 d5 a5 6 e6
c5+ 7 f5 b4 8 e4
d3 9 g3 xa4 10 g6 b5
11 xh6 c6=.
5 ... a5
6 b2 b8
7 b3 b6
8 c4+ c5
9 e3 h5
10 f5 d7
11 g3 f6
12 f5 e4

Notes expanded on those by Zlotnik.
Knight v Knight

Horner - P. Littlewood
British Ch. 1981

1 ... \( \text{d}6 \)
Not 1 ... a2 2 \( \text{x}a2 \) d2+ 3 \( \text{c}e2 \) \( \text{e}2 \) 4 \( \text{c}c1+ \).
2 g5 \( \text{e}4 \)

Knight and Three Pawns v Knight and One Pawn

Rajkovic - Marie
Yugoslavia 1974

1 \( \text{e}3 \)
Not 1 \( \text{f}3 \) \( \text{d}3 \) 2 g4 (2 \( \text{g}4 \) \( \text{e}5+ \) 3 \( \text{h}5 \) \( \text{xf}5 \) 4 \( \text{hx}6 \) \( \text{g}4=\) 2 ... h5=.
1 ... \( \text{h}3 \)
If 1 ... \( \text{g}4+ \) 2 \( \text{f}4 \) or 1 ...
\( \text{d}1+ \) 2 \( \text{f}4 \).
2 \( \text{f}3 \)
Not 2 g4 h5 \( \text{f}3 \) hgx4+ 4 \( \text{x}g4 \) \( \text{f}2+ \) 5 \( \text{f}3 \) \( \text{xf}5 \) 6 \( \text{xf}2 \) \( \text{g}4 \).
2 ... \( \text{xf}5 \)
3 \( \text{c}3 \)
Or 3 g4+ \( \text{f}6 \) 4 \( \text{c}3 \) h5 5 \( \text{gxh}5 \) \( \text{f}5 \) 6 \( \text{e}2+\) (JT).
3 ... \( \text{g}1+ \)

Knight and Three Pawns v Knight and Two Pawns

Prandstetter - Donchev
Prague Zt 1985

1 c4 bxc4
2 bxc4 \( \text{c}6 \)
3 a3!
\( \text{Not} \) 3 c5 \( \text{b}5 \) or 3 a4 \( \text{b}6 \).
3 ... \( \text{f}6 \)
Or 3 ... \( \text{d}6 \) 4 c5+ \( \text{c}6 \) 5 a4! \( \text{c}7 \) 6 \( \text{e}5 \) winning - White can penetrate with his king on b5 (Prandstetter).
4 \( \text{e}5+ \) \( \text{b}6 \)
5 a4! \( \text{a}6 \)

Based on Rajkovic's analysis.

White can penetrate with his king on b5 (Prandstetter).
Knight v Knight

c7 \( \triangleleft a6+ \) 16 ... \( \triangleleft e4+ \) 17 \( \triangleleft d7 \)
\( \triangleleft c5+ \) 18 \( \triangleleft a7 \) 19 \( \triangleleft c8 \)
\( \triangleleft b6 \) 20 c7 \( \triangleleft a6 \) 21 \( \triangleleft c4+ \)
\( \triangleleft c5 \) 22 \( \triangleleft x a5 \) \( \triangleleft x c7 \).

9 ... \( \triangleleft e3 \) !?

A better defence was 9 ... \( \triangleleft b7 \) 10 \( \triangleleft c4 \) (10 \( \triangleleft c3 ! \) \( \triangleleft g3 \) 11 \( \triangleleft c4 \) \( \triangleleft a6 \) 12 \( \triangleleft f4 \) \( \triangleleft e4 \) 13 \( \triangleleft d5 \) - intending c6, as in the note. Here it is Black to move, but it is c6 that is threatened, not any special zugzwang - 13 ... \( \triangleleft d2+ \) 14 \( \triangleleft c3 \) \( \triangleleft e4+ \) 15 \( \triangleleft d4 \) \( \triangleleft g5 \) 16 \( \triangleleft c4 \) \( \triangleleft e4 \) 17 c6 transposing to the note 11 ... \( \triangleleft a6 \) below). 10 ... \( \triangleleft a6 \) 11 \( \triangleleft d5 \)
\( \triangleleft b7 \) 12 \( \triangleleft d6 \) 13 c6+ \( \triangleleft e4 \).

10 \( \triangleleft f4! \)

If 10 \( \triangleleft d5 \) \( \triangleleft e2 \) 11 \( \triangleleft c6 \) \( \triangleleft e3 \).
10 ... \( \triangleleft b7 \)
11 ... \( \triangleleft c4 \) \( \triangleleft e4 \)
Or 11 ... \( \triangleleft a6 \) 12 \( \triangleleft d5 \) \( \triangleleft e4 \) 13 c6 \( \triangleleft d6+ \) 14 \( \triangleleft d4! \) \( \triangleleft c8 \) 15 \( \triangleleft c5 \) \( \triangleleft a7 \) (15 ... \( \triangleleft a7 \) 16 \( \triangleleft c7+ \) 16 \( \triangleleft b5 \).

Zapata - Van der Wiel
Brussels SWIFT 1986

1 f5 \( \triangleleft f7! \)

Not 1 ... gxf5 2 \( \triangleleft f4! \) \( \triangleleft f7 \) 3 \( \triangleleft g5 \) f4 4 \( \triangleleft x b5 \) \( \triangleleft f6 \) 5 \( \triangleleft g4! \)
\( \triangleleft e5 \) 6 \( \triangleleft e2 \).
2 \( \triangleleft f4 \) \( \triangleleft f6 \)
3 fxg6 \( \triangleleft x g6 \)
4 \( \triangleleft e2! \)

Aiming for f4 which will force the black king out of play.
4 ... \( \triangleleft h2 \)
5 \( \triangleleft e4! \)

White gradually improves his pieces taking care that the black knight is not allowed to interfere with checks.
5 ... \( \triangleleft d1 \)
6 \( \triangleleft f4+ \) \( \triangleleft h6 \)
7 \( \triangleleft d5! \)

Restraining the knight on dl.
7 ... \( \triangleleft f2+ \)

Knight checks would be answered by \( \triangleleft f5 \).

8 \( \triangleleft e5 \) \( \triangleleft g6 \)

Notes based on those by Prandstetter.

7 ... \( \triangleleft g6 \) 8 \( \triangleleft e5 \) should transpose.
9 \( \triangleleft f4+ \) \( \triangleleft h6 \)
10 \( \triangleleft f5 \) \( \triangleleft g4 \)
11 \( \triangleleft d5 \) \( \triangleleft f2 \)
Or 11 ... \( \triangleleft h2 \) 12 \( \triangleleft e3 \).
12 \( \triangleleft e3! \) \( \triangleleft d3 \)
13 \( \triangleleft f6 \) \( \triangleleft e1? \)

Alternatively:

a) 13 ... \( \triangleleft f4 \) 14 g3 \( \triangleleft h3 \) 15 \( \triangleleft f5+ \) \( \triangleleft h7 \) 16 \( \triangleleft d6++ \);
b) 13 ... \( \triangleleft e5! \) (the best square, to get on a checking circuit and avoid zugzwang)
14 \( \triangleleft f5+ \) \( \triangleleft h7 \) and now:

b1) 15 \( \triangleleft g5 \) \( \triangleleft e6+ \);
b2) 15 g3 \( \triangleleft e4+ \) 16 \( \triangleleft f7 \) \( \triangleleft c3! \) 17 \( \triangleleft d6 \) \( \triangleleft h6 \) 18 \( \triangleleft f6 \) \( \triangleleft d5+ \) 19 \( \triangleleft e3 \) \( \triangleleft c3 \) (19 ... \( \triangleleft b4?? \) 20 \( \triangleleft e4 \) \( \triangleleft e2 \); b3) 15 \( \triangleleft d6 \) \( \triangleleft h6 \) 16 g3
Knight v Knight

\[ \text{\( \text{N} \)} \text{45} \text{Monte Carlo 1968} \]

\[ 43 \text{f4 d7} \]

A long three pawns vs two endgame. With no black weaknesses and no passed pawns Black should hold as long as passivity is avoided. Perhaps he could even try 43 ... h5!?

44 h4

Or 44 g4 g5+ 45 e4 c5+ 46 e3 (46 d5 d3) 46 ... g6=:

44 ... e5

45 e4 h5

Ensuring that there will be an exchange of pawns after any advance.

46 f3 f7 ,

47 b5 h6

A good circuit. The black knight presses g3 and h4, and hinders any possibility of f4-f5 to isolate the h5-pawn.

48 f4 f5

\[ \text{\( \text{b31} \)} \text{18 f7 d7! (18 ... d3? 19 f6+ or 18 ... h7? 19 f6 h6 20 f5+) 19 f5+ h7 20 e7 c5 (20 ... g6? 21 xd7 xf5 22 e7 g4 23 f6 xg3 24 g5+) 21 f6 e4++; b32) 18 f5 d7! (Black must prevent f6, other knight moves are too distant, e.g. 18 ... b3 19 f6+) and now: b321) 19 e4 b6 and White’s knight is also distant from its optimal square(s). (Not 19 ... f8 20 f6+;)

b322) 19 f7+ g7 20 e5 and: b3221) 20 ... c5! 21 f6+.

b3222) 20 ... f6 21 d3 f7 (21 ... h7? 22 c5 f7) 22 c5 g7 and now:

b3221) 23 e4 h7 24 g5 f6 25 e6 f7 26 f4 g7 27 e2 h7 (27 ... f7 28 g5 g7);

b3222) 23 g5 f7 24 h6 f8 (24 ... e7 25 g6 with zugzwang or 24 ... e8 25 g7+) 25 e6+ e7 26 f4+;

b3222) 20 ... c5! 21 g5 e4+.]

14 f5+ h7

15 g3 e3

16 d6

Zugzwang, so White wins the h-pawn: 16 ... d4 (16 ... b6 17 f7+ h7 18 g5+) 17 g5 e2 18 f5.

1-0

Black creates counterplay against h4 just as his lack of space is becoming dangerous, e.g. 63 e7 e3 64 e6+ g8 65 f6 (65 d4?) f5+ 65 ... g2=.

½-½
Knight v Knight

Hecht - Gligoric
Busum 1969

Another safe three pawns v two pawns.
74 ... d6
75 e2 e5
76 d3+ d4
Or 76 ... e4 77 c5+ e3
78 d7.

Anderssen - Steinitz
1866

1 ... e6
2 g2 f5

It seems to me (JT) that this plan is too rigid. It is more logical to try to mount pressure against the white pawns. The h3-pawn is not as weak as it would be on h4, so this is not an easy task.

Another idea is 2 ... h5!? and now:

a) 3 f3 h4 4 e7 g5 5 e6 f5 6 f2 g5 7 g2 (7 h4 looks very risky, the h-pawn being very vulnerable there) 7 ... e6 8 d4+ d5 9 e2 (9 f5 e6 10 f2 e5 11 e7 f6 12 d5+ g5 13 e7 looks to be White’s toughest attempt to break down) 9 ... e6 10 f2 e4;

b) 3 e7 d4 4 d5 g5 (4 ... g5 5 e7) 5 h2 f5

Sznapik - Romanishin
Caracas 1976

1 ... d4
2 a4

Intending c5+.
2 ... f5
3 g4 f6
4 h5!!

The pawn is even weaker on h5. White must consider passive defence with 4 c5 h5+ 5 h3 e5 6 d3+ e4 7 e1 f6!? (7 ... d4 is suggested by Bozic but it seems to me that h4 is weak enough to ensure that White’s position should be critical or lost, certainly here where White is so passive) 8 c2 f3 9 b4 e7 10 d3 and now:

a) 10 e2? 11 c5 xf2 (11 ... d5 12 g3) 12 e4+;
b) 10 ... d5! 11 h2 g4+.
4  g5
5  c5  g7
6  e4+  e5
7  xg5
Or 7 g3 f5++.
7  hgx5

White is too tied down to the e4-pawn to do without this, which at least creates a passed pawn.
58 ... fx5+
59  xe5  d6
60  g4
Or 60 g4 h6 61 d3 f6
62  f2  f7 63  e4+  g7
64  g3  f6 65  h5+  e7
66  e4  g5+  67  d5  f3

It looks risky to expose the h-pawn, but the g4-knight makes it possible to threaten e7.
60 ... f7
61  d4  h5

Intending c3 mate.
4  d5
5  f3
Perhaps 5 d3?! and now:
a) 5 ... b5 4  g5  h6 5 f3
d6 4 h5 (6 ... c5 transposes) 7 xf5;
b) 3 ... h6 4  d4  c5 5
e6+  d5 6  g7  c7  h3
with a zugzwang.
If 7 ... d5 8 xf5; otherwise the white king invades.
3  d4
If 3 d3 d7 4  d4  c5+ 5 e2  e4 6 b5 d5 7
c7+  d6.
3  e4
4  b5

Gligoric - Levy
Hastings 1970
55  f3  f7
56  e3  h6
57  f4  f7
58  e5

Gufeld - Grigorian
USSR 1980
1  gxf5  gxf5
2  f3  f6
Or 2 ... d6 3 d3 and:
a) 3 ... b5 4  g5  h6 5 f3
d6 4 h5 (6 ... c5 transposes) 7 xf5;
b) 3 ... h6 4  d4  c5 5
e6+  d5 6  g7  c7  h3
with a zugzwang.
If 7 ... d5 8 xf5; otherwise the white king invades.
3  d4
If 3 d3 d7 4  d4  c5+ 5 e2  e4 6 b5 d5 7
c7+  d6.
3  e4
4  b5

95
Knight v Knight

White has two other tries:

a) 6 h3 Qh6 7 Qd4 8 Qg3 (8 e4 was suggested by Gufeld) and now:

a1) 8 ... Qxe7!? 9 Qh4 (9 Qf3 Qf6 10 Qg5 Qg6) 9 ... Qxf6 10 Qh5 (10 Qf3 Qf7) 10 ... Qf7 11 Qf3 Qd6 12 Qe5! Qg7 13 Qg5 h6+ 14 Qh5 Qe4;

a2) 8 ... Qd5 (This was given by Gufeld but it looks dubious to me. The black king defends best from f6.) 9 Qh4 Qe4 10 Qg5 Qf7+ 11 Qf6 Qd6 12 h4 Qe8+ 13 Qg5?! (13 Qf7 is inferior: 13 ... Qxe3

b) 6 e4+ Qc5 7 Qxf5 Qxh2+ 8 Qg3 Qf1+ 9 Qg4 Qc6 10 f6 Qd7 11 Qc7 Qd2!= 12 Qf5 Qc4 13 Qb5 Qe3+.

6 ... Qxh2+

7 Qg3 Qf1+

8 Qf2 Qe4!

9 Qxf1 Qxe3

10 Qe6 Qf3

11 Qg1 Qg3

White could also have played:

a) 3 Qc6 Qf6 and now:

a1) 4 Qg3 Qf5+ 5 Qh3 Qe7 6 Qd4 Qd5 7 Qg3 (7 Qe2 Qf5 8 Qg3 Qe4) 7 ... Qxf4 8 Qxf4 e5+;

a2) 4 Qd4 Qd5 5 Qe2 (5 Qg3 Qxf4) 6 Qf3 Qg3 Qe4.

b) 3 Qg3?! Qf6 4 Qd7+ Qf5 (4 ... Qe7 5 Qe5) and now:

b1) 5 Qe5?? Qd5 6 Qd3 Qe4 (6 ... Qc3 7 Qf3 Qb5 8 Qc5 Qd4+ 9 Qe3 Qe2+ 10 Qf3 Qe1+ 11 Qg3) 7 Qc5+ when I (JT) do not see how Black wins against best defence. Pressure against e6 rather than g6 seems best;

b2) 5 Qe5 Qe4 6 Qxg6 Qd5 7 Qf8 Qxf4 8 Qd7 e5 9 Qf2 Qd4 10 Qf6 (10 Qf3 Qd5) 10 ... e4 11 Qg3 e3

(Correction: Gufeld)

14 Qe6 Qc7! (Gufeld) 13 ...

Qxe3 (Alternatively: 13 ...

Qd6 14 h5 h6+ 15 Qg6+- or 13 ... h6+ 14 Qxh6 Qxe3 15 Qe6 intending Qg6 +-) 14 Qxf5+ Qe4 15 h5 Qc7 16 Qg7 Qd5 17 f5 Qe5 18 Qe8 Qf4 19 f6.

6 ... Qxh2+

7 Qg3 Qf1+

8 Qf2 Qe4!

9 Qxf1 Qxe3

10 Qe6 Qf3

11 Qg1 Qg3
Knight v Knight

Serper - Suba
Hastings 1990

1... \(\mathcal{d}e1!\)

Intending 2 \(\mathcal{c}f3 \mathcal{g}g6\) 3 \(\mathcal{c}d3-c4-c5-d6xe6\).

1... \(\mathcal{c}c3\)
2 \(\mathcal{c}f3 \mathcal{g}g6\)

Not 2... \(\mathcal{d}d5+\) 3 \(\mathcal{d}d4 \mathcal{f}4\)
4 \(\mathcal{g}xg5+ \mathcal{f}6\) 5 h4+.

3 \(\mathcal{d}d4 \mathcal{d}d5\)
4 \(\mathcal{c}c5 \mathcal{f}4\)
5 \(\mathcal{d}d6 \mathcal{d}h3\)

If 5... \(\mathcal{d}h6\) 6 \(\mathcal{d}d7! \mathcal{g}g6\) 7 \(\mathcal{f}xe7\) (zugzwang) 7... \(\mathcal{d}h6\) 8 \(\mathcal{f}6+-\).

6 \(\mathcal{d}xe6 \mathcal{d}f2\)
7 \(\mathcal{d}h2 \mathcal{d}d3\)

If 7... \(\mathcal{d}e4\) 8 \(\mathcal{f}xe7\) intending \(\mathcal{d}e6+-\). The presence of the g-pawns makes the e-pawn a potent force - it is easier for a knight to sacrifice itself for a pawn than to halt it, and here the knight cannot afford to be sacrificed.

8 \(\mathcal{d}d6 \mathcal{f}f7\) 9 \(\mathcal{g}g3\) 10 \(\mathcal{f}f3 \mathcal{f}2\)
11 \(\mathcal{g}xe5!\) Not 11... \(\mathcal{d}e5?\) \(\mathcal{f}e4+\).

11... \(\mathcal{d}f8\)

Or 11... \(\mathcal{g}xe4\) 12 \(\mathcal{h}h7\) \(\mathcal{d}d8\)
13 \(\mathcal{e}7+\) \(\mathcal{d}e8\) 14 \(\mathcal{d}e6\) intending \(\mathcal{d}f6\) mate.

12 \(\mathcal{d}h7! \mathcal{d}e4+\)

Or 12... \(\mathcal{g}xe4\) 13 \(\mathcal{e}7+\).

13 \(\mathcal{d}e5 \mathcal{d}f2\)
14 \(\mathcal{f}d6 \mathcal{d}e7\)
15 \(\mathcal{d}d5+ \mathcal{d}f8\)
16 \(\mathcal{g}g5 \mathcal{f}1-0\)

Arnaudov - Semkov
Bulgarian Ch. 1977

1 \(\mathcal{f}e3!\)

Not 1 \(\mathcal{g}g3\) \(b3\) 2 \(\mathcal{f}f4 \mathcal{d}d6\)
3 \(\mathcal{f}d6 \mathcal{f}f7\) 4 \(\mathcal{g}g4 \mathcal{d}d6+\).

1... \(\mathcal{d}d6\)

If 1... \(b3\) 2 \(\mathcal{g}f5\) draws.

2 \(\mathcal{d}d5+ \mathcal{d}e6\)
3 \(\mathcal{f}xb4 \mathcal{d}xe7\)
4 \(\mathcal{g}g3\)

The blockade not only creates typical difficulties in advancing the pawns, but it is easy for the knight to threaten sacrifices liquidating both pawns.

4... \(\mathcal{f}f6\)

If 4... \(\mathcal{d}e4+\) 5 \(\mathcal{d}f4 \mathcal{d}e6\) (5... \(\mathcal{g}g3\) 6 \(\mathcal{d}d5+ \mathcal{d}e6\) 7 \(\mathcal{d}e3=\) since both Black pieces are tied down to defending pawns)
6 \(\mathcal{c}c2 \mathcal{f}f6\) 7 \(\mathcal{d}e3 \mathcal{d}d6\) 8 \(\mathcal{d}xe4+\).

5 \(\mathcal{d}f4 \mathcal{g}g6\)

Alternatively:

a) 5... \(\mathcal{d}c4\) (intending a controlling \(\mathcal{d}e3\) 6 \(\mathcal{d}d5+ \mathcal{d}e6\) 7 \(\mathcal{d}c7+ \mathcal{d}d6\) 8 \(\mathcal{g}xf5\) \(g3\) (8... \(\mathcal{d}e3+\) 9 \(\mathcal{f}f4+\) 9 \(\mathcal{b}b5+ \mathcal{c}c5\) 10 \(\mathcal{d}c3\) \(g2\) 11 \(\mathcal{d}e2=\).

b) 5... \(\mathcal{d}e6\) 6 \(\mathcal{c}c2!\) intending \(\mathcal{d}d4xf5, \mathcal{d}e3xg4\).

6 \(\mathcal{d}d5 \mathcal{h}5\)
7 \(\mathcal{e}e3 \mathcal{h}4\)
8 \(\mathcal{f}f1 \mathcal{h}3\)

Or 8... \(\mathcal{g}e4\) 9 \(\mathcal{e}e3 \mathcal{g}g3\) (9... \(\mathcal{d}d6\) repeats) 10 \(\mathcal{g}g2+ \mathcal{h}h3\) 11 \(\mathcal{e}e3\) (= Mechkarov) 11... \(\mathcal{e}e2+\) 12 \(\mathcal{g}xf5\) \(g3\) 13 \(\mathcal{g}g5!\) \(\mathcal{e}e3\) 14 \(\mathcal{h}h5=\) (see also diags 14 and 16).

9 \(\mathcal{g}g3 \mathcal{g}g2\)
10 \(\mathcal{g}xf5 \mathcal{g}g2+\)
Knight v Knight

Knight and Three Pawns v Knight and Three Pawns

Em Lasker - Nimzowitsch
Zürich 1934

1 ... g7

A classic example of the benefits of an outside pawn, but it must be noted that both of Black's pieces are superior as well. Still, White should hold with best defence.

2 c1 g6
3 d2 e5
4 e3 h5
5 a3?! i

White should activate the knight. Now Black has something to 'grip' on this flank. 5 d3! has two points: it begins to correct the pawns passivity and does not create any weakness on the queenside.

5 ... c2+

More accurate is 5 ... e6! 6 g1 g5.

6 c3

Or 6 d3 b4+.

6 ... b4
7 a3(?)

As pointed out by Fine, after 7 c4! White should draw, e.g. 7 ... d3 8 b4 e1+ 9 e2 c2. This is just one obvious possible improvement for White and explains why Averbakh preferred to analyse this ending from Black's 23rd move.

5 ... a5!
6 h3 c2+
7 d3 e1+
8 e2 g2
9 f3 h4+
10 e3 g6
11 g5 f6
12 h7+ e7

13 g5 e5
14 d4 d6
15 h3 a4
16 f4 h4
17 h3 b6!
18 f4 b5
19 h3

19 c3 c6 20 d3 is better, making ... b4 and ... xb4 problematic, i.e. 20 e5 (20 ... e5 21 c6+ 21 e6+ d6 22 f4. 19 ... c6+

20 e3

Or 20 d3 e5 21 e3 a5+.

20 ... e5
21 d3 b4
22 axb4+ xb4
23 c2 (54a)

Averbakh starts his analysis from here. The whole ending is instructive, though from here it becomes technically correct.

23 ... d4+
24 b1

Or 24 d3 e6 25 e3 (25 c2 c4+) 25 ... b3 26 f4 xb2 27 xe6 a3.

24 ... e6
25 a2

Or 25 c2 c4+-.

25 ... c4!
26 a3 d4
27 x4 e4
28 b4 f3
29 b5 g2

The finish might have been

30 b6 (30 g5 xg5 31 b6 e6 32 b5 d8) 30 ... xh3 31 b7 c5+.

0-1
Knight v Knight

**Stohl - Ilincic,**

*Vrnjacka Banja 1989*

38 ... d3
39 d5?!

More accurate was 39 f1 e5 40 e2 x4f4 41 g4
(see also diags 49 and 61) 41 f5 42 f6 h5 42 h6 43
g8 h5 44 e7 e5 45 f4
d6 46 c8+ d7 47 b6+ c6 48 e8 d7 49 b6+ c7 50 d5+ d6 51 b6)
39 d7+. This ending "feels" tenable, for example:

a) 43 ... d4 44 f8 e5 45 f4 (45 e6+??) 45 ... g4 46 f3 (or 46 h3 intending
g3, xg6);

b) 43 ... d6 44 f8 and now:

b1) 44 ... g5 45 h7 g4 46
fxg4 hxg4 47 h3 gxh3 48 f3
f4 49 e5+ e5+ (49 ... e2+ 50 f2) 50 xf4 h2
51 e4+ d5 52 f2 d3+ 53 g3=;

b2) 44 ... e5 45 f4 e7 45
f4 e7 46 h7 f7 47 f3.

**N Dudkin - Gofman**

*USSR 1990*

1 ... d1

Immediate promotion only
leads to a draw: 1 ... e1
2 xe1 xxe1 3 e3 d5+ (3 ...
xa4+ 4 c4 b6+ 5 b5
e8 6 e5 7 b5 e3
8 e6 f4 9 d7 a7 10
a7=) 4 c4 xc7 5 e5
e2 (5 ... e6+ 6 b6 xg5
7 xa5 e4 8 b6 d2 9
c5= f5 10 a5 b3+ 11 d5)
6 b6 d5+ 7 xa5 c3 (7 ...
e3 8 b5 c3+ 9 c6
xa4 10 d6 f11 e7=) 8
b6 xa4+ 9 c6 c3 10
d6 e4+ 11 e7 xg5 12
f6.

2 e3+ c1
3 g2 d2

4 h4 c1?
4 ... e1! 5 g2+ (or 5
e3+ d1 with zugzwang whilst 5 a3 clearly loses, as
White will be at least a tempo
- two usually - behind on the
variations in the first note) 5 ...
f1 6 e3+ gl 7 c2 f2
8 e3+ d5+ 9 c4 xc7 10
e5 11 e6+ b6 d4.

5 e2
d1
6 e3+ e1?
7 d5= c8
8 f4 b6

Or 8 ... d2 9 xe2 xe2
10 c4 e3 11 b5 d4 (11 ...
f4 12 xa5 xg5 13
a6 f5 14 b7= 12 c6!
e5 13 d7 a7 14 e7=.
9 d5= h4

Notes by Vladimirov.
Knight v Knight

\[
\begin{array}{c|c}
\text{N} & 57 \\
\hline
\text{M. Gurevich - Bareev} \\
\text{Germany 1992} \\
64 \text{d}3! \\
\text{Intending c5 and c3-b4.} \\
64 \text{...} \text{c}6 \\
65 \text{c}3 \text{f}1 \\
66 \text{b}4 \text{e}3 \\
67 \text{xa}4 \text{d}4?! \\
\text{Intending d5-e4.} \\
68 \text{b}4 \text{d}5 \\
69 \text{a}5 \text{c}7 \\
70 \text{c}5 \text{b}5 \\
71 \text{a}4 \text{c}3+ \\
72 \text{a}3!? \\
\text{More testing than 72 b}3 \\
\text{d}5 73 \text{c}2 \text{e}2 74 \text{d}3 \\
\text{c}4 75 \text{d}2 \text{g}3= \\
72 \text{...} \text{d}5 \\
73 \text{b}3 \text{b}5? \\
\text{Black had to play 73 ... e}2! \\
\text{preventing the white king} \\
\text{from having use of d3: 74} \\
\text{d}3, \text{c}3 75 \text{c}2 \text{e}2 76 \\
\text{d}2 \text{c}3= \\
74 \text{c}2! \text{c}3 \\
\text{If 74 ... c}4 75 \text{xe}6 \text{d}3+ \\
76 \text{d}2 \text{c}3 77 \text{c}5 \text{bl}+ \\
78 \text{c}1+-. \\
75 \text{d}3 \text{d}!!? \\
\text{Or 75 ... b}5 76 \text{e}4 \text{intending f}6+. \\
76 \text{xe}6! \\
\text{Not 76 a}6? \text{f}2+ 77 \text{e}2 \\
\text{e}4+ \text{intending 78 c}7+? \\
\text{c}4 79 \text{xe}6 \text{d}3+ 80 \text{d}1 \\
\text{c}3+. \\
76 \text{... f}2+ \\
\text{If 76 ... xe}6 77 \text{xd}4 \\
\text{b}2 78 \text{e}4! \text{c}4 79 \text{f}5+ \\
\text{e}7 80 \text{d}4+- \\
77 \text{e}2 \text{h}3 \\
78 \text{f}5! \\
\text{It was still possible to go} \\
\text{wrong: 78 b}5? \text{xe}6 79 \text{b}6 \\
\text{xf}4+ 80 \text{f}3 \text{(80 d}2 \\
\text{d}7--+) 80 ... \text{g}6 81 \text{b}7 \\
\text{xe}5+. \\
78 \text{... xe}5 \\
79 \text{b}5 \text{e}1+ \\
80 \text{d}1! 1-0 \\
\end{array}
\]
Knight v Knight

Knight v Knight: More Pawns

Fine 1941

1 ... $f6$
2 $g3$ $e5$
3 $c6+$ $e6$
4 $e3$ $g5$

Alternatively:

a) 4 ... $d7$ 5 $d4$ $f6$ 6 $f4$ $e7$ 7 $h4$ $f7$?! (by analogy with Portisch's note to diag 75, 7 ... $h5$ (!) should be played) 8 $g4$ $d7$ (if ... $h6$, $h5$ becomes a threat - see diag 75) 9 $d3$ $e7$ 10 $c4$
$d6$ 11 $g5$ $fxg5$ 12 $hxg5$ and now:

a1) 12 ... $h6$ 13 $e5+$ $e7$ 14 $gxh6$ $xh6$ 15 $d5$ $g4$ 16 $c6+$ $e8$ (16 ... $d7$ 17 $e6+$ $e8$ 18 $d6$ $f6$ 19 $b4$ $e4+$ 20 $e5$ $f2$ 21 $d5$ $g4+$ 22 $d6++$) 17 $e6$ $e3$ 18 $b4$ $g2$ 19 $d5$ and the g6-pawn is doomed;

a2) 12 ... $e7$ 13 $e5$ $d8$ 14 $d5$ $f7$ 15 $c6+$ $e8$ 16 $e6$

Keres - Reshevsky

Variation based on Fine's analysis, 1939

1 ... $f8$
2 $f1$ $e7$
3 $e2$ $d6$
4 $c2$ $e5$
5 $e3$ $b2$
6 $d1$ $a4$
7 $d3$ $d5$
8 $e3+$ $f4$
9 $f5$ $g6$
10 $h6$ $f5$
11 $f7$ $d5$
12 $g5$ $e5+$
13 $e3$ $h6$
14 $f3$ $g5$
15 $g3$ $e4$

$h8$ 17 $e5$ $f8$ 18 $f6$ $e8$ 19 $g7$;

b) 4 ... $f5$ 5 $d4+$ (5 $e5$ $f7$ 6 $f4$ "is also good" - Fine)

b1) 5 ... $e7$ 6 $e5$ $c4+$ 7 $f4$ $h6$ 8 $h4$ $b2$ 9 $xf5+$ $gxh5$ 10 $xf5$ $f7$ 11 $f4$ (11 $h3$? or 11 $g4$?) 11 ... $d3$ (11 ... $c4$ looks to be a tougher defence) 12 $h5$ $f2$ 13 $g4$ $h3$
14 $g5+-$;

b2) 5 ... $f6$ 6 $exf5$ $gxh5$ 7 $f4$ $g6$ (7 ... $h6$ 8 $h3$) 8 $e5$ $d7$ 9 $f2$ $d8$ 10 $e7$ $b2$ 11 $e6$ $e5$
$g7$ 14 $e6$;

After 4 ... $g5$, Fine continues

5 $d4+$ $f6$ 6 $f4$ $gxf4$ 7 $gxf4$ $g6$ (7 ... $h6$ 8 $h3$) 8 $e5$ $f7$ 9 $e6$ $d8$ 10 $e7$ $b7$ 11 $f4$ $e5$ 12 $f3$
$e4$ (12 ... $h5$ 13 $e5$ and $f6/e6$) 13 $e5+$ $g7$ 14 $e6$;

16 $d4$ $xc3$
17 $xf5$ $h5$
18 $f4$

Not 18 $g7$ $h4$ 19 $gxh4$ $gxh4$ 20 $f4$ $h3$ 21 $f5$ $e6$
22 $g3$ $d5$ and Black's king position enables him to draw, according to Fine.

18 ... $gxf4+$
Or 18 ... $g4$ 19 $g7$ $d6$ 20 $xh5$.

19 $xf4$ $e4$
20 $h4$ $f6$
21 $g7$ $d6$
22 $f5$ $e7$
23 $g6+--$

See also diag 44.
Here White has played h4, avoiding the stifling advance of the g-pawn (cf diag 59a).

```
55 f3?!
According to Hecht, who suggests the manoeuvre \( \text{b1-d2-f3-g5} \), this is dubious. Now the kingside pawn chain is weakened, though this (f3) is theoretically interesting since this structure could have arisen in diags 59 and 75.

55 ... \( \text{c5} \)
56 \( \text{b1} \) \( \text{d4} \)
57 \( \text{d2} \) \( \text{c6} \)
58 \( \text{f1} \)
58 \( \text{b3+} \) transposes to the game.
58 ...
59 \( \text{d2} \) \( \text{c6} \)
60 \( \text{b3+} \)

60 f4 leads to a structure mentioned but not analysed by Fine. After 60 ... e4 it seems that White cannot prevent the gradual invasion of the black king:

```
58 ... \( \text{c5} \)
59 \( \text{d2} \) \( \text{c6} \)
60 \( \text{b3+} \)
```

a) 61 \( \text{f1 a5} \) 62 \( \text{d2} \) (62 \( \text{e3 c4} \) 62 ... \( \text{c3} \) 63 \( \text{bl+ b2} \) 64 \( \text{d2} \) \( \text{c2} \) with zugzwang):

b) 61 \( \text{b3+ c4} \) 62 \( \text{d2+ c3} \) 63 \( \text{e3} \) (63 \( \text{bl+ b2} \) 64 \( \text{d2} \) \( \text{c2} \) 68 \( \text{e2} \) - Black wants to reach this position with White to move - 68 ... \( \text{c3} \) 69 \( \text{bl+ b2} \) 70 \( \text{d2} \) \( \text{c2} \) with zugzwang) 63 ... \( \text{c2} \) and now:

b1) 64 \( \text{d4} \) (This pseudo-activity allows the black king around the back leading to a basic winning position. Passive play also seems doomed to meet death by zugzwang)

```
64 ... \( \text{d1} \) and:

b11) 65 \( \text{f2} \) \( \text{b4} \) 66 \( \text{c3} \)
```

(66 \( \text{e5 d5} \) transposes to the note) 66 ... \( \text{d2} \) 67 \( \text{c4} \) \( \text{c3} \) 68 \( \text{b6 d3} \) +. The black king always has a way of manoeuvring out of the knight's checks and reaching a position where the knight must take up an inferior circuit. For example, here the knight must go away from checking king on d2, or else the white king must yield vital turf:

b12) 65 \( \text{e5} \) \( \text{e7} \) 66 \( \text{f2} \)

\( \text{d5} \) 67 \( \text{c4} \) (67 \( \text{e5 g6} \) \( \text{e3} \) +) e3+ 68 \( \text{xe3} \) \( \text{e2} \) 69 \( \text{b2+ c2} \) 68 ... \( \text{xe3} \) \( \text{e1} \) 70 \( \text{f3 f1+} \).

b2) 64 \( \text{c4} \) \( \text{a5} \) (a key zugzwang position) 65 \( \text{e3} \)

(65 \( \text{e4 f1} \) \( \text{c4} \) +) 65 ... \( \text{d1} \) +.

```
60 ...
61 \( \text{d2} \) \( \text{d4} \)
62 \( \text{f2} \)
61 \( \text{d2} \) \( \text{d4} \)
62 \( \text{f2} \)
63 \( \text{f4} \)
62 ... \( \text{f4} \)
```

The h4-pawn falls now.

```
63 \( \text{e4} \)
64 \( \text{f4} \)
65 \( \text{f6} \)
66 \( \text{xg4} \)
67 \( \text{e2} \)
68 \( \text{d3} \)
69 \( \text{f2} \)
```

0-1
Knight v Knight

Kreuzbov - Lukov
Bulgaria 1981

1 ... e2
2 f3 e1
3 g2?

Incredibly passive. Better is 3 d2 f1+ 4 g3 g4 5 h3 gxf3 6 g1+ e4 7 f3 e3+ 8 fxe3 xe5 9 f3 e3 7 d3 e6 8 h5 g4 9 f3 g3 7 xe6 h3 8 g6! (7 ... xh4 8 xg7 g4+ 9 e8) 8 f3 f3 9 e1 0-1

Also losing is 10 g1+ e3

11 h3 f3+ and now:

a) 12 h1 d2! 13 g2 (13 f2 e2 14 g2 e1+ 15 g1 f3) 13 ... e2;

b) 12 g2 e2 13 h1 f1.

10 ... hxg5
11 h5 gxh5
12 fxg5 c2
13 g4
15 g1 g2
16 g7 d4
17 ...
18 f4 4 e2 19 g2 e1 20 d3

Korchnoi - Polugaevsky
Tilburg 1985

44 ... e5
45 f3 d2
46 c5 d4
47 ... g5
48 c5?

White should play 48 f1!!

f4 49 f2! f5 49 ... fxg3+ 50 xg3 xg5 51 f2 f4 52 e2 g3 53 d3 d6 54 e3+ 50 g4+ 56 g6+ 51 c3++ (Polugaevsky). Not, however, 48 f2?! f4! 49 g2 (49 gfx4+ exf4 50 e2 f5 51 d3 e5+ 52 d4 f3+ 53 d3 e5 54 c3 f3 55 d1 d3 56 b4 f6 57 b5 47 e7 58 a4 b2= 49 ... e3+! 50 h3 e4 51 gxf4+ xxf4 52 fxe4 xe4 53 c3+ d3 54 a4 c4 55 d1 c2= (Polugaevsky).

48 ... xh2
49 a4 c4
50 b3 f4!
51 a5

8 ... e1
9 h2 f3
10 e5+ f2
11 h3 f3+ and now:

a) 12 h1 d2! 13 g2 (13 f2 e2 14 g2 e1+ 15 g1 f3) 13 ... e2;

b) 12 g2 e2 13 h1 f1.

10 ... hxg5
11 h5 gxh5
12 fxg5 c2
13 g4
15 g1 g2
16 g7 d4
17 ...
18 f4 4 e2 19 g2 e1 20 d3

Or 51 g4 e4! (Polugaevsky) 52 a5 exf3+ 53 xf3 xf5 54 e4 d6 55 a6 xg4 56 d4 e7= (56 ... xd4?? 57 a7).

51 ...
52 g3
53 e6
54 ... a7= (Polugaevsky).

55 a7 a8= (Polugaevsky).

52 ...
53 a6 b5
54 c5 f6!
55 ...
56 ...
57 ...
58 ...
59 ...
60 ...
61 ...

Instead 61 c3 c7 62 b5+ b6 63 a7 b7 64 c4 e7! 65 xe5 g6+ 66 e4 e7! 65 xe5 g6+ 66 e4 e7!

103
Suba - Adorjan
Szirak 1986

A new structure. Here the presence of a protected passed e-pawn is balanced by the rigidity of the rest of the pawn structure. Black cannot set his pawns in motion without massive exchanges.

Also drawing is 63 ... g6 64 fxg6+ hxg6 65 ... exh7=(Suba).

After 63 ... exf8 the conclusion might be 64 d5 g6 65 g5! gxg5 66 ... exx5 67 ... exd4 68 exf4 (intending exf5xe4) 69 ... exf4 exf5+=.

continuation, but the pawn-eating race favours Black.

Alternatively, 64 ... e6 65 ef4 transposing to the next note.

Similarly, 63 ... exf4 64 ae6+ (64 ef4 ef4=+) 65 ... ef7 makes it harder for Black to storm into the kingside, though Black should be able to transpose into a version of diags. 59 or 72 after 60 ... d6 61 ... ef7 62 ... ef6+ 63 ... ef5 64 ... d3 ef5. Tal prefers a more active
Knight v Knight

\( \text{\#f7 f4! 71 gxf4 exf4 72 \text{\#g6}} \)
\( \text{\#e3! (72 ... g4 73 \text{\#h5 g3 74}} \)
\( \text{hgx3 fxg3 75 \text{\#d3=} 73 \text{\#f5}} \)
\( \text{g4! (73 ... f3? 74 \text{\#e4 g4 75}} \)
\( \text{\text{\#g3 h4 76 \text{\#f1+ \text{\#f2} 77}} \)
\( \text{\text{\#xg4=} 74 \text{\#e4 h4 and ...}} \)
\( \text{g3+ (Sveshnikov).} \)

64 \ldots \text{\#d6+}
65 \text{\#d4 gxf4!}
66 gxf4 \text{\#e2}
67 \text{\#c5 h4}

\begin{tabular}{|c|c|c|c|c|}
\hline
& N & 66 & W & \\
\hline
Ivkov - Filip & & & & \\
Vrsac 1971 & & & & \\
Conversion of an extra outside pawn. & & & & \\
44 \text{\#f3} f6 & & & & \\
45 \text{\#g4 \#d5} & & & & \\
\begin{tabular}{c}
To make the b-pawn more accessible to the king.
\end{tabular} & & & & \\
46 b5 \text{\#b6} & & & & \\
47 \text{\#e3? \#d6} & & & & \\
48 \text{\#e4} & & & & \\
Intending \text{\#d4.} & & & & \\
48 \ldots \text{\#c5} & & & & \\
49 f5 \text{\#xb5} & & & & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|}
\hline
& N & 67 & W & \\
\hline
Seirawan - Byrne & & & & \\
Baden 1980 & & & & \\
This is an example of a clean exploitation of a pure extra outside pawn. & & & & \\
41 \ldots \text{\#d5} & & & & \\
42 \text{\#e2} \text{\#c5+ 'a' & & & & \\
43 \text{\#c3 a5} & & & & \\
44 \text{\#e3+ \#e4} & & & & \\
45 \text{\#c4 \#b7} & & & & \\
Black's king is already in, so there is no reason to donate the a-pawns and race. & & & & \\
46 \text{\#b6 \#d6} \text{\#f5} & & & & \\
47 \text{\#d7 h5} & & & & \\
48 \text{\#b3 h5} & & & & \\
49 \text{\#a4 \#e4} & & & & \\
50 \text{\#xa5 \#d2} & & & & \\
51 h3 \text{\#e4!} & & & & \\
\begin{tabular}{c}
Preventing \#c4 by defending f6. Now the entire white kingside falls.
\end{tabular} & & & & \\
0-1 & & & & \\
\hline
\end{tabular}
Knight v Knight

Ftacnik - Beliavsky
Wijk aan Zee 1985

White's doubled pawns are in no way a liability. Black must exchange a pawn early to gain space.

42 ... 
43 f3 
44 g2 
45 h2 
46 f2 
47 e4 
48 g3 
49 gxf5 
50 e3 
51 e2+ 
52 c1 
53 d3 
54 f1 

55 c2+ c4
55 ... e5 looks more dangerous?
56 a3+ c5
57 c2 f4
Or 57 ... h4 58 gxh4 gxh4
59 e2 h3 60 f2 f4 61 g1
56 e3 62 a3! 62 e1 d4 63 h2 c3 64 xh3 d2 65 g2 xg2 66 xg2 e2-
62 ... b4 63 b1 c4 64 h2 b3 65 xh3 b2 66 g4=(Beliavsky).

58 gxf4 xf4
59 e3 ½-½
Since 59 ... c4 60 a3+
60 b4 61 b1 intending xd2-e4 is drawn (Beliavsky).

54 ... d4

Godena - Seirawan
Lugano 1988

In this position, Black has a potential outside passed pawn - a tremendous bonus in a knight and pawn ending.

1 ... e7
2 e3
2 a7? d6 3 b5+ e6
4 e3 (perhaps 4 c7+???) is similar to the game.
2 ... f6
3 f3
Or 3 g5 d7.
3 ... d7
4 e3 b6
5 e2+ h6
Or 5 ... xc4 6 e4. -
6 f3 e6
7 e4 xc4
8 f5+ f6?
A much clearer way to victory was 8 ... d6 9 f4 6
10 g5 hxg5+ 10 ... d5+?? 11 xd5 xd5 12 g6++ 11 xg5 e5 12 g6 c4-+
9 f4
Not 9 d5 b6+ 10 xc5
xa4+ 11 xa4 g5+.
9 ... d6

10 d5+ f7
11 e3 e8
12 c4 f6
13 d6+!
Much more resilient than 13 xa5 d5+ 14 e5 c3+.
13 ... e7
14 b7 d7
15 g5 f8
16 xa5 b6
17 f6 h5
18 f5 g6+?
19 xg6 h4
20 b7 d7
21 a5 h3
22 a6 e5+
23 f5 e6
24 a7 b8 xa7
25 xc5 h2??
Throwing the game away.
Critical is 25 ... c6 and now:
26 e6+!! e8 27 g6 h2
28 f7+ (28 g7? f7) d7 29 f8= b1 30 c5+ c7 31 f7+ b6 32 d7+;
26 e4 (Seirawan) 26 ... h2 27 f2 (27 g3 d4+ 28
Notes based on those by Seirawan.

Tisdall 1992
Analysis from Godena - Seirawan, Lugano 1988
White will try to get his king in on the h- or e-files, and can improve the knight to g3 to create tactical possibilities with the pawns. Black must try to create a blockade.

The battle of two connected pawns v a rook's pawn is intriguing, and is seen here in its most extreme form (i.e. two pawns on the sixth, rook's pawn on the seventh; the pawns could not be more efficient.

2 ... $g5+$

The battle of two connected pawns v a rook's pawn is intriguing, and is seen here in its most extreme form (i.e. two pawns on the sixth, rook's pawn on the seventh; the pawns could not be more efficient.

2 ... $f5$ $f3$

Alternatively:
a) 3 ... $g1$? 4 $f7$ $g7$ 5 $g3$ $h1$ (5 ... $f3$ 6 $h5+$ $f8$ 7 $f6$) 6 $h1$ $e2$ 7 $f2$ $d4+$ 8 $f5+$.
b) 3 ... $d4+$ 4 $g5$ $e6+$ 5 $h6$ $g8$ 6 $g3$ and now:
bl) 6 ... $g7$? 7 $g5$ (7 $f7+$ $f8$ 8 $g5$ $e7$ 9 $g4$ $e6$ 10 $f5$ $d4+$) 7 ...

e6+ 8 $f5$ $d8$ $e5$ $f8$ 10 $d5$ $e8$ (this looks to be one of the most critical positions, but black is still able to hold the balance) 11 $g7$ (11 $d6$ $f8$ 12 $d7$ $b7$ 13 $g7+$ $f7$ 14 $g8+$ $g8$ 15 $e7$ $d8+$ 16 $xd8$ $f7$) 11 ... $f7$ 12 $d6$ and:
b1) 12 ... $b7+$ 13 $c6$ (13 $e5$ $c5$ 14 $f5$ $d7$)
b2) 12 ... $g8$? 13 $f5$

e7 + 14 $c7$;
b2) 6 ... $d8$

4 $g3$ $f8$

Black should now be able to keep White at bay, but 4 ...

d4+ gives him chances to go wrong: 5 $e5$ $e2$? (another example of why the black knight must never stray) 6 $f7+$ $g7$ (6 ... $f8$ 7 $f6+$) 7 $f5+$ $xg6$ 8 $f8+$
h1+$ $g7+$ $h5$ 10 $h6+$.

Smyslov - Persitz
Hastings 1969

1 $e3$

Or 1 $g6$ $e5+$.

1 ... $e1$

2 $e4$ $c2$.

Also losing quickly is 2 ...

fxg5 3 hxg5 $c2$ (3 ... $d7$ 4 $e5+$ $d6$ 5 f6 $xg6$ 6 $g6$) 4 $e5$ $b4$ (4 ... $d6$ 5 f6 $xg6$ 6 $g6$) 5 $d4$ $d6$ 6 $c4+$

d7 7 $g6+$.

More troublesome is 2 ...

$g2$ 3 $g6$ $xh4$ 4 $e3$ and now (71a):

a) 4 ... $d6$ 5 $f4$ and:
a1) 5 ... $c5$ 6 $a6$ (6 ... $g4$ 7 $xh4$ $e4$ 8 $c4$ $xf5$ 9 $d6+$ $xg6$ 10 $a6$ $c4+$) 6 $c4$ (6 ... $c6$ 7 $g4$ $b6$ 8 $xh4$ $xa6$ 9 $d5$ $c4$ 10 $xf6$ $c3$ 11 $d5$ 7 $xc4+$

$e5$ 8 $a5$ $b5$ 9 $b7$

$xa6$ 10 $d6$ $b6$ 11 $e8
and now:
a11) 11 ... a5 12 \(xg7 \) a4 13 \
\(e6 \) a3 14 \(d4 \);

a12) 11 ... \(c6 \) 12 \(xg7 \) \(g2+ \) (12 ... \(d7 \) 13 \(g3 \)) 13 \
\(f3 \) \(e1+ \) 14 \(e2 \) with \(e6 \) to follow, winning;

a13) 11 ... \(g2+ \) 12 \(f3 \) (12 \(w \) \(e4 \) \(c6 \) 13 \(xg7 \) \(d7 \) 14 \
\(h5 \) \(e7 \) 15 \(f4 \) \(h4 \) 16 \
\(d5+ \) \(f8 \) 17 \(xf6 \) \(g7 \) 18 \
\(h5+ \) \(h6 \) 19 \(f4 \) a5=) 12 ... \
\(e1+ \) 13 \(g4! \) (13 \(e4 \) \(c6 \) 14 \
\(xg7 \) \(d7 \) 15 \(h5 \) \(e7 \) 13 ... \(c6 \) 14 \(xg7 \) \(d7 \) 15 \
\(e6 \) \(e7 \) 16 \(h5 \) \(g2 \) 17 \
\(h6 \) \(e3 \) 18 \(d4 \); 

a2) 5 ... \(c5 \) 6 \(g4 \) and 

now:
a21) 6 ... \(b4 \) 7 \(xf6 \) c5 8 \
\(d5+ \) \(xa5 \) 9 \(g5 \) \(xf5 \) (9 ... \
\(f3+ \) 10 \(h5 \) 10 \(xf5 \) \(b5 \) 11 \(e6 \) a5 12 \
\(f7 \) a4 13 \
\(xg7 \) a3 14 \(e3l+- \) (but not 
\(c3+? \) \(c4 \) 15 \(f7 \) \(xc3 \) \
\(g7 \) a2 17 \(g8w \) \(b2l-; 

a22) 6 ... \(d6 \) 7 \(xf6 \) \(e7 \) 
8 \(h5 \) \(f8 \) (8 ... \(c5 \) 9 \(xg7 \) \
c4 10 \(e4 \) c3 11 \(d3 \) \(f6 \) 12 \
\(h5+ \) 9 \(e5 \) and: 

a221) 9 ... \(c5! \) 10 \(g3 \) \(e7 \) 
11 \(xg4 \) (11 \(a6 \) c4 12 \(d4 \) \(f6 \) 
13 \(xc4 \) \(xf5 \)=) 11 ... c4 12 a6 

\(f3+ \) 13 \(f4 \) (13 \(d5 \) \(h4=)) 
13 ... \(e1+; 

a222) 9 ... \(f3+? \) 10 \(d6 \
\(d4 \) 11 \(g3 \) intending \(a6, \
\(c5; 

b) 4 ... \(a6 \) 5 \(f4 \) \(d6 \) 6 
\(g4 \) \(e5 \) 7 \(xh4 \) \(e4 \) 8 \
\(c2 \) c5 (8 ... \(xf5 \) 9 \(b4 \
\(e6 \) 10 \(xc6 \) 9 \(g4 \) \(e3 \) (9 ... 
\(c4 \) 10 \(b4 \) c3 11 \(xaxa6 \) c2 
12 \(c5+ \) \(d4 \) 13 \(b3+ \) \(c4 \) 
\(c4 \) 15 \(f4 \) \(xa5 \) 16 
\(e4) \) 10 \(a3 \) c4 11 \(f4 \) \(c3 \) 
(11 ... \(d4 \) 12 \(c2+ \) \(c3 \) 13 \
\(e3 \) \(d4 \) 14 \(e4 \) c3 - or 14 ... 
\(d3 \) 15 \(xf6 \) c3 16 \(d5 \) - 15 
\(e3 \) \(d3 \) 16 \(f3 \) \(d4 \) 17 
\(c2+ \) \(e5 \) 18 \(e3 \) \(xf5 \) 19 
\(e3 \) \(d4 \) winning) 12 \(f3 \) \(d4 \) 
(12 ... \(c2 \) 13 \(xc2 \) \(xc2 \) 14 
\(e4++) \) 13 \(e2 \) \(c5 \) (15 ... 
\(e4 \) 14 \(c2 \) \(xf5 \) 15 \(b4) 
14 \(d3 \) \(b4 \) 15 \(b1l. 

3 \(g6 \) \(h4 \) 
4 \(e3 \) \(a6 \) 
5 \(d4 \) \(c7 \) 
6 \(c5 \) \(g4 \) 
7 \(h5 \) \(e8 \) 
8 \(d4 \) \(f1-0 

With the idea of \(d6l, h6. 
Notes based on those in Infor­ 
mator.

Ribli - Beliavsky
Reggio Emilia 1986
Black's king must stand and 
guard against the white king's 
entry. Black's kingside pawns 
are overextended and White 
can slowly exaggerate their 
weakness.

37 \(d4 \) \(h5 \) 
38 \(e2 \) \(g7 \) 

Or 38 ... \(f6 \) 39 \(g3+- 
\(e6 \) (39 ... \(f4 \) 40 \(e4+ \) \(xe4 \) 
41 \(xe4 \) \(e6 \) 42 \(f3 \) a6 43 
\(d4+\) 44 \(d6 \) 44 a4) 40 \(c5. 
39 \(e4 \) \(f4 \) 
40 \(d4+-

Intending \(e4+-\). 

44 ... \(gxf3 \) 
45 \(xf3 \) \(g7 \) 
46 \(e4+ \) \(c7 \) 
46 ... \(e6 \) 47 \(c5+++. 
47 \(c5 \) \(f6 \) 
48 \(xa6+ \) \(d6 \) 
49 \(e5 \) \(d5 \) 
50 \(a4+ \) \(e6 \)
Knight v Knight

51 ♗c3 ♗e3
52 ♗e4 ♗c2

Timman - Andersson

Tilburg 1987

1 ... h5

Playing to contain the white king.

2 g3 ♗c3
3 ♗g2 ♗e4
4 ♗b4

±

B

If 4 ♗f3 ♗c3, but perhaps 4 ♗f1!?.

4 ... ♗d2!
5 ♗d3 g5
6 ♗f3 ♗c4
7 ♗f2 ♗d6
8 ♗c5+ ♗e7
9 ♗e2

9 e4 was suggested by Timman.

9 ... ♗f5

Note Black’s handling of this ending. First, restricting the white king led to the creation of white pawn weaknesses. Now the black king uses these to force pawn exchanges to ease the defence. White helps by playing impatiently.

10 g4?!

Timman prefers 10 ♗f2 and then aiming for e4.

10 ... hxg4
11 hxg4 ♗h6!
12 e4?

White forces the position too quickly. He can wait and try to achieve a two connected against one passed pawn position with 12 ♗d3!?. For example:

a) 12 ... ♗f7;

b) 12 ... ♗d6? 13 ♗a4 f5 (13 ♗e6 14 ♗c3 ♗d6) 14 ♗xf5 ♗xf5 15 e4 ♗h4 16 ♗e3 (16 e5+ ♗e6 17 ♗c5+ ♗f5 18 ♗e3 ♗g2+ 19 ♗f2 ♗f4) 16 ... ♗xe4 (16 ... ♗g2+ 17 ♗f2 ♗f4 18 ♗c3) 17 ♗xe4 g4 (17 ... ♗g2+ 18 ♗f2 ♗f4 19 ♗c3. 1 [JT] believe this structure should be very dangerous for Black since the g-pawn is not a major distraction. See also diags 37 and 69. It seems that centre pawns allow for maximum flexibility and the g-pawn could also be vulnerable.) 18 ♗f4! (18 e5+ ♗d5) 18 ... ♗f3 19 d5 ♗d2 20 ♗c3+; c) 12 f5 13 ♗xf5 ♗xf5 14 e4 ♗h4 15 ♗e3 transposing to the notes.

12 ... dxe4

13 ♗xe4 ♗f5

Forced according to Timman. The implication is that three pawns against two with a passed d-pawn is winning.

14 ♗f2

Or 14 ♗xf5 ♗xf5 15 ♗d3 ♗e6! 16 ♗xg5+ ♗d5=.

14 ... ♗e6
15 ♗e3 ♗g8
16 ♗d3 ♗xg4
17 ♗xg4 ♗f5
18 d5 ♗e7
19 ♗c4 ♗f4

Intending 20 d6 ♗c8=.

Analysis by Timman.
Knight v Knight

Hübner - Larsen
Las Palmas 1976

A textbook exploitation of an extra outside pawn.

48 \texttt{\textsf{d4 \textsf{d7}? \textsf{b2}}}.

Or 49 \textsf{... e5+ 50 \textsf{fxe5+}} \texttt{\textsf{xe5 51 b5+ e6 52 e7+ d6 53 e8+ e6 54 g7+}}.

50 b5+ d7
51 a5 bxa5
52 bxa5 c6
53 c4 d7
54 d4+ d6
55 b5 e5
56 e2

Not even allowing 56 a6 \texttt{\textsf{xa6 57 xxa6 d5 with chances to liquidate the pawns, though I believe it should still be winning, e.g. 58 f3 e4 59 g5+ xe3 60 xe6 f3 61 b5 g3 62 c4 xh3 63 d5 g4 64 e5 h4 65 g5.}}

56 \textsf{... d7}
57 a6 c7
58 d4 e5
59 xf5 exf4
60 exf4 f6
61 e3 e4
62 d5+

White's technique was excellent, though it was simplified by his having better pieces as well. 1-0

Portisch - Ljubojevic
Thessaloniki 1988

33 f4 f6
34 f3 f7
35 e3 c6
36 b3 g6
37 h4 b4

37 \textsf{... h5} was suggested by Polugaevsky. The four vs three structure (after an eventual d4 exd4) is of interest since it is also possible from diag 59 (though he, like Ljubojevic, omitted \textsf{... h5} and reached a crushing position for White.

38 d4 exd4+
39 xd4 a6

Perhaps 39 \textsf{... h5}.
40 g4!++

Now White's space advantage is tremendous and the chances of being left with a weak h-pawn are very high (see also diag 59).

40 \textsf{... c7}
41 d3 e7

Perhaps 41 \textsf{... h5}.
42 c4 d7
43 h5! gxh5
44 gxh5 e8

Portisch takes his time.

A top-level example of two pawns v none. Perhaps due to time pressure Portisch does not really win cleanly, but as long as White avoids a blockade the win is simple.

54 f3

More accurate was 54 e5 \texttt{\textsf{c7 55 g7+ f7 56 f5+}}.

54 \textsf{... c7}
55 e3 b5
56 g7+ d6
57 f5+ e5
58 d3 c7
59 d4

Portisch takes his time.
Knight v Knight

More direct was 59 e5 d5 60 e4 c3+ 61 f3 d5 62 g4 e6 63 d4+ d5 64 f3+-.
59 ... e8
60 b3+

Straightforward was 60 e5 intending e4, f5, d5, f5+-.

60 ... b4
61 d2 c5
62 e4 g7
63 e5 h5

Toth - Miles
Reggio Emilia 1984

Here White’s fractured queenside pawn structure, and weak c4-square give Black a positional advantage.

31 ... e7
32 c2 f6
33 g4?!

Better was 33 h2 intending g3, f3 according to Miles.

33 ... g6!
Planning ... h5 creating more white weaknesses.

34 d3

Alternatively:

a) 34 d2 h5 35 xc4 dxc4 36 f3 e6! intending ... b5, ... g5!+ (Miles);

b) 34 h2 h5 35 f3 e3+ intending ... g2xh4; the knight is only temporarily out of play on h4.

34 ... h5
35 gxh5 gxh5
36 g5 f5
37 h7 d6
38 f3 f7
39 e3 h8!
40 g5

Or:

a) 40 f2 g6 41 g3 f4 42 f2 e6 trapping the knight on h7.

b) 40 f8 g6 41 xg6 xg6 42 f4 f6+-. The white king will have to give ground and Black can combine a king advance with creating an outside passed pawn on the queenside.

40 ... g6+
41 h3 c6! Zugzwang.

Or 42 a4 a5.

42 ...
43 d3 g6
44 b4 e7
45 f2 a5
46 d3 g6
47 g3 f4!
48 e5

Or 48 xf4 h4+++

48 e2+
49 h4 xc3
50 xc6 xa2
51 e7+ e6
0-1
Two Knights v Pawn(s)

NNP The ‘Troitsky Line’

1 If the pawn is blockaded no further up then Black loses (ignoring the position of the knights).

NNP A Cage

1 ... h8
2 g5 h7
3 h5 h8
4 h6 g8
5 g6

Now it is Black to move and the white king can force its way to f7.

5 ... h8
6 g7! h6
7 g6 h7
8 f6 h7

NNP A Second Cage

White to move wins easily:

1 e4 d2
2 f6+ h8
3 g5 d1
4 f7 mate

Black to move draws.

+/=

If course if White could transfer the move to Black he would win trivially. But here that is not possible since he would have to triangulate with the black king on h7 or g8 at the edge of the cage - ready to run if given any air.

1 ... h8
2 f7 h7
3 g7 h6

Not 3 ... h8? 4 f5 h7 5 e4 and wins.

4 f6 h7
5 f5 h8!

Again not 5 ... h8? 6 f7 h7 7 e4.

6 e7 h7!
And again not 6 ... h8? 7 f7 h7 8 e4.

7 f7

Of course if 7 f8 Black
Two Knights v Pawn(s)

"Two Knights v Pawn(s)"

Analysis by Troitsky 1906 -

Computer improved

7 ... g6!

NNP

B

Analysis by Troitsky in 1906.

1 ... f3

2 d2 g3

3 e2 g2

4 c5 g3

5 f1 h4

6 e2 g5

7 f3 f5

8 c4 f6

9 f4 e6

10 e4 f6

11 d5 e7

12 e5 f7

13 d6 f6

14 e2 f5

15 e7 e6

16 e6 g7!

16 ... g3? was analysed by Troitsky in 1906.

17 e4 g6

This is zugzwang and over

the next few moves White

threatens to ‘lose a move’.

18 e5 g7

19 d6 h6

20 ef2!

Getting the knight out of

the way so as to manoeuvre

for the move.

20 ... g7

21 e6 f8 (4a)

21 ... g6 22 e4! is what

White wants: 22 ... g7

23 d6 g6 24 f7 g7 25
e5 f8 26 d7 and White

is in control.

22 e4 e8

23 d6+ e8

Black is able to run to the

queenside and avoid mate

there. But eventually he will

be driven back to the kingside

in an unfavourable position

with White in full control -

see the note to 38 f8.

24 f5 e8
Two Knights v Pawn(s)

47 $\text{g}f5$ $\text{h}4$
as follows: 59 ... $\text{g}1$ 60 $\text{g}3$
48 $\text{g}f5$ $\text{h}5$
49 $\text{g}4$ $\text{h}4$
50 $\text{f}6$ $\text{h}3$ (4b)
51 $\text{g}5$!
Triangulating.
51 $\text{g}4$
52 $\text{e}4$ $\text{h}3$
53 $\text{f}3$ $\text{h}4$
54 $\text{f}4$ $\text{h}3$
55 $\text{h}5$ $\text{h}4$
56 $\text{g}7$ $\text{h}3$
57 $\text{g}5$ $\text{g}2$
58 $\text{g}4$ $\text{h}2$
59 $\text{g}3$!
Troitsky continued naturally
with 59 $\text{h}4$ and forced a win
59 ... $\text{g}4$

Motwani - I. Gurevich
Hastings Challengers 1991
73 $\text{c}3$ $\text{c}7$
74 $\text{c}5$ $\text{d}8$
75 $\text{c}6$ $\text{d}7$
76 $\text{c}5$ $\text{c}7$
77 $\text{c}4$ $\text{c}6$
78 $\text{d}3$ $\text{c}6$
79 $\text{d}4$ $\text{c}7$
80 $\text{d}3$ $\text{d}5$
81 $\text{e}3$ $\text{f}5$+
82 $\text{e}3$ $\text{f}4$
83 $\text{e}3$ $\text{b}3$ $\text{a}5$
84 $\text{e}3$ $\text{c}4$
85 $\text{e}3$ $\text{c}4$
86 $\text{e}2$ $\text{d}4$
87 $\text{e}2$ $\text{f}3$+
88 $\text{e}2$ $\text{c}4$
89 $\text{e}2$ $\text{f}4$
90 $\text{a}3$ $\text{c}4$
91 $\text{b}2$ $\text{c}3$
92 $\text{a}3$ $\text{d}1$
93 $\text{a}4$?
Better was 93 $\text{a}2$! after
which Black should repeat

NNP Motwani - I. Gurevich
Hastings Challengers 1991
73 $\text{c}3$ $\text{c}7$
74 $\text{c}5$ $\text{d}8$
75 $\text{c}6$ $\text{d}7$
76 $\text{c}5$ $\text{c}7$
77 $\text{c}4$ $\text{c}6$
78 $\text{d}3$ $\text{c}6$
79 $\text{d}4$ $\text{c}7$
80 $\text{d}3$ $\text{d}5$
81 $\text{e}3$ $\text{f}5$+
82 $\text{e}3$ $\text{f}4$
83 $\text{e}3$ $\text{b}3$ $\text{a}5$
84 $\text{e}3$ $\text{c}4$
85 $\text{e}3$ $\text{c}4$
86 $\text{e}2$ $\text{d}4$
87 $\text{e}2$ $\text{f}3$+
88 $\text{e}2$ $\text{c}4$
89 $\text{e}2$ $\text{f}4$
90 $\text{a}3$ $\text{c}4$
91 $\text{b}2$ $\text{c}3$
92 $\text{a}3$ $\text{d}1$
93 $\text{a}4$?
Better was 93 $\text{a}2$! after
which Black should repeat

with 93 ... $\text{e}3$! 94 $\text{a}3$ $\text{c}3$!!
etc. (Not 93 ... $\text{e}3$ 94 $\text{b}1$)
94 $\text{e}3$ - 94 $\text{b}2$ 95 $\text{c}1$ - 95
$\text{c}1$ $\text{d}3$ 96 $\text{b}2$ $\text{c}4$ 97
$\text{a}3$ $\text{d}1$ 98 $\text{a}2$! etc. and
Black makes no progress until
he finds 98 ... $\text{e}3$!
93 ... $\text{b}2$+
94 $\text{a}3$?!
Making it very trivial. How-
ever, 94 $\text{a}5$ also loses rather
easily: 94 ... $\text{c}5$ 95 $\text{a}6$ $\text{c}4$
96 $\text{b}7$ $\text{b}5$ 97 $\text{a}7$ $\text{a}5$ 98
$\text{b}8$ $\text{b}6$ 99 $\text{c}8$ $\text{c}6$ 100
$\text{b}8$ $\text{b}3$ 101 $\text{a}7$ $\text{bc}5$ 102
$\text{b}8$ $\text{d}7$-103 $\text{a}7$ $\text{c}7$ 104
$\text{a}8$ $\text{a}6$.105 $\text{a}7$ $\text{b}4$ 106
$\text{a}8$ $\text{d}8$ 107 $\text{e}6$ $\text{d}c6$ 108 $\text{e}7$
$\text{d}5$ 109 $\text{e}8$ $\text{a}1$ $\text{b}6$ 110 $\text{a}6$
$\text{c}7$ mate.

91 $\text{c}3$
92 $\text{d}1$
93 $\text{c}4$?
Better was 93 $\text{a}2$! after
Two Knights v Pawn(s)

Troitsky 1906

1 ... \( \text{a1} \)
2 \( \text{h3} \) \( \text{h1} \)
3 \( \text{b2} \) \( \text{c1} \)
4 \( \text{c3} \) \( \text{b1} \)
5 \( \text{d3} \) \( \text{a2} \)
6 \( \text{b4} \) \( \text{b1} \)
7 \( \text{b3} \) \( \text{a1} \)
8 \( \text{e5} \) \( \text{b1} \)
9 \( \text{f3} \) \( \text{a1} \)

Not 9 ... \( \text{c1} \) 10 \( \text{c3} \) \( \text{d1} \) 11 \( \text{f4} \) \( \text{c1} \) 12 \( \text{e2}+ \) \( \text{d1} \) 13 \( \text{d3} \) \( \text{h3} \) 14 \( \text{h2} \) etc.

10 \( \text{f4} \) \( \text{h3} \)
11 \( \text{h2} \) \( \text{b1} \)
12 \( \text{d3} \) \( \text{a1} \)
13 \( \text{c2} \) \( \text{a2} \)
14 \( \text{h2} \) \( \text{a3} \)
15 \( \text{c3} \) \( \text{a2} \)
16 \( \text{e4} \) \( \text{b1} \)
17 \( \text{d2} \) \( \text{a2} \)
18 \( \text{c2} \) \( \text{a1} \)
19 \( \text{h3} \) \( \text{b1} \)
20 \( \text{d2}+ \) \( \text{c1} \)
21 \( \text{c3} \) \( \text{d1} \)
22 \( \text{h3} \) \( \text{e2} \)
23 \( \text{c4} \) \( \text{f2} \)
24 \( \text{c1} \) \( \text{g3} \)
25 \( \text{c3} \) \( \text{h4} \)

Alternatively:

a) 25 ... \( \text{hxh2} \) 26 \( \text{f2} \) \( \text{h1} \)
27 \( \text{e2} \) \( \text{h2} \) 28 \( \text{c3} \) \( \text{h1} \) 29

\( \text{e4} \) \( \text{h2} \) 30 \( \text{d2} \) \( \text{h1} \) 31
\( \text{f1} \) \( \text{h2} \) 32 \( \text{g3} \) mate;

b) 25 ... \( \text{g2} \) 26 \( \text{e2} \) \( \text{h2} \)
27 \( \text{f3} \) \( \text{h1} \) 28 \( \text{f2} \) \( \text{h2} \) 29
\( \text{c3} \) etc.

26 \( \text{f4} \) \( \text{h5} \)
27 \( \text{f5} \) \( \text{h6} \)
28 \( \text{f6} \) \( \text{h7} \)
29 \( \text{d3} \) \( \text{g8} \)
30 \( \text{e7} \) \( \text{h7} \)

Or 30 ... \( \text{g7} \) 31 \( \text{e5} \).

31 \( \text{f7} \) \( \text{h6} \)
32 \( \text{f6} \) \( \text{h7} \)
33 \( \text{e5} \) \( \text{g8} \)
34 \( \text{g6} \) \( \text{h7} \)
35 \( \text{e7} \) \( \text{h6} \)
36 \( \text{f5}+ \) \( \text{h5} \)
37 \( \text{e3} \) \( \text{h6} \)
38 \( \text{eg4}+ \) \( \text{h7} \)
39 \( \text{f7} \) \( \text{h8} \)
40 \( \text{h6} \) \( \text{h7} \)
41 \( \text{f5} \) \( \text{h8} \)
42 \( \text{g6} \) \( \text{g8} \)
43 \( \text{g7} \) \( \text{f8} \)
44 \( \text{f6} \) \( \text{g8} \)
45 \( \text{e6} \) \( \text{h7} \)
46 \( \text{g5} \) \( \text{g8} \)
47 \( \text{g6} \) \( \text{h8} \)
48 \( \text{f7} \) \( \text{h7} \)
49 \( \text{g4} \) \( \text{h2} \)
50 \( \text{g5}+ \) \( \text{h8} \)
51 \( \text{e5} \) \( \text{h1} \)
52 \( \text{g6} \) mate
**Bishop v Pawns**

**Bishop and One Pawn v King**

1. Bishop\(B\) and One Pawn\(P\) v King\(K\)

<table>
<thead>
<tr>
<th>BP</th>
<th>Ponziani 1782</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a6, a8</td>
</tr>
</tbody>
</table>

A fortress draw.

<table>
<thead>
<tr>
<th>BP</th>
<th>1</th>
<th>a6, a8</th>
</tr>
</thead>
</table>

2 Another positional draw.

<table>
<thead>
<tr>
<th>BP</th>
<th>1</th>
<th>a6, a8</th>
</tr>
</thead>
</table>

3. Bishop\(B\) and One Pawn\(P\) v One Pawn\(P\)

<table>
<thead>
<tr>
<th>BP</th>
<th>1</th>
<th>e7 stalemate</th>
</tr>
</thead>
</table>

Again no progress can be made.

<table>
<thead>
<tr>
<th>BP</th>
<th>1</th>
<th>e7, e8</th>
</tr>
</thead>
</table>

4. Bishop\(B\) and One Pawn\(P\) v One Pawn\(P\)

<table>
<thead>
<tr>
<th>BP</th>
<th>1</th>
<th>e7, e8</th>
</tr>
</thead>
</table>

No progress is possible - a positional draw.
Bishop v Pawns

Rauzer 1928

1... f3!

Black prepares to run around to the right if White's king goes after the rook's pawn.

2... f5  e3

The only winning move, found by Rauzer.

3... d3

Or 3... f3 4 c1 g3 5 g5 and now:

a) 5... f3 6 f4 e2! 6...

since it is the one most useful in keeping the black king out of the drawing corner. White also pulls the bishop out of the way of a possible gain of tempo by attack from the black king.

8... e6

9 e4 d7

10 b5 e8

11 c6 and wins

Averbakh's guidelines for this type of ending are:

a) Black doesn't draw just by being in the zone in diag 5b - he must also reach the corner in time;

b) When the bishop controls the h2/b8 (or corresponding) diagonal the black king must be able to answer c6 immediately.

Averbakh's guidelines for this type of ending are:

a) Black doesn't draw just by being in the zone in diag 5b - he must also reach the corner in time;

b) When the bishop controls the h2/b8 (or corresponding) diagonal the black king must be able to answer c6 immediately.
Bishop v Pawns

BP 6a  
14 g1 14 f3 h1 15 b8!  
(White removes his bishop from a possible tempo-gaining attack from the black king) 15 ... g1 16 e3 g2  
17 d3 f3 18 c4 e4 19 b5 d5 20 h2! (zugzwang - Black must move away from the drawing corner) 20 ... d4  
21 xax4 c5 22 a5 c6 23 a6 and Black does not reach a safe haven;

b) 5 ... f2 6 f4 e2 7  
Making it more difficult to be driven right than after 3 ... c7 4 c6 e6 5 d6 (note again this type of opposition which is used to force the black king away).

BP 7a  
Rauzer 1928  
1 d6  
White must keep Black out of the corner.

1 ... d8  
2 b7 d7  
3 c7 e6  
Making it more difficult to be driven right than after 3 ... c7 4 c6 e6 5 d6 (note again this type of opposition which is used to force the black king away).

BP 7b  
Rauzer and Averbakh both consider this to be a dangerous option. See diag 8 for an example where Black simply consents to being driven as far as the h8-corner, but refuses to move forwards. This is a safer policy than the text.

BP 7c  
8 g7+ e4!  
Not 8 ... e4? 9 e5 d3 10 d5 and Black's king is driven back, and he loses as in the first examples.

BP 7d  
9 d6 f5  
For 10 ... e4? 11 e6 see example showed, being caught in the corner behind the pawns loses easily) 8 f4 g2  
9 d4 f3 10 h2 with a familiar winning set-up.

BP 7e  
4 e5 e3 (6a)  
4 ... c4 5 d4 b3 6 c5 leads to the previous example.

BP 7f  
5 c1+ f3  
6 f5! g3  
7 g5! f3  
8 f4  
And White wins as in note a above.

BP 7g  
Rauzer and Averbakh both consider this to be a dangerous option. See diag 8 for an example where Black simply consents to being driven as far as the h8-corner, but refuses to move forwards. This is a safer policy than the text.

BP 7h  
8 g7+ e4!  
Not 8 ... e4? 9 e5 d3 10 d5 and Black's king is driven back, and he loses as in the first examples.

BP 7i  
9 d6 f5  
For 10 ... e4? 11 e6 see the boundaries and safety of the zone. Here White wins as in the previous example.

BP 7j  
13 e7 g7  
14 b4 g6  
15 e3 g5  
16 e5 g6  
17 f6 h6  
18 f7 h7  
19 e5 h6  
20 g7+ h7  
21 f8 g6  
22 g8  
This is now a direct transposition to diag 8.

BP 7k  
22 f7 f5  
23 f7 h5!  
24 f8 f5  
25 e7  
For 25 d6 see diag 8.

BP 7l  
25 e5  
26 e8 e6! (7b)  
This time it is a minor zugzwang for White, who
Bishop v Pawns

BP

7c

White cannot win. He can only drive Black from corner to corner. As long as Black does not head out for open spaces he is safe. Rauzer continues further with:

27 Qf8 Qf6
28 Qb4 Qg7
29 Qc3+ Qg6
30 Qe7 Qf5
31 Qd6 Qg6

Here Black does not reach d7 in time (see note re Averbakh’s emphasis in diag 5a) but more importantly, since the bishop is not posted on the cutting diagonal h2-b8, he reaches the corner.

93 Qb7 Qc5
94 Qc7 Qb5!

This game not only illustrates the drawing zone and method, it does so in most practical fashion. Van der Wiel avoids being driven forward like the plague, happily heading to the opposite corner, the safest policy.

8

This game not only illustrates the drawing zone and method, it does so in most practical fashion. Van der Wiel avoids being driven forward like the plague, happily heading to the opposite corner, the safest policy.
Bishop v Pawns

Paulsen - Metger
Nuremberg 1888

1...d4!!

Not 1...c5 b6+!= or 1...c4 b5+!=.

Alternatively:

a) 1...b5 2.a6 c6 3.c3 d6 4.b4 c6 5.a5+!;

b) 1...b6 2.a6 c6 3.c4 d6 4.b4 c6 6.b8 5.a6 6.a7+!.

2.c6+

Not 2...c3? b6 3.a6 b5=.

2...d6

Or 2...b5 3.d5 a6 4.d6 b5 5.c7 a6 6.b8+.

BP

Bishop and One Pawn v Two or More Pawns

Tunik - Sorokin
Kuibyshev 1990

A simple illustration of how the bishop wins.

57...d4

Preventing king entry.

58.c4 f6

Retreat is equally hopeless: 60.g2 e2 61.f3 c3 62.f4 e2 63.h2 f3 64.h3 g7 65.h2 g4 66.g2 c5 67.h2 f2.

60...e2

61.f3 d3

62.g4 d4

Black has a limitless source of tempi, and waits for White's position to become rigid - White must either advance his pawns or retreat and allow the encroachment of the enemy king. All sub-variations show this dilemma.

63...c3 e3

64...c4 e7

0-1

Due to 65.f5 (65.g5.d6) 65...g6 66.g2.f4 67.h3 f3. Black was aided by the inaccessibility of the g6-pawn. This difference prevents the white king from becoming active in the same way as the next two examples.

1...f4!

Not 1...f6? 2.e2 e5 3.d3 f6 4.d4 g6 5.e5+!

2.g4 d4

3.e2 c3!

The black king creates a barrier.

4.f5 d4

5.d2 c4

White wins.

BP

"Averbakh's Barrier" 1972

1...f4!

Not 1...f6? 2.e2 e5 3.d3 f6 4.d4 g6 5.e5+!

2.g4 d4

3.e2 c3!

The black king creates a barrier.

4.f5 d4

5.d2 c4

White wins.
Bishop v Pawns

BP 12
Speelman/Averbakh
1  ♗f3  ♘f7
2  ♗e3  ♗g7
3  ♗d4  ♘h6

BP end of Chekhower study
1  ♗b8  ♘f5
2  ♗c7  ♗e4
3  ♗d6  ♗g2
4  ♗e5  ♘f3
5  ♗f4  ♘h3

Or 5 ... ♗xh2 6 b7 ♘xb7 7 ♧xg4.

BP
Short - Kasparov
Belgrade 1989

Here White loses due to the doubled pawns. Black's weapon is to stalemate the white king when he will be obliged to play b5, transforming the wrong rook's pawn to a winning knight's pawn.

93 ... ♗g2
94  ♗d1  ♘f3
95  ♗d4  ♗e4
96  ♗c3  ♗e3
97  ♗c2  ♗e2
98  ♗c1

100  ♗c3 ♘d3 99 ♘b3 ♘d2
102  ♗a3 ♘c2 101 ♗a2 ♘c4+

BP
Averbakh

1  ♗f2

White must prevent ... ♘g3. Instead, 1 ♗h2?? is considered dubious by Averbakh, who claims that it seriously complicates White's task. I (JT) believe it wins more quickly. After all, this is the diagonal and ... ♗h5/ ... f5=.

See especially diag 23 for an illustration of this and the previous position.

White loses normally if he flees the corner: 103 ♗a3 ♘b1
104 ♗a4 ♘b3 105 ♗a5 ♘a3
106 ♗b6 ♘xb4.

103 ... ♘b1 0-1

White wants: 1 ... ♗h4 (1 ... ♗f5 2 ♗c7 transposes to the main line at White's fifth move) 2 ♗c7 (2 ♗d6 ♗g4 3 ♗e3 c5 4 ♗f7 c4 5 ♗e5 ♗f5 6 ♗g7 ♗e4 and the black pawns are very dangerous - Averbakh) 2 ... ♗h5 (2 ... ♗g4 3 ♗d6 transposes into main
Bishop v Pawns

line at White's sixth move) 3 

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Preventing 5 ... g4, which can be met by 6 g3 

f5 (7 ... e7 8 c5 

d7 9 b8 c8 10 e5 c7 

d4 8 b8 (White must avoid lines where the black

king gains activity, e.g. 8 c5 

e4 9 x6 d4 10 d6 d3 11 
e6 f3 12 d5 d2; with care he can always bide time 
to keep the black king 
hemmed in) 8 ... g5 9 e5 
g6 10 a7 and White will soon round up all the pawns.

6 d6 (15b)

Now White frees the king 
from defence of c5. White has 
aimed for this position with 
Black to move. Now the white 
knight begins to drive Black 
back and then aim for g4.

6 ... f5

Or 6 ... h4 7 e3 c5 8 
f3 c4 9 e5 h5 10 g4+ 
h4 (10 ... g6 11 e3 f7 
12 c3 e6 13 d4) 11 f6.

7 e3 g4

Or 7 ... e6 8 c5 f5 9 
f3 e5 10 g4 d4 11 e7.

8 f2 f5

Or 8 ... d4 9 e2 f5 10 
d3 e6 11 c5.

9 f3 d4

10 g4+ e6

11 c5 d5

12 e7 c5

13 xg5 c4

14 f6! c3

15 g7! By waiting White forces the 
black king to the side, not 
yielding a route via, say, e4.

15 ... c4

Not 15 ... c2 16 h6 c4 17 
c1 e3 18 g5 d3 19 e3.

16 e2 d3+

17 e3 d2

18 e2 b3

19 d1 c4

20 c2 and wins.
Bishop v Pawns

Batuyev 1940

1. $\text{a}f6!$

Not 1 $\text{a}x\text{b}4? \text{a}b5 2 $\text{a}f8 \text{a}3!!$

(an amazing resource; not 2 ... $\text{a}c4 3 \text{a}a3! \text{d}3 4 $\text{e}e3++) 3 $\text{a}x\text{a}3 \text{a}c4$ with a positional draw: 4 $\text{c}e7 \text{b}3 5 \text{a}a3 \text{c}c4$

6 $\text{g}f3 \text{b}3 7 \text{e}e2 \text{c}2=-.

1 ... $\text{c}c5!$

2 $\text{d}d3!$

Again we see the priority given to preventing activity of the enemy king. (Not 2 $\text{d}d4+? \text{c}c4 3 \text{e}e5 \text{b}3=.)

2 $\text{b}3$

3 $\text{g}g7!$

Another common theme in bishop vs pawn endings is that waiting moves are often the most effective as the pawns are easily compromised.

White must avoid 3 $\text{c}c3 \text{a}3!=.$

3 $\text{d}5$

4 $\text{d}f8$

Immobilising the pawn majority.

4 ... $\text{e}e5$

5 $\text{d}c4!$

Swapping tasks. The bishop will monitor the d-pawn while the king mops up.

5 ... $\text{f}f4$

6 $\text{b}b4$ $\text{d}3$

7 $\text{h}h6$ and wins

Walker 1841

1 $\text{e}e2$ $\text{h}h3$

2 $\text{g}g5!$

An excellent move that passes without comment in Averbakh's book. The point is seen in the straightforward continuation 2 $\text{f}f2 \text{h}h4$ 3 $\text{g}g2$ (3 $\text{c}c5 \text{g}g5 4 \text{f}f7+)$ 4 $\text{f}f6 \text{g}3+ 5 \text{d}d2 $\text{g}g4=.

3 ... $\text{h}h5 4 \text{g}g3 \text{g}g6$ (with the idea of ... $\text{f}6) 5 \text{d}d4 \text{g}g5=.

2 ... $\text{g}g3$

Or 2 ... $\text{g}g3 3 \text{f}f3 \text{g}2 4 \text{e}e3 \text{h}h2 5 \text{h}h4! \text{g}1\text{h} 6 \text{h}xg1+ \text{h}xg1 7 \text{g}g5 \text{f}f2 8 \text{f}f6 winning.

3 $\text{e}e3$ $\text{g}g2$

4 $\text{h}h4!$ $\text{h}h3$

5 $\text{f}f1$

White refuses the black king access to the fifth rank.

Alternatively, 5 ... $\text{f}f4 \text{h}h3$ and:

a) 7 $\text{g}g5 \text{g}3 8 \text{h}h5!$ wins as in main line. But not 8 $\text{f}f6? \text{g}g2 9 \text{f}f2 \text{g}4! 10 \text{f}x\text{f}7 \text{f}f5=;

b) 7 $\text{g}g3 \text{f}5 8 \text{ex}f6 \text{e}5+ 9 \text{g}x\text{e}5 \text{h}xg3 10 \text{f}7.$

6 $\text{f}f4$ $\text{g}2$

7 $\text{f}f2$ $\text{h}2$

8 $\text{g}g5$

The beginning of a cute manœuvre but 8 $\text{g}g4!$ wins faster (JT).

8 ... $\text{h}h3$

9 $\text{h}h5$ $\text{h}2$

10 $\text{h}h6$ $\text{h}3$

11 $\text{g}g5$ $\text{h}2$

12 $\text{f}f6$ and wins

Note: Finales Fous pions. Toujours, surtout, ne pas attaquer les cases blanches inutilement.
White is hard pressed to get his king into the safe corner. It seems that the best solution is to combine a route towards a1 with one to a5, which is also a drawing square thanks to the distraction of the h-pawn.

41 ... \( \text{Qc2} \)

42 b3

After 42 \( \text{Qe5} \) \( \text{Qxb2} \) 43 \( \text{Qd6} \) \( \text{Qa3} \) (not 43 ... \( \text{Qxa2} \) 44 \( \text{Qc5} \) \( \text{Qb3} \) 45 \( \text{Qb6} \) \( \text{Qb5} \) 46 \( \text{Qa5} \!), \( \text{Qc4} \) 47 \( \text{Qh4} \) \( \text{Qd5} \) 48 \( \text{Qh5} \) 49 \( \text{Qh6} \), the white king does not reach a5:

44 \( \text{Qc5} \) \( \text{Qb5} \) 45 \( \text{Qh4} \) \( \text{Qe2} \) 46 \( \text{Qh5} \) \( \text{Qb5} \) 47 \( \text{Qb3} \) a5 48 \( \text{Qb6} \) \( \text{Qf3} \) 49 \( \text{Qb5} \) a4 50 \( \text{Qa5} \) \( \text{Qc6} \) + .

42 ... \( \text{Qc3} \) (18a)

43 \( \text{Qe5} ? \)

Better was 43 \( \text{Qe4} ! \) \( \text{Qg6} + \) (43 ... \( \text{Qxb4} \) 44 \( \text{Qd3} \) \( \text{Qa3} \) 45 \( \text{Qc4} \) a5 46 h4) 44 \( \text{Qe3} \) (44 \( \text{Qd5} \) \( \text{Qxb4} \) 45 \( \text{Qc6} \) a5 transposes back to the game) and now:

a) 44 ... \( \text{Qb2} ?? \) 45 a4 \( \text{Qxb3} \) 46 b5 axb5 47 axb5 \( \text{Qe8} \) 48 b6 \( \text{Qc6} \) 49 h4 \( \text{Qc4} \) 50 h5 \( \text{Qc5} \) 51 h6 + ;

b) 44 ... \( \text{Qb1} \) 45 b5!! axb5 46 a4! b4 47 a5 \( \text{Qa2} \) (47 ... \( \text{Qd3} ? \) 48 h4) 48 a6 \( \text{Qxb3} \) 49 h4 \( \text{Qd5} \) 50 h5 b3 51 h6 b2 52 h7 + ;

44 ... \( \text{Qxb4} \) 45 \( \text{Qd2} \) and:

1) 45 ... \( \text{Qb1} \) 46 \( \text{Qc1} = \);

2) 45 ... \( \text{a5} \) 46 h4 \( \text{Qa3} \) 47 \( \text{Qc3} \) \( \text{Qf7} \) (47 ... \( \text{Qxa2} \) 48 \( \text{Qc4} \) \( \text{Qe8} \) 49 h5 = ) 48 h5 and now:

21) 48 ... \( \text{Qxa2} \) 49 h6 \( \text{Qg8} \) 50 b4 = (50 ... \( \text{a4} ?? \) 51 b5 + ).

White must avoid 50 h7?

221) 48 ... \( \text{Qxh5} \) 50 \( \text{Qc4} \) \( \text{Qf1} \) (50 ...
Bishop v Pawns

**Bareev - King**

Hastings 1990/91

The bishop has little chance against four pawns.

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Black must make some gesture towards hobbling the kingside pawn mass but the advance of the b-pawn is also quickly decisive.

39 b5 g4g4
40 b6 c8
41 cxd5 1-0
41 ... f5 42 d6 xf4 43 e6 wins easily.

Bishop and Two Pawns v Pawn(s)

**Sveshnikov - Gulko**

Moscow Ch 1983

75 h7! 1-0

An example of two wrong rook's pawns saving the win.

Black cannot use the tactic ...

g5/ ... g6 to enter the corner as hxg6 wins thanks to the presence of the second h-pawn. (Not 75 c4+ f6 76 f4? g5+.)

**Mukhin - Polovets**

Leningrad 1983

With the 'right' rook's pawn there are no technical difficulties.

42 ... f5

Or 42 ... f6 43 g2 and now:

a) 43 ... g5 44 g3 h5 45 f4+ f6 46 gxh5;

b) 43 ... g7 44 f3 f6 45 f4 e6 (45 ... g7 46)

41 ... g5+ 42 f4

42 ... e5+ 43 f4

44 gxf5

45 g2 g6

46 g3 h5

47 f4 g6

48 h4 1-0

**Portisch - Stein**

Sousse IZ 1967

49 e8! e7

50 b5 f5

Alternatively, 50 ... f6 51 e4 or 50 ... d6 51 e4 f5? 52 g8.

51 e3 f6

52 d4 h5

More testing was 52 ... g5(!) 53 e5 h5 54 h4+!

(54 e2 h4 55 g4 fxg4= 56 hxg4 h3 54 ... g4 55 f6 g3 (55 ... f4 56 gxh4+ xf4 57 d7 g3 58 g5) 56 g5+ (Portisch) 56 ... f4 57 d3 f3 58 gxg6 f2 59 d3.)

53 e3! h4

54 g4 e5

55 f1 g6

56 f4 g5+

57 e3 e5

58 a6 1-0
Bishop v Pawns

**Speelman**

1...g4!!

Not 1...h5 f5 and:

a) 2 Qd3 g5 3 Qf3 f4! 4 g4 h6= is analogous to Averbakh’s barrier - the addition of h-pawns does not hamper Black since h3 is a potential target. Also interesting is 4...h5? 5 gxh5 Qf6 6 b6 Qf7 7 Qh7 Qf6 8 Qg4 Qf7 9 Qxg5 f3 and the black king reaches the corner - Averbakh;

b) 2 Qe8?? g5 3 Qg4 Qf6! 4 Qh5 (4 Qb5 fxg4 5 hxg4 h5) 4...Qe5 5 Qd3 Qf6 (not 5...Qe6? 6 Qd4! or 5...Qf4? 6 Qd4+! 6 Qd4 Qe6 arriving at a position of mutual zugzwang - Black to play would lose: ...Qf6 - Qd5; ...h6 - Qg6. However, it is White to move: 7 Qe3 (7 Qe8 Qe7 8 Qh5 Qe6! 9 Qe8 Qe7 10 Qb5 fxg4 11 hxg4 h5) 7...Qe5 8 Qd3 Qf6 and:

b1) 9 Qc3 Qe5 10 Qe4 Qe4! 11 Qc5 (11 Qe8 Qf4=) Qe5! 12 Qc6 f4=;

b2) 9 Qd4 Qe5 10 Qc5 f4! 11 Qc4 (11 Qe8 f3 12 Qb5 h5=) 11...f3 12 Qd3 Qf4 13 Qe8 Qg3 14 Qe3 f2 15 Qb5 Qxh3 16 Qf3 Nh3=.

Another attempt which is not quite good enough is 1 Qa4 f5 2 Qc2:

a) 2...g5 3 Qg4!! f4+ 4 Qd3 and Black cannot achieve diag 11: 4... h5 5 Qb1 hxg4 6 hxg4 Qd5 7 Qc2 Qe5 8 Qb3 Qf6 (8... f3 9 Qe3 f2 10 Qxf2 Qf4 11 Qd6) 9 Qe4++;

b) 2...h5? 3 h4++;

c) 2...h6!! and:

c1) 3 h4 Qf6! (3...g5? 4 hxg5 hxg5 5 Qd3+- Qd5 6 Qa4 Qe5 7 Qd7 Qf6 8 Qd4) 4 Qf3 (4 Qd4 h5 and ...g5=) 4...g5 5 h5 (5 hxg5+ reaches diag 11) 5...f4! 6 Qg4 Qe5= with a positional draw, by analogy to diag 11;

c2) 3 Qd1 g5 4 Qd3 g4! 5 hxg4 f4 6 gxh4 Qxf4 7 Qd4 Qg5 8 Qe5 h5 9 gxh5 Qh6=.

Both 1 Qc6 f5 2 Qf3 g5 3 Qd3 g4! 4 hxg4 f4+= as above and 1 Qe8 f5 2 h4 Qf6 3 Qd4 Qe7! (3...h5? 4 Qxg6! Qxg6 5 Qe5+!) 4 Qb5 Qf6 5 Qe2 h6 5 Qxh5 gxh5 7 Qd5 f4= also fail to win.

1...h5 (23a)

Or 1...f6 2 h4 Qd6 3 Qe8 Qe5 4 Qf3 Qd6 5 Qa6 Qe5 6 Qd3 Qe6 7 Qf4 Qe7 8 Qc4 Qf8 (8...h6 Qe6 3 Qe3) 9 Qe3 Qg7 10 Qd4 Qh6 11 Qe2! Qg7 12 Qd5 Qf7 13 Qd6+.

The winning technique is to use the bishop to prevent h5 or...f5, then invade with the king.

2 Qe8!

2 Qf3? (also not 2 g5? h4!) and...f6=) 2...hxg4+ 3 hxg4 Qf6 4 Qf4 (4 Qe8 Qg7 5 Qe3 f6 6 Qd4 Qh6 is the fortress in diag 11) 4...Qe7 5 Qc8 f6 Qe3 6 Qe4 f5 7 Qxf5 Qxf5+ 8 Qxf5 Qf7=) 6...Qf7 7 Qd4 Qg7 again with the fortress from diag 11.

2...hxg4

3 Qh4 f6

4 Qd7!

White still must take care to avoid diag 12.

4...Qd6

5 Qe8 and wins
Bishop v Pawns

Anand - Dreev
Madras 1991
A remarkable twist on the corner fortress theme.
45 a6 \textit{b}b8
46 \textit{h}1!
White intends to jettison the g-pawn and then play a7, obliging Black to stalemate him.
46 ... \textit{g}8
47 \textit{g}1

Mestel - Speelman
London 1986
49 g4
Or 49 \textit{e}7 \textit{c}6 50 g4 \textit{g}7.
49 ... \textit{g}8
50 h5 \textit{f}8
The \textit{e}8 does a remarkable job of pressuring both flanks from its humble post.
51 h6
Removing much dynamic potential of the kingside pawns but other moves either lose a pawn or allow the black king to emerge. Also, the tactical possibility of g5-g6 keeps some pressure on this flank.
51 ... \textit{g}6
52 b5 \textit{e}8
53 \textit{e}6 \textit{d}8 (25a)

47 g5 transposes to the game.
47 ... \textit{f}8
48 \textit{h}1 \textit{g}8
49 g5 f5
50 g6 f4
51 g7 \textit{f}7
Or 51 ... f3 52 a7.
52 g8#+ \textit{x}g8
53 a7 \textit{x}a7
½-½

54 a4
Or 54 \textit{d}6 a6! and now:
a) 55 bxa6 \textit{c}8 56 \textit{c}6 \textit{b}8 57 \textit{b}6 \textit{a}8 and White will lose both a-pawns through zugzwang;
b) 55 b6 \textit{c}8 56 \textit{c}6 \textit{e}8+ and wins, as in the game.
54 ... a6! (25b)
55 b6 a5
56 \textit{d}6 \textit{c}8
57 \textit{c}5 \textit{e}8
58 g5 \textit{b}7
59 g6 \textit{x}g6
60 \textit{b}5 0-1

After 60 ... \textit{d}3+ 61 \textit{x}a5 \textit{c}6 62 \textit{b}4 \textit{x}b6 and White will soon lose both pawns.

? 61... \textit{e}2
Remar la double val des pions adverses sur la case "h",
eli sundjen fort de la petite niéce aue la pata (le presse d'un pin)
Bishop v Pawns

Bishop v Pawns: Further Examples

Renet - Piket
Euro Junior Ch,
Groningen 1984

An example of the importance of blockade, and the strength of a passed pawn for the side with the bishop.

\[ 45 \text{...} \text{Q}\text{g6} \]
\[ 46 \text{Q}\text{f3} \text{Q}\text{f5} \]
\[ 47 \text{h5} \text{Q}\text{d5} \]
\[ 48 \text{g6} \]

Now White's pawn mass is neutralized. 48 \text{h6} looks less logical, as zugzwang is easy then: 48 ... \text{b4} 49 \text{Q}\text{e3} \text{a5} 50 \text{Q}\text{d2} \text{a4} 51 \text{Q}\text{c1} \text{a3}+. The white king cannot move because of ... \text{b3}, so the pawns drop.

\[ 48 \text{...} \text{b4} \]
\[ 49 \text{Q}\text{e3} \text{a5} \]
\[ 50 \text{Q}\text{d2} \text{a4} \]
\[ 51 \text{a3} \]

White cannot prevent the harvesting of his pawn mass. No better is 51 \text{Q}\text{c1} \text{Q}\text{e6} (51 ... \text{a3} 52 \text{g7} \text{Q}\text{h7} 53 \text{f5}! \text{Q}\text{xe5} 54 \text{Q}\text{c2} 55 \text{h6} \text{Q}\text{f6} 56 \text{h7=})

\[ \text{BP} \]

Tringov - Peev
Plovdiv 1981

Black resigned without further play here. It would be interesting to see how he would fight against the mass of pawns:

\[ 45 \text{...} \text{Q}\text{h2} \]
\[ 46 \text{f4} \text{Q}\text{xb7} \]
\[ 47 \text{b4} (27a) \]

White does best not to hurry. Real drawing chances occur after the hasty 47 \text{f5}! (this removes much of the worry of a white king invasion to the kingside) and:

a) 47 ... \text{Q}\text{c7} 48 \text{f6} \text{Q}\text{d6} 49 \text{b4} \text{Q}\text{e6} 50 \text{c4} \text{Q}\text{g3} 51 \text{c5} \text{Q}\text{e1}

\[ a1) 55 \text{...} \text{Q}\text{b6}+ 56 \text{Q}\text{c4} \text{Q}\text{f7} \]
\[ (56 \text{...} \text{Q}\text{e3} 57 \text{c7} \text{Q}\text{d7} 58 \text{f7}) \]
\[ 57 \text{Q}\text{d5} \text{Q}\text{c7} 58 \text{Q}\text{c5}; \]
\[ a2) 55 \text{...} \text{Q}\text{h2} 56 \text{Q}\text{c4} \text{Q}\text{c7} \]
\[ 57 \text{Q}\text{c5}; \]

b) 47 ... \text{gxf5}+ 48 \text{Q}\text{xf5} \text{Q}\text{g3} and now:

\[ b1) 49 \text{c4} \text{Q}\text{c6} 50 \text{Q}\text{g4} \text{Q}\text{f2} 51 \text{h4} \text{Q}\text{d6} 52 \text{h5} \text{Q}\text{e6} 53 \text{b4} \text{Q}\text{e1} 54 \text{b5} \text{Q}\text{f2} 55 \text{Q}\text{f4} \text{Q}\text{c5} \]
\[ 56 \text{Q}\text{e4} \text{Q}\text{f2} 57 \text{g6} (57 \text{h6} \text{Q}\text{f7} 58 \text{Q}\text{d5} \text{Q}\text{e3} 59 \text{c5} \text{Q}\text{xf5} 60 \text{c6} \text{Q}\text{e8}). \]
\[ b11) 57 \text{...} \text{h6?} and: \]
\[ b111) 58 \text{g7?!} \text{Q}\text{f7} 59 \text{Q}\text{d5} \]

\[ \text{a3? 52 \text{g7} \text{Q}\text{h7} 53 \text{f5}! \text{Q}\text{xe5} 54 \text{Q}\text{c2} 55 \text{h6} \text{Q}\text{f6} 56 \text{h7=}) \]
\[ 52 \text{Q}\text{d2} \text{Q}\text{e7} 53 \text{g7} \text{Q}\text{f7} 54 \text{h6} \text{Q}\text{g8} \text{and wins as in the game.} \]

51 ... \text{b3} 52 \text{Q}\text{c3} \text{Q}\text{e6} 53 \text{g7} \text{Q}\text{g8} \text{and the pawns are no less vulnerable on h5/g6:} 53 \text{Q}\text{b2} \text{Q}\text{e7} 54 \text{Q}\text{c3} \text{Q}\text{f8} 55 \text{Q}\text{b2} \text{Q}\text{g7} 56 \text{Q}\text{c3} \text{Q}\text{e6} 57 \text{Q}\text{b2} \text{Q}\text{h6} 58 \text{Q}\text{c3} \text{Q}\text{hx5} 59 \text{g7} \text{Q}\text{g6}+ \]

53 ... \text{Q}\text{f7} 54 \text{h6} \text{Q}\text{g8} 55 \text{Q}\text{b2} \text{Q}\text{h7} 56 \text{Q}\text{c3} \text{Q}\text{e6} 57 \text{Q}\text{b2} \text{Q}\text{h6} 58 \text{f5} \text{Q}\text{g8}! \text{Not} 58 \text{...} \text{Q}\text{xg7??} 59 \text{fxe6} \text{Q}\text{f8} 60 \text{Q}\text{b1} \text{Q}\text{e7} 61 \text{Q}\text{b2} \text{Q}\text{xe6} 62 \text{Q}\text{b1} \text{Q}\text{xe5} 63 \text{Q}\text{b2=}. 59 \text{e6} \text{Q}\text{g7} 60 \text{f6+} \text{Q}\text{f6} 61 \text{e7} \text{Q}\text{e7} 62 \text{Q}\text{c3} \text{Q}\text{d6} 0-1
Bishop v Pawns

\[ \text{BP} \]

- 27a

- +

- B

- 28

- Tompa - Schoeneberg

- Leipzig 1977

- 37 h4!

- Ideally fixing the kingside.

- The presence of the a-pawns makes this an easy win for White.

- 37 ... e5

- 38 \( \text{f3} \) \( \text{f5} \)

- +

- W

- 29

- Dolmatov - Shirov

- Klaipeda 1988

- 31 ... \( \text{e4} \)

- Again the piece must work patiently and aim to enforce a blockade. After 31 ... \( g4 \) 32 c3 the black king's attempt to create play on the kingside is shown to be misguided - the b-pawn forces the black king to watch the queenside.

- 32 \( \text{e3} \) \( \text{e5} \)

- 33 \( \text{d7} \) \( \text{f4}+ \)

- 34 \( \text{e7} \) \( \text{d4} \)

- 35 c3+ \( \text{d5} \)

- Not 35 ... \( \text{c4} \) 36 \( \text{e6}+ \) \( \text{b6} \) 37 \( \text{d5} \)

- 36 \( \text{b3} \) \( \text{d6} \)

- 65 \( \text{d5}+ \)

- 47 ... \( \text{g3} \)

- 48 e4 \( \text{e1} \)

- 49 b5 \( \text{f2} \)

- 50 \( \text{e5} \) \( \text{e3} \)

- Or 50 ... \( \text{g3} \) 51 c5 \( \text{f2} \) 52 \( \text{d6} \) \( \text{e3} \) 53 c6+ \( \text{b6} \) 54 \( \text{e5} \)

- 55 \( \text{f6} \) \( \text{g3} \) 56 \( \text{g7} \)

- 57 \( \text{xf4} \) 58 h4 \( \text{xb5} \) 59 \( \text{g7} \)

- 60 \( \text{c6} \) 59 \( \text{d6} \) 60 \( \text{e4} \) 61 \( \text{c4} \) 62 \( \text{f5} \) 63 \( \text{d4} \) 64 \( \text{d6} \) 65 \( \text{d5} \)

- 37 h4!

- Ideally fixing the kingside.

- The presence of the a-pawns makes this an easy win for White.

- 37 ... e5

- 38 \( \text{f3} \) \( \text{f5} \)

- 39 \( \text{d7}+ \) \( \text{f6} \)

- 40 \( \text{e4} \) \( \text{exf4} \)

- 41 \( \text{xf4} \) \( \text{c7} \)

- 42 \( \text{b5} \) \( \text{f6} \)

- 43 \( \text{c4} \) \( \text{f8} \)

- 44 \( \text{e4} \) \( \text{c7} \)

- 45 \( \text{e2} \) \( \text{b6} \)

- 46 \( \text{d1} \) 1-0

- 29

- Dolmatov - Shirov

- Klaipeda 1988

- 31 ... \( \text{e4} \)

- Again the piece must work patiently and aim to enforce a blockade. After 31 ... \( g4 \) 32 c3 the black king's attempt to create play on the kingside is shown to be misguided - the b-pawn forces the black king to watch the queenside.

- 32 \( \text{e3} \) \( \text{e5} \)

- 33 \( \text{d7} \) \( \text{f4}+ \)

- 34 \( \text{e7} \) \( \text{d4} \)

- 35 c3+ \( \text{d5} \)

- Not 35 ... \( \text{c4} \) 36 \( \text{e6}+ \) \( \text{b5} \) 37 \( \text{d5} \)

- 36 \( \text{b3} \) \( \text{d6} \)

- 48 \( \text{f3} \) and here the pawns are blockaded while keeping the
Bishop v Pawns

black king under control - the point of manoeuvring is to play $h3$ with the black king on d5: 48 ... $f5$ 49 $b4$ cxb4 50 cxb4 $e6$ 51 $b5$ $d7$ 52 $b6$ $c8$ 53 $g4$ e2 54 $xe2$ $b7$ 55 $f5$ $xb6$ 56 $g6$ $c5$ 57 $xh6$+-.

48 $xb7$

After 48 ... $e5$ 49 $c6$ e3 (or 49 ... f3 50 $b7$) 50 $f3$ Black has no moves that do not worsen his position, and White wins as in the note to Black's 46th move.

1-0

Hartston - Ostermeyer

Reykjavik 1975

1 ... $b6$

Not 1 ... $e6$ 2 $d2$ $f5$? (2 ... $b6$) 3 $h4$ $g4$ 4 $f7$

$e7$ 5 $a4$ $f3$ 6 $e1$ $e4$ (6 ... $e4$ 7 $a5$ $e3$ 8 $a6$ $d6$ 9 $f5$! $xf8$ 10 $a7$+) 7 $a5$

$d5$ 8 $a6$ $c6$ 9 $h5$ $f8$ 10 $h6$! 1-0 as in the game.

2 $d2$

Worse is 2 ... $d4$?!, e.g.

a) 3 $a4$ $xb2$ 4 $a5$ (4 $c3$ $a3$ 5 $e3$ $b2$!) 4 ... $d4$ 5 $a6$

$e4$; 

b) 3 $b4$! cxb3 4 cxb3 with good chances for White, though possibly drawable:

b1) 4 ... $e4$ 5 $e2$! (5 $b4$? $b2$! 6 $a4$ $a3$ 7 $b5$ $c5$ 8 $e2$ $b6$= or 5 $a4$ $c5$=?) 5 ...

$e6$ 6 $b4$ $h6$ 7 $h4$ hxg5 8 hxg5 $f7$ 9 $a4$ $g6$ 10 $a5$

$c3$ 11 $e3$! $xb4$ 12 $a6$+;

b2) 4 ... $e6$! and now:

b21) 5 $a4$ $c5$ 6 $c3$ (6 $d3$ $d5$ 7 $c3$ $d4$+ 8 $d2$ $c5$ 9 $c3$ $d4$+ 10 $c2$! $c5$) 6 ... $e4$ 7 $b4$ $e3$ 8 $h4$ (8 $a5$ $xg5$ 9 $xd4$

$xf6$+) 8 ... $h6$! (8 ... $f2$ 9 $a5$ $xh4$ 10 $d4$ e3 11 $d3$+;)

b22) 5 $b4$ $h6$ 6 $h4$ $f2$ 7 $e2$? (7 $gxh6$) 7 ... $xh4$ 8 $a4$? $xg5$ 9 $a5$ $d7$ 10 $f7$

$e7$+.

However, 2 ... $e6$! looks simplest of all: 3 $c3$ (3 $b4$

$cxb3$ 4 $cxb3$ $h6$ 5 $b4$ $f2$= or 3 $e2$ $c5$ 4 $f3$ $f5$=) 3 ...

$d4$+ (3 ... $d5$?) 4 $xc4$

$xh2$ 5 $a4$ $e4$=.

3 $c3$

4 $f7$

5 $xc4$ $xg5$

6 $a4$ $xf7$

7 $d5$

Liberzon assesses this position as slightly better for White and it is probably drawn, e.g. 7 ... $e7$ and:

a) 8 $a5$ $d7$ 9 $xe5$ (9 $c4$

$e4$ 10 $xe4$ $d2$ 11 $a6$ $c6$) 9 ...

$c6$ 10 $e3$ $b5$ 11 $b4$ $d2$

12 $d4$ $e1$ 13 $d3$ $h5$ 14 $h3$

$h4$=;

b) 8 $b4$ $d2$ 9 $b5$ $d5$ 10 $c4$

$e4$ 11 $xe4$ $d6$=;

c) 8 $c4$ $e4$! 9 $xe4$ $d6$ 10 $a5$ (10 $b4$ $d2$ 11 $b5$ $c5$=) 10 ...

$d2$ 11 $a6$ $c6$-=.
Bishop v Pawns

Bishop (without pawns) v Pawns

\[
\begin{array}{ll}
BP & Two Pawns \\
31 & Averbakh 1972 \\
\text{1 \ldots } & \text{c3} \\
\text{1 \ldots } & \text{d8? 2 c7+ c8 3 e7} \\
\text{wins.} & \\
\text{2 \ldots } & \text{d7+} \\
\text{Or 2 e7 b4=.} & \\
\hline
BP & Three Split Pawns \\
32 & Kosten - Adorjan \\
\text{Esbjerg 1988} & \\
Most dangerous for the bishop & which can overload the bishop & when it tries to restrain them & both from afar. Again critical & for the defence is the proximity & of the king. \\
\text{56 } & \text{e4} \\
\text{Or 56 f3 f4 57 f1 b3=+} & \\
The f4-pawn is taboo since & the bishop cannot restrain & both knight’s pawns. \\
\text{56 \ldots } & \text{d6} \\
\text{57 } & \text{f3} \\
\hline
BP & Hübner - Zuckerman \\
33 & Students of 1969 \\
Here White is helpless against & the pawns. The king is deflected & to the queenside and & the black king ushers the & pawns in past the bishop. \\
\text{43 } & \text{c3} \\
\text{White has no choice. If 43 } & \text{c3 Black can advance his} & \text{kingside pawns and bring his} & \text{king in on either side. The} & \text{white king cannot cope with} & \\
\end{array}
\]

0-1

The connected pawns and the bishop would be completely tied to guarding the b2-square.

\[
\begin{array}{ll}
58 & b3 e5 \\
59 & d1 \\
\text{Or 59 c2 d4 60 e4 g2.} & \\
59 & \ldots d4 \\
60 & c2 c3 \\
61 & e4 b3 \\
62 & xf4 (32a) & \\
62 & \ldots d4! & \\
\text{A tremendous blow, paralysing White. The bishop cannot} & \text{move and restrain the pawns,} & \text{and the white king cannot} & \text{leave the bishop. Next will follow ... g2 overloading both} & \text{pieces.} & \\
0-1
\end{array}
\]
Bishop v Pawns

Bishop v Pawns: Three United Pawns

Averbakh 1972, correcting Cheron, Berger

1 ... \( \text{Qg5} \)

After 1 ... \( \text{Qe5} \) 2 \( \text{Qe8} \) the weakness of \( g4 \) forces Black to regroup to main line.

2 \( \text{Qc6} \) \( \text{Qh4!} \)

3 \( \text{Qg2} \) \( e3 \)

Alternatively, 3 ... \( g3 \) 4 \( \text{Qd5} \) \( \text{Qg4} \) (4 ... \( e3 \) 5 \( \text{Qf3} \) \( f4 \) 6 \( \text{Qe2} \) \( \text{Qg5} \) 7 \( \text{Qf3} \) is a drawing fortress, of type examined by Cheron and Averbakh: 7 ... \( \text{Qh4} \) 8 \( \text{Qg2} \) \( \text{Qg5} \) 9 \( \text{Qf3} \) 10 \( \text{Qe1} \) \( \text{Qe5} \) 11 \( \text{Qg2} \) \( \text{Qxd4} \) 12 \( \text{Qe2} \) and Black cannot invade)

5 \( \text{Qc6} \) \( \text{Qf4} \) 6 \( \text{Qb7} \) (as Averbakh notes, White's defensive task consists largely of waiting) 6 ... \( \text{Qe3} \) 7 \( \text{Qxg3} \) \( f4+ \) 8 \( \text{Qg2} \) \( f3+ \) 9 \( \text{Qf1} \) =.

4 \( \text{Qb5!} \)

White cannot prevent \( ... \) \( f4 \) but can get into position to prevent \( ... \) \( f3 \).

Streltsov, correcting Averbakh 1962

1 \( \text{Qb5} \) \( f3 \)

Or 1 ... \( h3 \) 2 \( \text{Qd7} \) \( h2+ \) 3 \( \text{Qh1} \) \( f3 \) and:

a) 4 \( \text{Qxg4?} \) \( \text{Qxg4} \) 5 \( \text{Qxh2} \) \( \text{Qf4} \) 6 \( \text{Qg1} \) \( \text{Qe3+} \);

b) 4 \( \text{Qc6?} \) \( \text{Qf2} \) 5 \( \text{Qb7} \) \( \text{Qe1!} \) (5 ... \( g3 \) 6 \( \text{Qxh3} \) 6 \( \text{Qa6} \) 6 \( \text{Qxh2} \) \( \text{Qf1} \) or 6 \( \text{Qc6} \) \( f2 \) 7 \( \text{Qb5} \) \( \text{Qf1} \) 8 \( \text{Qxf1} \) \( \text{Qxf1} \) 9 \( \text{Qh2} \) \( \text{Qf2} \) 10 \( \text{Qh1} \) \( \text{Qg3} \) 11 \( \text{Qg1} \) \( \text{Qh3} \) 12 \( \text{Qh1} \) \( g3 \) 13 \( \text{Qg1} \) \( g2 \) 14 \( \text{Qg3} \) 15 \( \text{Qb7} \) \( g2+ \) 16 \( \text{Qh2} \) \( Qf2 \));

c) 4 \( \text{Qc8?} \) \( f2 \) 5 \( \text{Qa6} \).

2 \( \text{Qd7} \) \( \text{Qf4} \)

3 \( \text{Qe6} \) \( g3 \)

Or 3 ... \( h3 \) 4 \( \text{Qd7} \) \( \text{Qg3} \) 5 \( \text{Qe6} \) \( f2+ \) (or 5 ... \( h2+ \) 6 \( \text{Qh1} \) \( f2 \) 7 \( \text{Qc4} \). White is only sur

viving this ending due the fact that one of Black's pawns is a rook's pawn, and the corner affords extra stalemate defences. Even with the pawn on \( g3 \) White can shuttle with the bishop - even \( ... \) \( \text{Qxf1} \) is stalemate) 6 \( \text{Qf1} \) \( h2 \) 7 \( \text{Qd5} \).

4 \( \text{Qd7} \)

4 \( \text{Qh3!} \) is most accurate - see the main line.

4 ... \( \text{Qe3} \)

5 \( \text{Qe6} \) \( \text{Qe2} \)

6 \( \text{Qh3!} \)

Streltsov, 6 \( \text{Qg4} \) \( g2 \) 7 \( \text{Qh5} \) \( h3 \) 8 \( \text{Qg4} \) \( h2+ \) 9 \( \text{Qxh2} \) \( \text{Qf2} \) winning was Averbakh's original solution.

4 \( ... \) \( \text{Qe1} \)

5 \( \text{Qf1} \) \( f2+ \)

6 \( \text{Qh1!} =\)
Bishop v Bishop (Same)

Averbakh

A basic position.

1... h5

Black to move draws with...

... e8-d8. Such a position with the weaker king in front of the pawn and "indefeasible to checks" is a basic drawing position.

1... h3

1... b5, 1... c6, or 1...

a4 are safe. After 1... h3

White has two tries:

A. 2 e5 d7?

Passive defence loses. Instead 2... g7! 3 d5 f6 4

c6 e5 5 c7 d4 6 e8 c5 reaches another basic drawing position - where the defending king cannot occupy the square in front but can prevent interception of his bishop's diagonal (la): 7 d7

B. 2 g6 7 d1

Not 2... g4? 3 f5 x f5 4

xf5 f7 5 e5 e8 6 e6

d8 d7.

3 f5 e8!

with a draw

Centurini's Rule - kings in vertical opposition

A basic drawing position. This is also an illustration of the drawing zone for fighting passed pawns when the kings are in vertical opposition. This rule was observed by Centurini and can be diagrammed as in diag 2.

1 g4 a4

Here the black bishop has two diagonals, and there is no diagonal of three squares or less, so he holds. (Note that a pawn on b6 or c7 would win since Black has one such diagonal then.) Centurini also observed two exceptions to the rule - diags 5 and 6.
From examining Centurini's rule it is easy to deduce that centre pawns pose the least danger since they afford the longest diagonals for defence. But there is still danger:
a) 1 ... d8? 2 d7;
b) 1 ... d8? 2 g7! g5 3 d7 d8 4 d4 e7 5 c5 d8 6 e7.

We have seen the vital importance of controlling interception squares. Here we see the kings battle for this control. Although the pawn is still within the drawing zone Black is placed in zugzwang. Not 1 d4? f3= or 1 e6? d3= 2 f7 (2 d5 d2) 2 ... e4 3 e8 f5 4 b6 h4 5 c5 e6 (mission accomplished - vertical opposition, controlling the interception square, with two long defensive diagonals within drawing zone).

Alternatively:
a) 1 ... f2 amounts to the same as the main variation.
b) 1 ... b4 and:
b1) 2 d5? d3= 3 c6 (3 e6 e1! 4 f7 e4 5 e8 d5=) 3 ... c4 4 b7 b5 5 c8 c6;
b2) 2 ... d4!? and:
b21) 2 ... e1 3 c5 d3 (3 ... f2+ 4 c6 e1 5 b7 also as in main line) 4 b6! transposing to the main line;
b22) 2 ... f3 3 c4 e1 4 b5 g3 and:
b221) 5 c6?! e1 6 b6! also wins, though less efficiently, but not 6 b7?? e4 7 c8 d5 8 g5 a5 9 f4 c6=;
b222) 5 b6!. Again this move. Cheron notes that 5 ... f2+ 6 b7 e1 and wins as in main line.

c) 1 ... e3 (or 1 ... d2) 2 f5! (following the same routine on the other flank. White wins a tempo by threatening to move the d8 to b6/c7) 2 ... e1 (2 ... b4 3 c7 e7 4 e6 and White wins the necessary second tempo, with e8, d6-e7 to follow) 3 g5! (again this motif - Black must waste a move to secure a square on the d8-h4 diagonal for the bishop) 3 ... d2+ 4 g6 e1 5 f7 f3 6 e8 e4 7 c7 h4 8 d6 and wins.

d) 1 ... f1 and now:
d1) 2 f7? g2= 3 e4!! h3 4 f3 d2! 5 e2 b4 6 d3 g4 7 c4 f5! 8 b6 e7 9 d5 g5 10 d6 e4 (or 10 ... h4 11 c7 e6 12 c8 d5 13 d8 e1 14 g5 a5 15 f4 c6);
d2) 2 d5! e2 3 c6 d3 4 b6!.
e) 1 ... d1 and now:
e1) 2 d5 c2! and:
e11) 3 c6 b3 4 b5 (4 b7 a4) 4 ... g3;
e12) 3 c4;
e2) 2 f5! e2 3 g5! and again Black will have to invest a decisive tempo to get a square on the d8-h4 diagonal.

2 d5!
Bishop v Bishop (Same)

Heading for c8.

2 ... \( \texttt{d3} \)
3 \( \texttt{c6} \)

Winning a tempo since White threatens to play the \( \texttt{Qd8} \) along the h4-diagonal promoting the pawn.

3 ... \( \texttt{e1} \)

Gaining another tempo - not 5 \( \texttt{c7? c4} \) 6 \( \texttt{g5 b5!} \)
7 \( \texttt{c8} \) (7 \( \texttt{d8} \) \( \texttt{b6+} \) draws) 7 ...
8 \( \texttt{b6} \) 8 \( \texttt{f4} \) \( \texttt{c6=} \).

The black king is a move too late. The paths of the kings are essential to understanding the fine points of bishop and pawns v bishop (see also diag 10). This is one of the most completely instructive positions.

---

Centurini 1856

This is the first exception to Centurini’s rule (see diag 2). With his king on \( \texttt{g8} \) or \( \texttt{g6} \) White would win easily with 1 \( \texttt{f8} \) to force the defending bishop to the h6-f8 diagonal. Then bishop to the a1-h8 diagonal when the black bishop is on \( \texttt{h6} \). But with the white king on \( \texttt{e8} \) the crossing of the
drawing zone does not help.

1 \( \texttt{f8} \) \( \texttt{e5} \)
2 \( \texttt{c5} \) \( \texttt{g7} \)
3 \( \texttt{e3} \) \( \texttt{d6} \)

Here Black cannot be zugzwanged off the short diagonal since the white king is not participating.

4 \( \texttt{d4} \) \( \texttt{h6} \)

and draws

---

Centurini 1856

This is the second exception to Centurini’s rule. Although the pawn on \( \texttt{h7} \) has crossed the drawing zone and Black has one diagonal it is still a draw.

1 \( \texttt{d2} \) \( \texttt{d4=} \)

White cannot challenge the diagonal.

---

Averbakh 1954

1 \( \texttt{d2} \) \( \texttt{f8!} \)

Black rushes to block the pawn. Averbakh uses this position to illustrate another type of defensive position - where White’s interception of the vital diagonals leads to drawn pawn endings.

2 \( \texttt{g5} \) \( \texttt{g8} \)
3 \( \texttt{f6} \) \( \texttt{f2} \)
4 \( \texttt{c3} \) \( \texttt{h4} \)
5 \( \texttt{d2} \) \( \texttt{e7} \)
6 \( \texttt{g5} \) \( \texttt{xg5} \)

Otherwise the pawn crosses the zone.

7 \( \texttt{g7=} \)

---
Bishop v Bishop (Same)

Horwitz 1880

1... $\text{Q}f8+!$
Or 1... $\text{Q}f4$ $\text{h}6$ 2... $\text{Q}e5$ $\text{g}5$
3... $\text{Q}e6$ $\text{f}4$ 4... $\text{Q}e7$ $\text{g}5$.
1... $\text{Q}h8!$
Not 1... $\text{Q}xg8$ 2... $\text{Q}xg6+$.
2... $\text{Q}e6$ $\text{Q}e8$
Alternatively:
a) 2... $\text{Q}h7$ 3... $\text{Q}h5$;
b) 2... $\text{Q}d3$ 3... $\text{Q}f4$ $\text{Q}b5$ 4... $\text{Q}e5$ $\text{Q}h7$ 5... $\text{Q}d6$ and now:
b1) 5... $\text{Q}e8$ 6... $\text{Q}e7$ and:
b11) 6... $\text{Q}g6$ 7... $\text{Q}d7$! $\text{Q}f7$ (7... $\text{Q}xg7$ 8... $\text{Q}f5+$; b12) 6... $\text{Q}h7$ 7... $\text{Q}f7$ $\text{Q}e2$ 8... $\text{Q}e8$ $\text{b}4$ 9... $\text{Q}d7$
Or 1... $\text{Q}f5$
Or 3... $\text{Q}h6$ $\text{g}6$.
3... $\text{Q}f7$
4... $\text{Q}d5$ $\text{Q}h6$
Also losing for Black are 4... $\text{Q}d7+$ 5... $\text{Q}e5$ $\text{g}6$ 6... $\text{Q}f7$ $\text{g}7$
7... $\text{Q}d6$ and $\text{Q}e7$ or 4... $\text{Q}h5$ 5... $\text{Q}e6$ $\text{g}6$ 6... $\text{Q}e7$ $\text{f}5$ 7... $\text{Q}f7$
8... $\text{Q}e8$ $\text{b}6$ + $\text{Q}e6$.

Capablanca - Janowsky
New York 1916

This is the final position in which Janowsky resigned. However, Averbakh was subsequently able to demonstrate a draw by an ingenious pursuit of the standard drawing position:

1... $\text{Q}f4$
2... $\text{Q}d4$ $\text{Q}a7$? $\text{Q}d5$.
Straightforward is 2... $\text{Q}e5+$
$\text{e}3$ 3... $\text{b}5$ $\text{Q}d3$ 4... $\text{Q}e6$ $\text{c}4$.

Or 3... $\text{Q}e2$! 4... $\text{Q}e6$ $\text{d}3$
5... $\text{Q}d7$ $\text{Q}g5$ 6... $\text{b}5$ $\text{Q}c4$.
3... $\text{Q}d2$
4... $\text{Q}c6$ $\text{d}3$
5... $\text{Q}b6$ $\text{g}5$
6... $\text{Q}b7$! $\text{f}5$
If 6... $\text{Q}c7$ $\text{Q}e3$ 7... $\text{Q}d6$ $\text{c}4$.
6... $\text{Q}c4$
7... $\text{Q}a6$ $\text{b}3$!
8... $\text{Q}f2$ $\text{d}8$
9... $\text{Q}e1$ $\text{a}4$!
And Black has managed to arrange the familiar defensive position.

Averbakh 1954

The small difference of the bishop on d2 rather than c3 (see diag 9) proves decisive since the black king must travel further to reach vertical opposition.

1... $\text{Q}g4$
2... $\text{b}5$ $\text{Q}f3$
3... $\text{Q}c6$ $\text{e}4$
Black would like to regain time lost by having to trek round the f4-square but if 3... $\text{Q}e2$ 4... $\text{Q}f4$! (4... $\text{Q}b4$? $\text{Q}d3$ 5... $\text{Q}d6$ $\text{Q}c4$ = 4... $\text{Q}d3$ 5... $\text{Q}c7$.
4... $\text{Q}b7$!! $\text{d}3$
5... $\text{Q}e1$!!
The bishop is aiming for a5.
5... $\text{Q}c4$
6... $\text{Q}a6$ $\text{b}3$
Now the king is one move late reaching a4.
7... $\text{Q}a5$ $\text{Q}f6$
8... $\text{b}6$ and wins
Now we reach diag 15.
Bishop v Bishop (Same)

**Grigoriev**

1. \( \text{Qd5} \)
   - Not 1 \( \text{Qd4?} \) \( \text{Qg5} \) 2 \( \text{Qd5} \)
   - \( \text{Qf6} \) 3 \( \text{Qc4} \) \( \text{Qg4!} \) 4 \( \text{Qc5} \) \( \text{Qe7} \)
   - 5 \( \text{Qa6} \) (5 \( \text{b5} \) \( \text{Qd8} \) 6 \( \text{b6} \) \( \text{Qd7} \) and ... \( \text{Qxb5} \) 5 ... \( \text{Qf3} \) 6 \( \text{b6} \)
   - \( \text{Qd8} \) 7 \( \text{Qa7} \) \( \text{Qc6=}. \)

1. ... \( \text{Qg5} \)
2. \( \text{Qc4} \) \( \text{Qg4!} \)

2 ... \( \text{Qf3} \) 3 \( \text{b5} \) \( \text{Qf6} \) 4 \( \text{Qb4}! \)

\( \text{Qe7} \) 5 \( \text{a5} \) and White achieves his main aim of \( \text{b6} \) and \( \text{Qa7} \), reaching the position seen in diag 12.
3. \( \text{b5} \) \( \text{Qf6} \)
4. \( \text{b6} \) \( \text{Qc8} \)
   - Or 4 ... \( \text{Qf3} \) 5 \( \text{Qd4} \) \( \text{Qe7} \) (5 ... \( \text{Qb7} \) 6 \( \text{Qd5} \) \( \text{Qa6} \) 7 \( \text{Qc5} \) \( \text{Qe7} \)
   - 8 \( \text{Qc6} \) \( \text{Qd8} \) 9 \( \text{Qe6} \) \( \text{Qc8} \) 10 \( \text{Qc4} \) and the king invades.) 6
   - \( \text{Qd5} \) \( \text{Qxd5} \) 7 \( \text{Qxd5} \) \( \text{Qd7} \)
   - \( \text{Qc5} \) \( \text{Qd8} \) 9 \( \text{Qd6=} \).

5. \( \text{Qd4} \) \( \text{Qe7} \)
6. \( \text{Qc5} \) \( \text{Qd7} \)

Not 6 ... \( \text{Qb7} \) 7 \( \text{Qd5} \) \( \text{Qc8} \) 8 \( \text{Qc6=} \) (compare with diag 15) or 6 ... \( \text{Qd8} \) 7 \( \text{Qd6} \) \( \text{Qb7} \) 8 \( \text{Qe6} \)
(see diag 14).

**Averbakh**

Another basic winning position as the white pawn has crossed the drawing zone. Here the defending king supports the bishop but Black lacks adequate manoeuvring space along the diagonal, resulting in zugzwang.

1. \( \text{Qg4} \) \( \text{b5} \)
2. \( \text{Qe2=} \) and wins

**Dehler 1922**

1. \( \text{Qf5} \)

To prevent 1 ... \( \text{Qc8} \).

1. ... \( \text{Qf3} \)
2. \( \text{Qe6} \) \( \text{Qb7!} \)

The only move - Black must be ready to draw the pawn ending. This is a key position of mutual zugzwang. See diag 14 for the solution with Black to move here.

1. ... \( \text{Qf3} \) 3 \( \text{Qc5} \)
   - Or 3 \( \text{Qd5} \) \( \text{Qc8}! \).

3. ... \( \text{Qf3} \)
4. \( \text{Qd5} \) \( \text{Qe2} \)
5. \( \text{Qb7} \) \( \text{Qd7=} \)

Black is saved by his king’s proximity to the front of the pawn.
Bishop v Bishop (Same)

Dehler/Cheron 1922

This is identical to the position after Black's second move in diag 13 except that here it is Black to move.

1 ... \( \text{Q}a6 \)
A better try than 1 ... \( \text{Q}f3?! \)
2 \( \text{Q}d5 \text{Q}xd5 \text{Q}d7 \text{Q}c6 \text{Q}b8 \text{b7} \text{Q}c7 \text{Q}a7 \text{c8} \text{Q}c6 \text{Q}c3+ \mathbb{1} \)
3 \( \text{b}7 \text{c7} \text{Q}e2 \)

Alternatively:

Savon - Am. Rodriguez

Erevan 1976

The vital difference between this and diag 13 is that White has the long diagonal.

1 ... \( \text{Q}h6 \)
2 \( \text{Q}b4 \)
Not 2 \( \text{Q}d2?? \text{Q}xd2 \text{g7} \text{Q}c3+ \mathbb{1} \)
3 \( \text{Q}d2 \text{Q}e8 \text{Q}d8 \text{Q}d7 \text{Q}c8 \text{Q}c6 \text{Q}c5 \text{f3}+ \mathbb{1} \)
4 \( \text{Q}d4 \text{Q}d4+ \mathbb{1} \)
5 \( \text{Q}h7 \text{Q}h7 \text{Q}h4 \text{Q}f2 \text{Q}f7 \text{e3 and wins} \)

Threatening to intercept the diagonal at c7.

1 \( \text{Q}h4 \)
White needs only to play \( \text{Q}a7-b8 \) and win, but Black's king has time to run to a6 and prevent this. White wins via zugzwang since Black's bishop is now ideally placed.

1 ... \( \text{Q}b5 \)
2 \( \text{Q}f2 \text{Q}a6 \text{Q}c5! \)
Not 3 \( \text{Q}e3 \text{Q}d6! \text{Q}g5 \text{Q}b5 \text{Q}d8 \text{Q}c6 \text{Q}e7 \text{Q}h2 \) and \( \text{Q}e5-a7 \) manoeuvre is prevented by the black king.
3 ... \( \text{Q}g3 \text{Q}e7 \text{Q}a6 \text{Q}b8 \text{Q}g1 \text{Q}f4 \text{Q}a7 \text{Q}e3 \) and wins

Black can no longer prevent the king's entry.

15

centurini 1847

White needs only to play \( \text{Q}a7-b8 \) and win, but Black's king has time to run to a6 and prevent this. White wins via zugzwang since Black's bishop is now ideally placed.
Bishop v Bishop (Same)

White to move:

1. $\text{Qe}3$ $\text{Qg}3$
2. $\text{Qb}6$ $\text{Qb}8$
3. $\text{Qd}8$ $\text{Qa}7$

All moves are met by $\text{Qc}7$.

4. $\text{Qc}7$ and wins

Black to move:

1. $\text{Qa}7$
2. $\text{Qe}3$ $\text{Qb}8$

The king lodges in front of the pawn but is clearly not "invulnerable" to being shifted by checks.

3. $\text{Qb}6$

Not $3$ $\text{Qb}6$? $\text{Qg}1$!.

3. $\text{Qf}4$

4. $\text{Qf}2$+$

Crossing safely and preparing $\text{Qa}7$+$.

5. $\text{Qb}6$

6. $\text{Qa}6$ $\text{Qe}3$
7. $\text{Qh}4$ $\text{Qf}4$
8. $\text{Qf}2$ $\text{Qc}7$
9. $\text{Qa}7$!

The second trip for the king, now preparing the manoeuvre $\text{Qa}7$-$\text{b}8$.

Black to move:

10. $\text{Qa}8$

Black is now helpless against $\text{Qa}7$-$\text{b}8$.

11. $\text{Qe}5$
12. $\text{Qf}4$
13. $\text{Qe}3$
14. $\text{Qg}3$ and wins

Bishop and Two Pawns v Bishop

Fine 1941

1. $\text{Qb}3$ $\text{Qf}5$

2. $\text{Qa}4$ $\text{Qd}7$
3. $\text{Qa}5$ $\text{Qc}8$
4. $\text{b}6$ $\text{Qb}7$
5. $\text{Qf}1$ $\text{Qc}8$

After $5$ $\text{Qd}6$ $6$ $\text{Qb}5$ $\text{Qc}6+$

Fine 1941

1. $\text{Qe}1$ $\text{Qf}5$

2. $\text{Qa}4$ $\text{Qd}7$
3. $\text{Qa}5$ $\text{Qc}8$
4. $\text{b}6$ $\text{Qb}7$
5. $\text{Qf}1$ $\text{Qc}8$

4. $\text{b}5$ $\text{Qb}6=$

White cannot profitably break the blockade. It is worth noting that even one file further up, Black cannot hold (see diag 19). He needs both the blockade and space.

7. $\text{Qa}6$ White reaches a winning knight's pawn position.

6. $\text{Qh}3$ $\text{Qb}7$
7. $\text{Qe}6$ and wins

Since $\text{Qd}5$ breaks the blockade.
Bishop v Bishop (Same)

With connected flank pawns problems may arise if the rook's pawn is the wrong colour.

1 ... Qh3
Illustrating White's difficulty - avoiding the bishop and wrong rook's pawn draw.

2 g3 Qf6
Pointed out by Cheron. Black tries to restrain the advance of the white king rather than wedge in between the pawns. Berger analyses 2 ...

3 Qf1 Qg4 4 h4 Qf5 5 Qf2 Qg4 6 Qe3 Qe6 7 Qf4 Qd7 8 Qd3 Qh3 9 Qf1 10 Qg4 Qe2 11 g5+ Qh5 (11 ... Qg7 12 Qg4 and h5) 12 Qg3 (12 g6? Qh6 13 Qe5 Qh5=) 12 ... Qd1 13 Qe4 Qb3 14 Qf3+ Qg6 15 Qf4 and White achieves h5-h6 and wins as in the main line: 15 ... Qf7 16 h5+ Qg7 17 h6+ Qh8 18 Qf5 Qe8 19 Qf6 Qg8 20 Qd5+ Qh8 21 Qf7.

4 Qf2 Qe6
5 Or 4 ... Qg5 5 h4+ Qg4 6 Qe2+ Qh3 (retreating will transpose to the main line) 7 h5 Qf5 8 h6 Qg6 9 Qf3 and wins easily.

6 Qe3 Qd7
7 h4 Qg4
8 Qe2 Qe6
9 Qd3!
Taking f5 from the black king. White must avoid 8 h5? (Berger) 8 ... Qf5! and the win is gone:

a) 9 Qd4 Qf7 10 Qd1 (10 Qc5 Qg5=) 10 ... Qe8 11 Qd5 Qf7+ 12 Qd6 Qf6 13 g4 (13 Qd7 Qg5 or 13 Qe2 Qe8) 13 ... Qg5 14 Qe7 Qhx5 15 gxh5 Qh6=;
b) 9 Qd3+ Qg5! (9 ... Qg4?
10 h6 Qg8 11 Qf2 Qg5 12 h7+) 10 Qg6 Qd4=;
11 g4+ Qh5 and ...
12 Qf7xh5=.

8 ... Qf7
Alternatively, 8 ... Qg4 9 Qg6 Qd1 (9 ... Qf6 10 Qf4) 10 h5 Qf6 (Black must prevent h6) 11 Qf4 Qe2 12 Qe8 Qg7 (12 ... Qe7 13 h6 Qf6 14 g4! Qxg4 15 Qxg4 and the black king does not reach the corner +-) 13 Qg5 Qd3 14 Qg6 Qe2 15 h6+ Qg8 16 Qf4 Qd1 17 Qe4 Qe2 18 Qf3 Qb5 19 g4 Qh7 20 g5 and wins.

11 Qf3 Qh5+

12 Qg3
Zugzwang.

12 ... Qd4
After 12 ... Qe8 (or 12 ... Qd1 13 Qg6) 13 Qg4 Qd7+ 14 Qh5 White wins easily - he controls the corner.

13 Qh1 Qe5
14 Qc2 Qe6
15 Qf4 Qf7
16 Qf5 Qd1
17 Qg4 Qc2
18 h5 Qd3
19 Qf5 Qe2
20 h6 Qh5
21 Qe5 Qf8
22 Qf6 Qg8
23 Qe6+ Qh8
24 Qf7 and wins

The end of a difficult process. Black had to keep the white king out of h5 or advancing in the centre, as well as preventing h4-h5-h6 or g3-g4-g5. By combining threats White was able to invade and advance his pawns while avoiding Qxg5.
Bishop v Bishop (Same)

Goglidze - Kasparian
USSR 1929
(Analysis by Averbakh)

When the pawns are split wrong rook’s pawns still present technical difficulties.

1 \( \text{Qe8} \)

Not 1 e6? \( \text{Qg4} \) and Black reaches a drawn bishop and rook’s pawn position.

1 ... \( \text{Qg4} \)

Or 2 \( \text{Qd6} \) h6 3 \( \text{Qd7} \) xh5

4 e6 \( \text{Qg7} \) 5 e7 \( \text{Qf6} \) =.

Averbakh’s 2 ... \( \text{Qe6} \) is also possible: 3 \( \text{Qd7} \) Qf7 4 \( \text{Qe7} \) Qc4 5 \( \text{Qd6} \) b3 6 \( \text{Qc6} \) Qf7 7 \( \text{Qd5} \) \( \text{Qxh5} \)? 8 e6 \( \text{Qf6} \) 9 e7 \( \text{Qe8} \) .

Sokolsky - Lipnitsky
USSR 1950
(Analysis by Averbakh)

In this example Black is able to use the h-pawn as a diversionary tactic to reach a won bishop and one pawn position.

1 ... \( \text{Qe5} \) 
2 \( \text{Qb6} \) \( \text{Qd4} \)
3 \( \text{Qa5} \) c5
4 \( \text{Qh2} \) c4
5 \( \text{Qxh3} \) \( \text{Qe4} \)
6 \( \text{Qg2} \)

Or 6 \( \text{Qg4} \) \( \text{Qd3} \) 7 f5 \( \text{Qe3} \) 8 \( \text{Qe6} \) \( \text{Qd2} \) and White’s king does not arrive in time.

6 ... \( \text{Qd3} \)
7 \( \text{Qf1} \) \( \text{Qc3} \)
8 \( \text{Qd8} \) \( \text{Qb4} \)
9 \( \text{Qf6} \) \( \text{Qc2} \)!

The king heads for the ideal bl-square. White is helpless once the pawn crosses c3, and this cannot be prevented.

10 \( \text{Qe2} \) \( \text{Qb3} \)!

Black intends to interrupt the enemy bishop on b2 but first maximises his position by getting out of the way of his pawn. The white king cannot reach cl.

11 \( \text{Qe5} \) \( \text{Qa3} \)
12 \( \text{Qf6} \) \( \text{Qb2} \)
13 \( \text{Qg5} \) c3
14 \( \text{Qh6} \) c2
15 \( \text{Qd3} \) \( \text{Qa3} \)
16 \( \text{Qg5} \) \( \text{Qb2} \)
17 \( \text{Qe4} \) \( \text{Qb1} \)
18 \( \text{Qb3} \)

The vertical opposition does not help as the b-pawn has crossed the drawing zone.

18 ... \( \text{Qc1} \)
19 \( \text{Qf6} \) \( \text{Qh6} \)
20 \( \text{Qb2} \) \( \text{Qb8} \) x
0-1
Bishop v Bishop (Same)

**Fischer - Keres**

*Zürich 1959*

This is a good example of exploiting a split two-pawn advantage.

74 ... lobber

After 74 ... libido White can still regroup with libido/libera as in the game.

75 libido libera

76 libido libera

77 libido libera

78 libido libera

79 libido libera

80 libido libera

81 libido

Black resigned. He is helpless against 81 ... libido libido libido libido libido.

82 libido libido libido libido libido

83 libido libido libido libido libido

84 libido libido libido libido libido

85 libido libido libido libido libido

**Fine 1941**

A more straightforward conversion of the two pawn advantage.

1 f4+ libido

9 libido libido

10 libido libido

8 d5 libido

9 libido libido

10 libido libido

Or 10 ... libido libido libido.

11 d6 libido

12 d7 libido

13 f6+ libido

14 f7 libido

15 f8h+ libido

16 d8h+ and wins

**Averbakh 1954**

An instructive example with doubled pawns.

1 libido libido

Or 1 ... libido libido libido 2 libido libido 3 d7.

2 libido libido

3 libido libido

Not 3 libido libido!}

3 ... libido

Or 3 ... libido libido libido 4 libido libido.

And d7 will win the bishop. Basically, unless Black's king can securely block the pawns, the first pawn will win the bishop and the remaining pawn will win the game.
Bishop v Bishop (Same)

Bishop and Three Pawns v Bishop and Two Pawns

Tukmakov - Timoshchenko
USSR 1968

45 ... \( \text{g7} \)
46 g5!

Creating a barrier around the f4-pawn. White’s winning chances are based on this pawn’s frailty.

46 ... hgx5
47 hxg5 \( \text{h5} \)
48 \( \text{g2} \) \( \text{g6} \)
49 \( \text{g4} \) \( \text{e4+} \)
50 \( \text{h3} \) \( \text{g6} \)
51 \( \text{h4} \) \( \text{e6} \)
52 \( \text{d1} \) \( \text{d7} \)

Or 52 ... f3 53 \( \text{g4} \) \( \text{d7+} \)
54 \( \text{xf4} \) \( \text{e6} \)
55 \( \text{xf3} \) \( \text{xf3} \)
56 \( \text{xf3} \)
57 \( \text{xf3} \)
58 \( \text{xf3} \)
59 \( \text{xf4} \) \( \text{xf6} \)

60 \( \text{g4+} \)
61 \( \text{xf4} \) \( \text{h5} \)

After 61 ... \( \text{h6} \) 62 \( \text{f5} \) \( \text{c4} \)
63 \( \text{f6+} \), or 61 ... \( \text{f6} \) 62 \( \text{h4} \)
and White will either achieve \( \text{h6} \) or \( \text{h7} \) when the g-pawn alone wins, or if \( \text{g7} \) then \( \text{g5} \) guarantees the smooth advance of the pawns. If the black bishop were on \( \text{c4} \) instead of \( \text{e6} \), he could reply ... \( \text{e2} \), but he needs to guard \( \text{g4} \) against \( \text{g4-h5} \).

62 \( \text{h5} \)
63 \( \text{f6} \) \( \text{h6} \)
64 \( \text{f4} \) and wins

Larsen - Stein
Belgrade 1970

61 b5!

“...In this position White’s passed pawns supported by the bishop completely block Black’s forces, so that White’s king manages to remove from the board both of Black’s pawns” (Larsen).

61 ... axb5
62 a6

Remarkably, this position might have been considered under bishop and two pawns against bishop. Even the wrong rook’s pawn (and two black pawns) cannot prevent White from winning!

62 ... \( \text{c8} \)
63 \( \text{d6} \) \( \text{b8} \)

The difference between this ending and diag 21 is that the pawns have reached the sixth rank. The h-pawn and bishop form a barrier around the black king, allowing White to win with the d-pawn. The irrelevance of the rest of the board becomes clear as Black
Bishop v Bishop (Same)

Bishop can only watch helplessly (63 ... b4 would be met by 64 d7+).

64 \( \text{d5} \) \( \text{f6} \)

Or 64 ... \( \text{b4} \) 65 \( \text{c4} \) (Larsen)

65 ... \( \text{g5} \)

66 \( \text{xb4} \) \( \text{g4} \) (27a)

67 \( \text{c4} \) \( \text{a8} \)

Or 67 ... \( \text{g3} \) 68 \( \text{d3} \) \( \text{g2} \) 69 \( \text{e2} \) \( \text{e5} \) 70 \( \text{d7} \) \( \text{f6} \) 71 \( \text{f2} \).

68 \( \text{d3} \) \( \text{e5} \)

69 \( \text{d7} \) \( \text{c7} \)

70 \( \text{e4} \) \( \text{g3} \)

71 \( \text{f3} \) \( \text{d8} \)

Or 71 ... \( \text{b8} \) 72 \( \text{d6} \).

72 \( \text{xg3} \) \( \text{a5} \) (27b)

73 \( \text{g4} \) \( \text{d8} \)

74 \( \text{f5} \) \( \text{a5} \)

75 \( \text{e6} \) \( \text{c7} \)

76 \( \text{f7} \) \( \text{a5} \)

77 \( \text{e8} \) \( \text{c7} \)

78 \( \text{e7} \) \( \text{a5} \)

79 \( \text{d8} \) \( \text{d2} \)

80 \( \text{b6} \) \( \text{g5} \)

81 \( \text{e5} \) 1-0

The a-pawn carried its weight by keeping the black king totally occupied.

Dizdarevic - Short

Germany 1988

1 \( \text{e2} \) \( \text{f6}? \)

Better was 1 ... \( \text{e4}! \) 2 \( \text{d2} \)

\( \text{f6} \) 3 \( \text{c3} \) \( \text{e5}! \) 4 \( \text{e8} \) \( \text{f3} \) 5 \( \text{d3} \)

2 \( \text{e8}! \) \( \text{g6} \)

3 \( \text{d3} \) \( \text{f5} \)

4 \( \text{d4}+-- \) \( \text{e6} \)

5 \( \text{e4}+ \) \( \text{f6} \)

Or 5 ... \( \text{g4} \) 6 \( \text{e5} \) \( \text{f5} \) (6 ...

\( \text{b3} \) 7 \( \text{f6} \) \( \text{xg3} \) 8 \( \text{g5+} \)

7 \( \text{xf5} \) \( \text{gxh5} \) 8 \( \text{xf6} \) \( \text{xg5} \)

6 ... \( \text{e5} \)

7 \( \text{g6} \) \( \text{g4} \)

Or 7 ... \( \text{g8} \) 8 \( \text{hx5} \) \( \text{xg4} \) 9 \( \text{d6} \) \( \text{xg5} \) 10 \( \text{e7} \) winning.

8 \( \text{c4} \) \( \text{f6} \)

The alternative is also unpleasant: 8 ... \( \text{e2}+9 \) \( \text{c3} \)

\( \text{b5} \) 10 \( \text{d2} \) \( \text{d4} \) 11 \( \text{e1} \)

\( \text{e3} \) 12 \( \text{b5} \) \( \text{xh5} \) \( \text{xg4} \) 13 \( \text{f2}+-\)

144
Bishop v Bishop (Opposite)

Bishop and Two Pawns v Bishop

Tarrasch 1921

1. \( \text{Qb}5+ \text{Qf}8 \\
2. \text{Qd}5 \\

And White wins by \( \text{Qd}7 \) and e7+. The \( \text{Qb}4 \) must stay on its present diagonal preventing e7+. Ideally the bishop should attack the f6-pawn and prevent e7. This is only possible from d8, and after \( \text{Qf}5 \) the bishop on d8 is driven away by zugzwang.

Salvioli 1887

1. \( \text{Qd}5+ \text{Qf}8\)!

Note that with the bishops controlling different coloured squares (i.e. white bishop on f2/black bishop on d5), White would win by posting the bishop on the long diagonal and playing h7. The control over the corner nearest the pawns is an important consideration.

Tarrasch 1921

1. \( \ldots \) \( \text{Qh}5 \\
2. \text{Qd}4+ \text{Qh}7 \\

Or 2 \( \ldots \) \( \text{Qf}7 \) 3 \( \text{Qc}3 \) zugzwang - 4 g6 is achieved next move. Between this zugzwang motif and the idea of \( \text{Qf}6 \) Black is helpless.

3. \( \text{Qe}5 \text{Qg}7 \\
4. \text{Qe}6+ \text{Qh}7 \\
5. \text{Qf}6 \) and wins

The pawns must go through.

Henneberger 1916

1. \( \text{Qg}4 \\

Alternatively, 1 \( \text{Qh}5+ \text{Qe}7! \\
2. \text{Qg}6 \text{Qb}2 3. \text{Qg}4 \text{Qc}3 \) 4 \( \text{Qh}5 \text{Qg}7! \) (preventing the king's entry) 5 \( \text{Qh}7 \text{Qf}7! \) and White's king is rebuffed:

1. \( \ldots \) \( \text{Qb}2 \\
2. \text{Qh}5 \text{Qg}7! \\

Not 2 \( \text{Qg}7? \) 3 \( \text{Qc}4+ \text{Qe}7 \\
4. \text{Qg}6+ or 2 \( \text{Qc}3 \) 3 \( \text{Qh}6! \) \( \text{Qg}7+ \) 4 \( \text{Qh}7 \) followed by bishop check and \( \text{Qg}6. \\
3. \( \text{Qb}5 \text{Qc}3 \\
4. \text{Qe}8 \text{Qb}2 \\
5. \text{Qg}6 \text{Qc}3 \\
6. \text{Qg}4 \\

White seems to have achieved his aim. Now the threat is \( \text{Qh}5 \) followed by walking the king to e6 to finally force through f6.

6. \( \ldots \) \( \text{Qa}5! \\

This must be now while the loose bishop disallows f6+.

7. \( \text{Qh}5 \text{Qd}8\)! \\
Bishop v Bishop (Opposite)

With a familiar drawing position (32a). The bishop hits one pawn and prevents the advance of the other (Berger/B33). A critical ending that fully illustrates the ideas for both sides.

Henneberger 1916

1 \( \text{g5} +! \)

Not 1 \( \text{b4} + \text{f7} +! \) 2 \( \text{d4} \) \( \text{c2} + 3 \text{e6} + \text{f6} = \). The text move prevents 1 ... \( \text{f6} \).

1 ... \( \text{d7} \)

Or 1 ... \( \text{f7} + 2 \text{d4} \text{a2} + 3 \text{e5} \text{b3} (3 ... \text{b1} + 4 \text{e6} + \text{e8} + 5 \text{f6} \text{g6} 6 \text{h6} \text{h5} 7 \text{d6} \text{g6} 8 \text{e5} \text{h5} 9 \text{f5} \) \( \text{Tarrasch 1921} \)

1 ... \( \text{d6} \)

If White were to move in the starting position he would win easily by playing \( \text{e5} \) and \( \text{f6} \). Black prevents this.

2 \( \text{g5} \)

Again success will depend on whether White can "bypass" round and invade with his king to successfully support the pawn advance.

2 ... \( \text{e2} \)

2 ... \( \text{h3} \) looks like a tougher defence than Tarrasch's solution, e.g. 3 \( \text{g3} + ? \text{e7} + \) and ... \( \text{xe6} = \) (Nor 3 \( \text{b4} + \text{e5} 4 \text{e7} \text{f7} 5 \text{c3} + \text{d6} 6 \text{f6} \text{h5} \) and ... \( \text{d7} - \text{e8} = \). But the logical 3 \( \text{f6} ! \) \( \text{d1} \) 4 \( \text{f3} + \) wins as the king gets to either \( \text{e5} \) or \( \text{e7} \), guaranteeing the advance of the pawns.)

4 \( \text{d6} \) and the pawns advance to the sixth.

To me (JT) this method is more technical than Tarrasch's.

Tarrasch 1921

1 ... \( \text{d6} \)

3 \( \text{f6} \) wins simply, with a bishop check forcing white king access to \( \text{e5} \) (or \( \text{e7} \)).

3 ... \( \text{d5} \)

Or 3 ... \( \text{e7} + 4 \text{f4} \text{d6} 5 \text{e3} + \) and wins.

4 \( \text{e7} \) \( \text{b5} \)

5 \( \text{g6} \) \( \text{e8} + \)

6 \( \text{g7} \)

Now Black loses a piece.

6 ... \( \text{c6} \)

7 \( \text{f6} \) \( \text{d7} \)

8 \( \text{f7} \) and wins

Note that the start position would be drawn if moved two files to the right (Averbakh). Then there would be no room for the king to circle and invade (by-pass) and thus no way to progress.
Bishop v Bishop (Opposite)

**Averbakh**

1 ... \( \text{Qe}8 \)
2 \( \text{Qb}4+ \) \( \text{Qd}7! \)

Black aims for the drawing array of bishop attacks the pawn and cooperates to prevent advance seen before.

3 \( \text{Qd}4 \)

Not 3 e5 \( \text{Qf}7 \).

3 ... \( \text{Qf}7 \)
4 \( \text{Qe}5 \) \( \text{Qe}8 \)

This move is not necessary, but demonstrates the difference between this example and the position shifted one file to the right (see next diag). Black can also demonstrate the advantages of his extra space with 4 ... \( \text{Qg}6 \) 5 \( \text{Qa}3 \) \( \text{Qh}7 \) and Black has nothing to fear - this diagonal is long enough to avoid zugzwang.

5 \( \text{Qf}6 \) \( \text{Qg}8 \)
6 \( \text{Qg}7 \) \( \text{Qf}7 \)
7 \( \text{Qa}3 \) \( \text{Qh}5 \)
8 e5 \( \text{Qf}3 \)
9 d6 \( \text{Qg}4 \)
10 \( \text{Qf}6 \) \( \text{Qd}7= \)

**Tarrasch 1921**

1 ... \( \text{Qf}8 \)
2 \( \text{Qc}4+ \) \( \text{Qe}7 \) !
3 \( \text{Qe}4 \)

3 f5? \( \text{Qg}7= \) is a draw.

3 ... \( \text{Qg}7 \) \( \text{f}4 \)
4 \( \text{Qf}5 \) \( \text{Qh}6 \)
5 \( \text{Qg}4! \)

Zugzwang.

5 ... \( \text{Qf}8 \)

In the previous example Black could maintain bishop pressure against the back pawn but here he is driven back.

6 \( \text{Qg}5 \) \( \text{Qg}7 \)
7 \( \text{Qg}6 \) \( \text{Qf}8 \)

Alternatively, 7 ... \( \text{Qf}8 \) 8 f5 or 7 ... \( \text{Qh}8 \) 8 \( \text{Qh}7 \).

8 \( \text{Qh}7 \) and wins

A final reminder of Black's restricted space - now there is one less square on the short diagonal (in the previous example ... \( \text{Qh}5 \) was possible) - this is a fatal difference.

**Salvioli 1887**

1 \( \text{Qe}6 \) \( \text{Qb}4 \)
2 \( \text{Qc}4 \) \( \text{Qd}8 \)
3 \( \text{Qf}7 \) \( \text{Qa}3 \)
4 e6 \( \text{Qb}4= \)

White cannot make progress. The king on d8 stops both pawns. The ability for the king to act against both pawns is the determining factor for a successful defence.

**Salvioli 1887**

6 f7 leading to the main line.

4 ... \( \text{Qb}4 \)
5 \( \text{Qf}6 \) \( \text{Qc}3+ \)
6 \( \text{Qg}6 \) \( \text{Qb}4 \)
7 \( \text{Qg}7 \) and wins

Or 4 \( \text{Qf}7 \) \( \text{Qb}4 \) 5 \( \text{Qg}6 \) \( \text{Qc}5 \)
"If Black can post his bishop where it simultaneously restrains both pawns while the king successfully holds off the enemy king, the game ends in a draw" (Averbakh).

```
1. c5  e7
2. b5  d8
```

White confronts a dilemma - the king must choose which pawn to combat; he cannot fight both.

```
4. a6  f4
5. b7  c7=
```

White cannot progress - he is shadowed by his counterpart, and there is no point at which the black forces cannot cooperate against the advance of one of the pawns. It is this factor which determines the outcome of the game.

```
1. c5  e6
2. b5  f5
3. c5  e6
4. b8  g2
```

The white king cannot get round thanks to the obstruction on the b-file.

```
5. b5  b7=
```

Here is a typical example of the strength of widely separated pawns.

```
37. ...  e6
38. f8  d5
39. g2  c5
40. f2  h5
41. e7  d3
42. e3  c4
43. h4  e5
44. e1  f5
45. f3  e4+
```

After 55 g1 f3 56 h2 e2 57 b4 e2 the c-pawn will cost White the bishop. White could not avoid the division of his forces.
Bishop v Bishop (Opposite)

Berger 1899, Averbakh

1...{e5
White cannot allow ... {d8
drawing easily.
1 ... {f5
2 ... {c7
2 b5 e4! 3 {b7 {f3 4
{b6 {e4 5 c7 {d7=
2 ... {h3
3 c6
Not 3 {c6 {g2+! (3 ...
{c8? 4 {b6 {d7 5 {f4 {e6

Chekhover 1950

1 ... {e8 {c6
2 ... {e2 {c1
The centre pawns alone do
not pose a danger to White -
the b-pawn is critical. Black
has to worry that if advanced
too quickly to b2 it will be-
come an obstacle to its own
king trying to invade on that
flank.
3 ... {d1 {b2
4 ... {e2 {d4
5 ... {d1 {d6
6 ... {f7!
Now that ... d5 is not possi-
ble, White forces the b-pawn
forward.
6 ... {b2
7 ... {g6 {c5
8 ... {e2 {d5
9 ... {f5 {b4
10 ... {g6 {a3
11 ... {b1
The same kind of fortress
seen in diag 39.
11 ... {b3
12 ... {d1 {c3
13 ... {e2 {c5
14 ... {d1 {d4
15 ... {e2 {b3
16 ... {d3=

Walther - Fischer

Zurich 1959

54 a4?
Now Black draws according
to Fischer. Instead he should
play 1 b4! (Fontana) 1 ... {c7
55 ... {a1 {b8 56 b5 {a3 57 b6
{c8 58 ... {a6 {b8 59 {g2
{c8 60 ... {a7 {e5 61 a4 and
a5, {a8 with the promotion
of the b-pawn.
54 ... {c7
55 b4 {b8
56 a5
Without this move White
cannot arrange to play b6.
56 ... {a7

57 ... {c4
Black can sacrifice his
bishop on b6, leaving White
with the wrong rook's pawn
(though he then has to worry
about the "Rauzer" ending -
see diags BP5-9).
57 ... {g3
58 b5 {f2
59 ... {e2 {e3
60 ... {b3 {d2
61 b6+ {b7
62 {a4 {c6
63 {b5+ {c5
64 b7 {f4 65 a6 {b6= (Fis-
cher).
Csom - Vaganian
Buenos Aires 1978

I see no reason why Csom (and “Bukic”) drew this ending.

\[ \begin{array}{c}
47 \text{Q}d5+ \text{Q}d6 \\
48 \text{Q}c4 \text{Q}c5 \\
49 \text{Q}f1 \text{Q}c7 \\
50 \text{h}4
\end{array} \]

This removes a king route via h5 but makes bishop and wrong rook’s pawn endings more dangerous for Black. Bukic gives 50 f5! \text{Q}d6=4. Really? He leaves much unsaid if this is true. For example, 51 \text{Q}c4 \text{Q}d8 52 \text{Q}d5 (this is like a mirror of zugzwang in diag 49 - will the wrong rook’s pawn save Black?) 52 ... \text{Q}c5

53 \text{Q}e5 \text{Q}xb5 54 f6 \text{Q}c5 55 \text{f}7 \text{Q}c7 56 \text{Q}c6 \text{Q}f8 57 \text{Q}f3 (57 \text{Q}h1 \text{Q}d4 58 \text{Q}d7 h5 does not change the type of ending) 57 ... \text{Q}d4 58 \text{Q}d7 \text{Q}c3

59 \text{Q}g4 \text{Q}f4 60 \text{Q}e8 \text{Q}b4 61 \text{f}8 \text{Q}Q+ \text{Q}xf8 62 \text{Q}xh8 \text{Q}g4 63 \text{Q}d7 \text{h}4 and black should be able to get his king back into the drawing zone via the e-file. (See also diags BP5-9).

Bukic also gives 50 \text{Q}f5 \text{Q}d4 51 \text{Q}g4 \text{Q}d5! 52 f5 \text{Q}e5 53 \text{Q}c3 \text{Q}f6 (45a)=. Let us take this a little further: 54 \text{Q}c2 (“zugzwang”) 54 ... \text{Q}d6

55 \text{Q}f3 \text{Q}e5 56 b6 \text{Q}c5 57 b7 \text{Q}d6 58 \text{Q}g4 \text{Q}f6 59 \text{h}5 \text{Q}f4 60 \text{Q}d3 \text{Q}f7 61 \text{Q}b1 \text{Q}f6 62 \text{Q}c2 \text{Q}f7 63 \text{Q}b3+ \text{Q}f6 64 \text{Q}e6 \text{Q}g7 65 \text{Q}g4 \text{Q}b8 66

\[ \begin{array}{c}
\text{Q}f3 \text{Q}f6 67 \text{Q}e4 \text{Q}e7 68 \\
\text{Q}e4 \text{Q}f6 69 \text{Q}d3 \text{Q}e7=. It looks as if Bukic is right here.
\end{array} \]

50 ... \text{Q}d8
51 \text{h}5 \text{Q}c7
52 f5

Necessary to free the king from defence of the f4-pawn, though there are few invasion routes for the white king.

52 ... \text{Q}d6
53 \text{Q}h3

Why not 53 \text{Q}c4 here?

Again this is very reminiscent of diag 49:

a) 53 ... \text{Q}d8 54 \text{Q}d5 \text{Q}c5 (54 ... \text{Q}f6 55 \text{b}6+ or 54 ... \text{Q}b6 55 \text{f}6+) 55 \text{Q}e5 \text{Q}xb5 56 \text{f}6 \text{Q}c5 57 \text{f}7 \text{Q}e7 58 \text{Q}e6 \text{Q}f8 59 \text{Q}f3 \text{Q}d4 60 \text{Q}d7 and White wins since he will win the bishop for the f-pawn, and then has no difficulty winning the h-pawn whilst keeping the black king out of the corner;

b) 53 ... \text{Q}c5 54 f6 \text{Q}xc4 55 \text{f}7 \text{Q}d6 56 \text{b}6+.

53 ... \text{Q}d8
54 \text{Q}g4 \text{Q}f6
55 \text{b}6 \text{Q}c6
56 \text{b}7 \text{Q}xb7
57 \text{Q}d5 \text{Q}c7
58 \text{Q}e6 \text{Q}c3
59 \text{f}6 \text{Q}d8
60 \text{f}7 \text{Q}b4
61 \text{Q}e2 \text{Q}a3
62 \text{Q}e4 \text{Q}b4
63 \text{Q}f6 \text{Q}c3+ \frac{1}{2}-\frac{1}{2}
An interesting duel between pawn masses. The extra pawn proves decisive.

44 \( \text{b3}+! \)

Forcing the black king to choose.

44 ... \( \text{d7} \)

Black chooses to monitor the white pawn mass.

45 \( \text{c2} \) e4

46 \( \text{d5} \)

In effect paralysing Black’s pawns. If they advance they will become blockaded.

46 ... \( \text{c7} \)

47 a4 \( \text{b8} \)

48 \( \text{b3} \) \( \text{a7} \)

49 \( \text{e6} \)

Forcing a blockade of the black pawns. Since White also has the advantage that his bishop controls the appropriate corner, (see also diag 36 and 51) Black has no hope of defending.

49 ... e3

50 \( \text{c4} \) \( \text{h4} \)

51 \( \text{e2} \) f4

52 \( \text{c4} \) \( \text{e1} \)

53 b5 \( \text{a5} \)

54 \( \text{d5} \) \( \text{b7} \)

55 \( \text{d6} \) \( \text{c7}+ \)

56 \( \text{d7} \) 1-0

Or 6 ... a3 7 \( \text{xa3} \) \( \text{g5}+ \)

(Polugaevsky).

7 \( \text{d6} \) \( \text{g3} \)

8 \( \text{c5} \) \( \text{f3} \)

9 \( \text{d4}?! \)

A better try was 9 \( \text{c6}! \)

\( \text{g4} \) 10 \( \text{d6} \) a3 11 \( \text{xa3} \)

\( \text{gx5} \) 12 \( \text{c1}+ \) \( \text{h4} \) 13 \( \text{c5} \)

g5 14 \( \text{d4} \) g4 15 \( \text{e3} \) \( \text{g3} \) 16 \( \text{d2} \) \( \text{h2}+ \).

9 ... \( \text{g4} \)

0-1

White resigned in view of ...

\( \text{b1l} \) ...

\( \text{f5} \) when he will soon be forced to surrender a second pawn due to zugzwang.
**Bishop v Bishop (Opposite)**

**N**

**B**

Suetin - Matanovic

Titovo Uzice 1966

64 ... h5
65 Qe8 Qf6
66 Qd7 Qe5
67 Qe6 g4
68 fxg4 fxg4
69 hxg4 hxg4

This position is given as drawn in *Informator*. Is this really the case? It looks very much like Salvioli's split win (diag 38). Did Suetin resign, and this is an old typographical error?

Our analysis runs 70 Qf2 g3+ 71 Qg2 (71 Qe2 d3+ 72 Qf1 d2 73 Qb3 Qe3 74 Qd1 Qd3 75 Qg2 Qc3 76 Qf1 Qb2 77 Qa4 Qc1 78 Qe2 Qd4+) 71 ... Qe3+.

**W**

**R**

Uhlmann - Jansson

Raach 1969

48 h4 gxh4
49 gxh4 Qe1
50 h5 Qd2

Or 50 ... Qg5 51 Qg6 Qb4
52 Qe4 Qd6 (52 ... Qf6 53 Qd3 Qf8 would still transpose into the game - JT) 53 Qd3+-. The white king reaching c6 is decisive.

51 Qg6 Qb4

Alternatively, 51 ... Qf4 52 Qe4 Qh6 53 Qh7 (53 Qf5 Qf8 reaches the key position but unfortunately with White to move) 53 ... Qg7 (53 ... Qd2 54 Qf5 Qb4 55 h6 or 53 ... Qf4 54 Qg8 Qe7 55 Qf5) 54 Qg8 Qe7 55 Qf5+-. These variations illustrate Black's desperation against the split pawns. He must prevent them from advancing, and he must prevent the white king from invading either flank. Also, trading the e-pawn for the h-pawn loses.

52 Qe4 Qd6 (49a)
53 Qd3 Qf8
54 Qc4 Qe7
55 Qe4 Qd6
56 Qf3!

Not 56 Qb5 Qc7 57 Qa6 Qg7 58 d6+ Qxd6 59 Qxb6 Qh6 60 a5 Qe3+ 61 Qb7 Qe7 62 a6 Qf7+ (JT).

56 ... Qh6
57 Qd3 Qe7
58 Qe4 Qf6
59 Qg4

Threatening d6.

59 ... Qf8
60 Qf5!

Zugzwang - the position that White has been aiming to reach.

60 ... Qg5 Rc1+

Instead, 60 ... Qh6 61 d6+- or 60 ... Qd6 61 h6+-.

61 Qxe5 Qxh5
62 d6

The d-pawn wins the bishop on f8.

1-0
Korchnoi - Botvinnik  
Moscow 1960

38 h5

White does not even deign to thin out the queenside with \( \text{Qd4} \).

38 \( \text{gxh5} \)  
39 \( \text{Qxh5} \)  \( \text{Qxa4} \)  
40 f5 \( \text{Qd1} \)

It is noteworthy that Black resigned here. His pawns are meaningless - they cannot even distract the bishop from the long diagonal (see also diag 3).

\[ \text{a pawn can't move!} \]

Østenstad - H. Olafsson  
Espoo Zt 1989

46 ... \( \text{Qf3?} \)  
47 \( \text{Qxa4} \)  \( \text{Qg2} \)  
48 e4!

This pawn is White's hope for a draw - it must be used later to distract the black bishop. Not 48 \( \text{Qf6?} \) \( \text{Qxh2} \) 49 \( \text{Qh4} \) c3 50 \( \text{Qa3} \) \( \text{Qh3} \) 51 e4 \( \text{Qe6} \) 52 e5 \( \text{g2+} \) (zugzwang!).

\[ \text{Or 48} \ldots \text{Qxe4 49 Qb4 Qd3} \]

50 \( \text{Qf6} \) \( \text{Qxh2} \) 51 \( \text{Qh4} \) \( \text{Qg2} \) 52 \( \text{Qc3} \) \( \text{Qf2} \) 53 \( \text{Qd2} \)  
49 \( \text{Qb4} \) \( \text{Qxh2} \)  
50 \( \text{Qel} \) \( \text{Qg2} \)  
Not 50 ... \( \text{h4??} \) 51 gxd4 g3 52 h5 g2 53 \( \text{Qf2} \) \( \text{g1=Q} \) 54 \( \text{Qxg1+} \) \( \text{Qxg1} \) 55 h6 \( \text{Qf2} \) 56 e5 \( \text{Qe3} \) 57 e6+  
51 \( \text{Qc3} \) \( \text{Qf1} \) 52 \( \text{Qd2} \) \( \text{Qf2} \)  
53 \( \text{Qf4} \) \( \text{Qf3} \)  
54 \( \text{Qd6} \) \( \text{Qg2!} \)  
Obviously not 54 ... \( \text{Qxe4} \) 55 \( \text{Qe7} \) \( \text{Qf3} \) 56 \( \text{Qh4} \)  
55 \( \text{Qd2} \) \( \text{Qh3} \)  
56 \( \text{Qe3} \) h4  
57 \( \text{gxd4} \) \( \text{Qxh4} \)  
58 \( \text{Qf2} \) \( \text{Qh7} \)  
Alternatively, 58 ... \( \text{c3} \) 59 \( \text{Qe2} \) \( \text{Qc4+} \) 60 \( \text{Qd1} \) \( \text{Qb3+} \) 61 \( \text{Qc1} \) g3 62 e5 \( \text{Qh3} \) 63 e6 g2 64 \( \text{Qc5} \) \( \text{h2} \) 65 e7 \( \text{Qa4} \) 66 e8=\( \text{Q} \) \( \text{Qxe8} \) 67 \( \text{Qc2} \).  

\[ \text{The king can barricade the queenside so that Black cannot mobilise his pawns without allowing the \( \text{e-pawn} \) to advance.} \]

70 ... \( \text{Qd7} \)  
71 \( \text{Qb5} \) \( \text{Qc7} \)  
72 \( \text{Qc5} \) \( \text{Qg8} \)  
73 \( \text{Qa5+} \) \( \text{b7} \)  
74 \( \text{Qel} \) \( \text{Qa6} \)  
75 \( \text{Qd6} \)  
The black king gets through now but White attains the advantage of the \( \text{e-pawn} \), which can be used to distract the black bishop and so be swapped for the \( \text{g-pawn} \).  

75 ... \( \text{Qb5} \)  
76 \( \text{e6} \) \( \text{a4} \)  
77 \( \text{e7} \) \( \text{Qf7} \)  
78 \( \text{Qe5} \) \( \text{b6} \)  
Due to 78 ... \( \text{b3} \) 79 \( \text{Qf4} \) \( \text{Qh5} \) 80 \( \text{e8=\( \text{Q} \)}. \)
Bishop v Bishop (Opposite)

Kotov - Botvinnik
Moscow 1955

1 ... g5!!

Or 2 hxg5 h4 3 f5 (3 Qd6 Qf5!! 4 g6 Qxg6 5 f5 Qxf5 6 Qxb3 Qg2 and the h-pawn wins the bishop) 3 ... Qxf5 4 Qxb3 h3 5 Qd6 and now:

a) 5 ... Qg2? 6 Qc3 h2 7 Qxh2 Qxh2 8 Qd4 Qe4 (8 ... Qe6 9 e4=) 9 g6= (another example of the deflecting pawn motif);

b) 5 ... Qxe3! and ... Qg2, (... Qe6) wins.

2 ... d4+!

Preserving the dangerous distant b-pawn.

3 exd4

Or 3 Qxd4 Qg3 4 g6 Qxh4 5 Qd2 Qh3 6 Qe2 Qg2 7 Qf6 h4 and wins.

3 ... Qg3+!

Not 3 ... Qg4? 4 d5! Qxd5 5 Qf2=.

4 Qa3

To free the king to fight the h-pawn. Also hopeless is 4 Qe7 Qxh4 5 g6+ Qg4 (52a).

An excellent illustration of the ingredients for a successful opposite bishops ending: White's forces are divided by Black's dangerous pawns: whilst White's pawns are harmless, unable to deflect the Qe6 which can monitor both while guarding b3.

4 ... Qxh4

5 Qd3 Qxg5

6 Qe4 h4

7 Qf3

Or 7 d5 Qxd5+ 8 Qxd5 h3=.

8 Qd5+

Since 8 Qf2 Qg4 9 Qg1 Qf3 10 Qh2 Qe6 11 d5 Qd7 and the black king escorts the b-pawn home. (Most of the above annotations stem from Botvinnik.

Piskov - Nunn
Germany 1992

1 ... Qg6

2 Qxc5 Qf7

3 Qxd4

Instead 3 Qxa7 is an interesting try: 3 ... Qd3! (3 ... Qb1? 4 a4 Qa2 5 Qxd4 Qc4 6 d6 Qe6 7 Qc5 gives White winning chances) 4 c5 Qc4 5 d6 and now:

a) 5 ... Qe6! 6 a4?! (6 Qf2 Qxa2=) 6 ... d3= 7 d7 Qxd7 8 c6+ Qxc6 9 Qe3;

b) 5 ... Qxa2? 6 c6+-.

3 ... a6

4 a3 Qd3

5 c5 Qc4

6 d6 Qe6

The blockade renders the extra pawns harmless.

7 Qf2 Qd7

8 Qg3 Qe6

9 h4 Qc6

½-½
Unzicker - Botvinnik
Varna O1 1962
(Analysis by Speelman)

1 ... Qe5?! 
Suggested by Speelman as an improvement on the game. Not:

a) 1 f4? h4! 2 Qf2 (2 gxh4 gxf4) 2 ... g4+!; or

b) 1 h4? f4! 2 Qe5 (2 Qf2 gxh4 3 gxh4 Qe6 intending ... Qd5xf3) 2 ... Qe6! 3 Qc7 gxh4 4 Qxf4 (4 gxh4 Qf5+) 4 ... h3 5 g4 h4 6 Qh2 Qe2 0-1 was the game Unzicker - Botvinnik, viz. 7 Qb3 Qxf3 8 Qxa3 Qxg4 9 Qb4 Qd5 10 c4+ Qe4+.

But also possible are:

c) 1 Qb6 Qd5! (1 ... g6?! 2 Qc7! h4 3 gxh4 gxh4= as after 1 ... Qe5) 2 Qc7! (2 h4 f3 3 Qc7 g4! 4 fxg4 f3 5 Qb6 hxg4++ e.g. 6 Qe3 Qg6 7 Qd4 Qf7 8 Qf5 h5 Qxh5 10 Qb3 Qxe4) 2 ... Qxf3 (2 ... Qg6 3 f4=) 3 Qb3 Qg2 4 Qxa3 Qxh3 5 Qb2 f4 6 gxg4 g7 Qc7 g3 8 f5 h4 9 Qd2 (9 Qd8 g2 10 Qb6=) 9 ... Qf6 10 Qe3 Qxf5 11 Qxf3=;

d) 1 g4?! (I suspect that White can also make a draw with this):

d1) 1 ... f4? 2 gxh5 Qd5 3 h4=;

d2) 1 ... Qf1? 2 gxh5 Qxh3 3 f4! gxg4 (3 ... g4 4 Qf2=) 4 Qb3 Qg8 5 Qxa3 h7 6 Qb2 Qh6 7 Qc1 Qxh5 8 Qd2=;

d3) 1 ... Qg6? 2 Qe5 h4 (2 ... f4 3 h4=) 3 f4 and now:

d31) 3 ... Qe2 4 Qxf5+ (4 fxg5 Qxg4?? forcing a draw: 4 ... Qxf5 5 Qd6 g4 6 hxg4+ Qxg4 7 Qc5 h3 8 Qg1 Qe4 9 Qf5=)

d32) 3 ... fxg4 4 hxg4=;

d4) 1 ... h4 2 gxh5 Qe2 3 Qb6! (3 f4? g4! 4 hgx4 Qxg4 5 f6 Qf5+ 6 Qb3 h3 7 Qg1 Qxf6 8 c4 Qg6 9 c5 Qh5 10 c6 Qg4 11 c7 Qf3+ 3 ... Qf6 (3 ... Qe7 4 f6+ Qxf6 5 f4 g4 6 hgx4 h3 7 Qg1 Qxg4 8 f5=) 4 f4 g4 5 hxg4 h3 6 g5+ Qxg5 6 Qf7 7 Qg1 Qd3+ 8 Qb3 Qxf5 9 Qxa3 Qg6 10 Qh2 Qh5 11 c4 Qg4 12 g6 Qxg6 13 f5=) 7 Qg1 Qg4 8 f5 Qg3 9 Qc5=.

d5) 1 ... Qd5?! 2 gxh5! Qxf3 3 Qb3! h4 4 Qxa3 Qg2! (4 ... Qe4 5 f6) 5 Qb2 Qxh3 6 Qc1! (6 f6? - this does not work if the bishop on e6 can hold both pawns - 6 ... Qe6 7 Qc1 g4 8 Qd2 g3 9 Qe5 Qg6 10 Qe3 Qg5+ - 10 ... Qf5? 11 Qxg3!= - 6 ... Qf5 7 Qd2=.

The only move; not 1 ... Qe6? 2 f4 Qf1 (2 ... h4 3 gxh4 gxh4 4 Qd4=) 3 Qc7! (3 h4 g4 4 Qc4).

2 ... Qxh4 3 Qc7 4 Qg6 5 Qd6 6 Qb2 Qh5 7 Qc1 Qxf3 8 Qxa2 Qg2 9 Qb2 Qh3 10 Qc1 Qg4 11 Qd2 f4

Alternatively, 11 ... Qf3 12 Qc1 and now:

a) 12 ... Qg2 13 Qh2 (13 c4??

f4 14 Qc5 Qg3 15 Qf2+ Qg4 16 Qc5 Qf3 17 Qf2 h3 18 Qg1 Qxg3 19 Qf2+ Qh2 20 Qd4=)

b) 12 ... Qg2 13 Qe7 (13...
Bishop v Bishop (Opposite)

\[ \begin{align*}
\text{Bishop:} & \quad \text{v} \quad \text{Bishop (Opposite)} \\
16 & \text{Qf1} \\
16 & \text{Or 16 c4 h3 17 Qg1 Qg3 18} \\
16 & \text{Qf2+} \text{Qh2} 19 \text{Qd4 Qe6} 20 \\
16 & \text{f2=}. \\
16 & \text{...} \text{Qd5} \\
17 & \text{Qh2} \text{Qf1} \\
17 & \text{Not 17 Qf2?? Qh3 18 Qf1} \\
17 & \text{Qe4+ 19 Qf2 Qe2} 20 \text{c4 (20} \\
17 & \text{Qxe2 Qg2} 21 \text{c4 f3+ 22 Qe3} \\
17 & \text{Qxg1} 23 \text{Qf3 h3+) 20} \\
17 & \text{Qxc4 21 Qf3 Qd5+ 22 Qf2} \\
17 & \text{Qf4 Qg2 23 Qg4 h3 24} \\
17 & \text{Qh4 Qe6+) 22} \text{... Qc6} 23 \\
17 & \text{Qf1 Qb5+ 24 Qf2 Qe2+.} \\
17 & \text{...} \text{Qf3} \\
18 & \text{Qd2 Qe4} \\
19 & \text{Qe1 Qe3} \\
20 & \text{Qg1+} \text{Qf3} \\
21 & \text{Qh2=}
\end{align*} \]

This position is worth a diagram due to the graphic difference between the forces, especially the easily blockaded black pawns. Even the wrong rook's pawn cannot save Black.

\[ \begin{align*}
4 & \text{g4!! hgx4} \\
4 & \text{No better is 4 f3 \text{fxg4}} 5 f5 \\
4 & \text{gx5 6 Qxh5 Qf6 7 Qg3 Qf3} \\
4 & \text{8 Qh6 Qe4 9 h5 Qf3 10 Qh4+} \\
4 & \text{Qf7 11 Qg5 Qe4 12 Qg3 Qg7} \\
4 & \text{13 Qe5+ Qf7 14 h6+ e.g. 14} \\
4 & \text{... Qg8 15 a8}+ Qxa8 16 \\
4 & \text{Qxf5} \\
4 & \text{is an inferior version of} \\
4 & \text{the game for Black.} \\
4 & \text{Qxf5} \\
4 & \text{g6.}
\end{align*} \]

Not 12 \text{Qe2?? Qg3 13 Qc5} \\
12 & \text{Qg2 winning for Black.} \\
12 & \text{...} \text{Qf3} \\
13 & \text{Qe7 Qg3} \\
14 & \text{Or 14 Qg4 15 Qf2+ Qh3} \\
14 & \text{Qf1=}. \\
15 & \text{Qf2+} \text{Qg4} \\
16 & \text{Qe1!} \\
16 & \text{Not 16 \text{Qe2?? Qg3 13 Qc5}} \\
16 & \text{Qg2 winning for Black.} \\
16 & \text{...} \text{Qf3} \\
17 & \text{Qe7 Qg3} \\
18 & \text{Or 14 \text{Qg4 15 Qf2+ Qh3}} \\
19 & \text{16 ...} \text{Qf1=}. \\
20 & \text{Qf2+} \text{Qg4} \\
21 & \text{Qh2=}
\end{align*} \]

This position is worth a diagram due to the graphic difference between the forces, especially the easily blockaded black pawns. Even the wrong rook's pawn cannot save Black.

\[ \begin{align*}
4 & \text{g4!! hgx4} \\
4 & \text{No better is 4 f3 \text{fxg4}} 5 f5 \\
4 & \text{gx5 6 Qxh5 Qf6 7 Qg3 Qf3} \\
4 & \text{8 Qh6 Qe4 9 h5 Qf3 10 Qh4+} \\
4 & \text{Qf7 11 Qg5 Qe4 12 Qg3 Qg7} \\
4 & \text{13 Qe5+ Qf7 14 h6+ e.g. 14} \\
4 & \text{... Qg8 15 a8}+ Qxa8 16 \\
4 & \text{Qxf5} \\
4 & \text{g6.}
\end{align*} \]

Not 12 \text{Qe2?? Qg3 13 Qc5} \\
12 & \text{Qg2 winning for Black.} \\
12 & \text{...} \text{Qf3} \\
13 & \text{Qe7 Qg3} \\
14 & \text{Or 14 \text{Qg4 15 Qf2+ Qh3}} \\
14 & \text{Qf1=}. \\
15 & \text{Qf2+} \text{Qg4} \\
16 & \text{Qe1!} \\
16 & \text{Not 16 \text{Qe2?? Qg3 13 Qc5}} \\
16 & \text{Qg2 winning for Black.} \\
16 & \text{...} \text{Qf3} \\
17 & \text{Qe7 Qg3} \\
18 & \text{Or 14 \text{Qg4 15 Qf2+ Qh3}} \\
18 & \text{Qf1=}. \\
19 & \text{Qf2+} \text{Qg4} \\
20 & \text{Qh2=}
\end{align*} \]

This position is worth a diagram due to the graphic difference between the forces, especially the easily blockaded black pawns. Even the wrong rook's pawn cannot save Black.

\[ \begin{align*}
4 & \text{g4!! hgx4} \\
4 & \text{No better is 4 f3 \text{fxg4}} 5 f5 \\
4 & \text{gx5 6 Qxh5 Qf6 7 Qg3 Qf3} \\
4 & \text{8 Qh6 Qe4 9 h5 Qf3 10 Qh4+} \\
4 & \text{Qf7 11 Qg5 Qe4 12 Qg3 Qg7} \\
4 & \text{13 Qe5+ Qf7 14 h6+ e.g. 14} \\
4 & \text{... Qg8 15 a8}+ Qxa8 16 \\
4 & \text{Qxf5} \\
4 & \text{g6.}
\end{align*} \]
straightforward 10 \( \text{Q}xh5 \text{Q}e6 \\
11 \text{Q}xg4 \text{Q}e4 \) (or 11 ... \( \text{Q}d7 \\
12 \text{f}5 \text{Q}c8 \) 13 \( \text{f}6+\) ) 12 \( \text{f}5+ \) \( \text{Q}x5+ \) 13 \( \text{Q}f4 \\
10 ... \text{Q}f3 \\
11 \text{f}5 \\

Not 11 \( \text{Q}xh5? \) \( \text{g}3+ \) 12 \( \text{g}5 \\
g2= \) (Averbakh). The difference is that the \( \text{g} \)-pawn will be used to distract the bishop

10 ... \( \text{Q}f3 \\
11 \text{f}5 \\

Not 11 \( \text{Q}xh5? \) \( \text{g}3+ \) 12 \( \text{g}5 \\
g2= \) (Averbakh). The difference is that the \( \text{g} \)-pawn will be used to distract the bishop

Bishop v Bishop (Opposite)

\[
\text{Bishop} \quad \text{v} \quad \text{Bishop (Opposite)}
\]

from defence of the \( f \)-pawn if White transfers his king to the queenside.

11 ... \( \text{Q}g7 \\
12 \text{Q}g3 \text{Q}f7 \\
13 \text{Q}e5 \text{Q}e4 \\
14 \text{Q}xh5! \text{g}3 \\
15 \text{Q}xg3 \text{Q}f6 \\
16 \text{Q}g4 \text{Q}xf5+ \\
17 \text{Q}f4 and wins

61 ... \text{gxh4}

Capturing on \( g5 \) makes it easier for Black's king to invade, e.g. 61 \text{hxg5}+ \text{Qxg5} 62 \text{Qc2} \text{Qh4} 63 \text{Qg6} \text{Qg3} 64 \text{Qhx5} \text{Qxg2} 65 \text{Qg4} e4 66 \text{fxe4} f3 67 \text{b3} f2 68 \text{Qe2} f1\text{Q} 69 \text{xf1}+ \text{xf1} 70 \text{e5} \text{Qe7}.

61 ... \text{gxh4}

Palacios - Pilnik

Argentine Ch 1975

1 \text{Q}g4

This position is winning since White can set up a passed pawn on the \( h \)-file.

1 ... \( \text{Q}e1 \\
After 1 ... \text{g}5 2 \text{g}3 \text{hxg3} (2 ... \text{Q}e1 3 \text{gxh4} \text{gxh4} 4 \text{Qxh4} \text{xf2+} 5 \text{Qg4+}+) 3 \text{fxg3} the h-pawn will be decisive.

2 \text{Qxh4} \text{Qxf2+} \\
3 \text{Qh5} \text{g}5 \\
Alternatively:

a) 3 ... \text{Qe3} 4 \text{Qg6} \text{Qh6} 5 \text{h}4 \\
\text{Qa}5 6 \text{g}4++; b) 3 ... \text{Qc5} 4 \text{Qg6} \text{Qb4} 5 \\
\text{Qxg7} \text{Qc3} 6 \text{Qf1} 7 \text{b6} \text{d}3 8

Opening a path for the king and undermining \( f3 \).

66 \text{gxh3} \text{e}4!

Creating a second passed pawn.

67 \text{fxe}4 \text{f}3 \\
White faces perpetual zugzwang and the loss of all pawns - another example of dynamic creation of passed pawns over material considerations. The finish might be 68 \text{Qe}6 (or 68 \text{e}5 \text{Qxe}5 69 \text{Qf2} \text{Qf4} 70 \text{Qf7} \text{Qd}4 71 \text{Qf1} \text{Qg3} 68 ... \text{Qf4} 69 \text{Qd}5 \text{Qg}3 70 \text{Qe}6 \text{h}4.

b7 \text{Qa}7 9 \text{Qxd}3 \text{Qxd}3 10 \text{h}4++; c) 3 ... \text{Qa}5 4 \text{Qg}6 \text{Qxa}4 5 \\
\text{Qxg7} \text{f}5 6 \text{Qg}6 \text{f}4 7 \text{Qf}5 \text{Qe}3 8 \text{Qe}5+.
Bishop v Bishop (Opposite)

Yusupov - Frias
Lone Pine 1981
(Analysis by Yusupov)

36 \textbf{h5}!
Planning c5, \textbf{c4} isolating and attacking d4.

36 ... \textbf{g5}
To create a target for counterplay on f4. If White exchanges on g5 then Black gains the f6-square from which to defend d4.

37 e5 bxc5
38 bxc5 gxf4
39 gxf4 \textbf{f8}
40 h4!
Now White can combine threats against d4 or h7 to create a second passed pawn.

Vaganian - Anikaev
USSR Ch 1979

White has more trumps than meets the eye: the h-pawn as a decoy/passed pawn; the a3-pawn as a target; and f7 as the base of a chain fully edible to the bishop.

40 h5 \textbf{e7}
41 \textbf{a4} \textbf{f6}
42 \textbf{e2} \textbf{g7}
43 \textbf{e8} \textbf{f6}

Now White cashes in the h-pawn to create a passed a-pawn which costs Black his bishop.

47 ... \textbf{f6}
48 \textbf{b3} \textbf{e7}
49 \textbf{b5} \textbf{f6}
50 \textbf{e8} \textbf{e7}
51 \textbf{e6} \textbf{f6}

Or 51 ... \textbf{d8} 52 \textbf{b5} \textbf{c7}
53 \textbf{e8} \textbf{f6} 54 \textbf{f7} \textbf{d7} 55 \textbf{g8}+- (Vaganian).

52 h6+ \textbf{f6}
53 \textbf{g6} 54 \textbf{e8} \textbf{h5}
55 \textbf{b3}! \textbf{g4} 56 \textbf{c3}+- (Vaganian).

Now the black bishop is locked out and the a3-pawn is about to become a target.

46 ... \textbf{g7}
47 \textbf{e8}
Again this move, which preserves the h-pawn.

Black could continue to resist with the much tougher 56

a) 59 a6 \textbf{b8} 60 \textbf{xf7} (60
Bishop v Bishop (Opposite)

\[ \begin{array}{cccccc}
& & & & & \\
1. & Qa4 & Qa7 & 61 & Qd1 & Qd6 & 62 & Qh5 \\
& & & & & \\
2. & Qf4 & c6 \\
3. & Qd6 \\

White could consider immediately centralising the king.

4. & Qe6 \\
5. & Qf8 & g6 \\
6. & Qe3 & b6 \\
7. & h4 & c5 \\
8. & g4?! \\

This also gives the white king distracting weaknesses to defend. 8 Qh6 with the idea of Qc7 looks better - White should try to force Black's pawns onto white squares.

\[ \begin{array}{cccccc}
& & & & & \\
1. & Qd6 & (66 ... Qb7? 67 Qd3+-zugzwang but perhaps 66 ... Qb8!!) 67 Qd3 Qd6 (67 ... Qc6 68 Qxf5 Qb5 69 Qe6 \\
& & & & & \\
2. & Qxa7 & 50 & Qxd5 & Qb6 & 71 Qd3 \\
3. & Qc7 & Qd4 & Qd6 & 73 Qc4 \\
4. & (this ending is critical - White's win is problematic since: \\
5. & b1) & 68 Qa6 & Qd6 & 69 Qc8 \\
6. & Qc6 & 70 Qd3 & Qb8 & 71 Qe3 \\
7. & Qb5 & 72 a6 & Qa7 & 73 Qxf5 \\
8. & Qxa6 & 74 Qd4 & 75 Qg5 (75 Qe6 Qd8 76 Qxd5 Qb6 77 Qe4 Qc7 78 Qf5 Qd6 79 Qc4 Qe7 and I see no way to avoid the ending 80 g5 fxg5 81 fxg5 Qb6 82 d5 Qc4 83 Qg6 \\
9. & Qe3 and White cannot progress without allowing the known position 84 Qh5 Qd4 85 Qg6 Qg7 when the g6-pawn makes it impossible for White to invade round the right flank) 75 ... fxg5 76 fxg5 Qd8 \\
10. & Qf4 & Qb5 & 78 Qd3+ b4=; \\
11. & b2) & 68 Qc2 & Qb8 & 69 Qb4 \\
12. & Qa7 & 70 Qb5 & Qd6 & 71 Qxf5 \\
13. & Qxd4 & 72 Qd3 Qf2=.
\end{array} \]

57 Qb5 1-0

\[ \begin{array}{cccccc}
& & & & & \\
9. & Qf4 & Qd1 \\
10. & Qe4 & a4 \\
11. & g5 & g5+ \\
12. & Qe3 & Qd5 \\
13. & h6 \\

White now must waste time removing the kingside pawns from danger, and Black's king takes up a dominant post.

14. & Qc4 \\
15. & Qb3 \\
16. & Qg7
\end{array} \]

Or 15 Qd2? Qxb2! 16 Qxd1 c4 (16 ... Qxa3 17 Qc2 \\
& & & & & \\
17. & Qb4 & 18 Qb2+ Matanovic) 17 Qe7 (17 Qg7+c3 18 Qe2 \\
& & & & & \\
19. & Qe5 & b5 & 20 Qd6 \\
20. & (b1+) 17 ... b5 18 Qf8 c3 19
Bishop v Bishop (Opposite)

\[ \text{g7 b4!} +, \]

\[ 15 \ldots \text{c2} \]

\[ 16 \text{e5} \text{h5} \]

\[ 17 \text{f6} \text{f7} \]

\[ 18 \text{e5} \text{b3} \]

\[ 19 \text{g7} \text{b5} \]

\[ 20 \text{f8} \text{c4} \]

\[ 21 \text{g7} \text{b4!} \]

\[ 22 \text{d4} \]

\[ \text{Or } 22 \text{axb4 c3 23 bxc3 (23} \text{xc3 a3) 23} \ldots \text{c4} 24 \text{b5 a3} \]

\[ 25 \text{b6 a2 26 b7 a1} \text{g2 27 b8} \]

\[ \text{Kurajica - Karpov} \]

\[ \text{Skopje 1976} \]

\[ 1 \ldots \text{g5} \]

\[ 2 \text{f2!} \]

\[ \text{Not } 2 \text{a3?! f4+! 3 gxf4 g4!} \]

\[ 4 \text{fxg4+ xg4 (Karpov).} \]

\[ 2 \ldots \text{a2} \]

\[ 3 \text{a3} \text{b1} \]

\[ 4 \text{e2} \text{a2} \]

\[ 5 \text{c1} \text{e6} \]

\[ 6 \text{f2} \text{c8} \]

\[ 7 \text{d5?} \]

A bad reaction. White fears an eventual occupation of d5 by the black king, but it was better to wait: 7 \text{e2} \text{a6} and now:

\[ a) 8 \text{b2 hgx3 9 hxg3 f4 10 gxf4 (10 g4+ \text{h4 11 f2 h3 when Black intends \text{xd3-c4-e6xg4+}) 10} \ldots \text{gxf4} 11 \text{c1 g5 12 b2 h4} \]

\[ 13 \text{f2 xd3; } \]

\[ b) 8 \text{e3 f4+ 9 gxf4 g4 10 f5=}. \]

\[ 7 \ldots \text{cx5d5} \]

\[ 8 \text{d4 f4!} \]

\[ 9 \text{gxf4} \]

\[ \text{Or } 9 \text{g4+ \text{g6} intending } \ldots \text{c4, } \text{a3, } \ldots \]

\[ 9 \ldots \text{g4} \]

\[ 10 \text{g2 f5} \]

\[ \text{g1+ 28 \text{f3 d5} 29 \text{e2} \]

\[ 22 \ldots \text{c3} \]

\[ 23 \text{bxc3 bxa3}++; \]

\[ \text{For the record, the game concluded } 24 \text{c4 a2 25 e5} \]

\[ 26 \text{b4 a1} \text{g2 27 bxa1} \]

\[ 28 \text{c5 b2 29 e6 a3} 30 \text{c7 e6 a2 32 d6} \]

\[ \text{e8} 0-1. \]

Due to the variations:

\[ a) 21 \text{b2 g4 22 g4} \]

\[ 19 \ldots \text{h5+ and wins (JT).} \]

\[ 19 \ldots \text{g4} 20 \text{f2 \text{g4} 21 e2 \text{e4} 22 e3 \text{h5+ and wins (JT).} \]

\[ 20 \text{g1} \text{d4!} \]

0-1

Due to the variations:

\[ a) 21 \text{b2 g4 22 g4} \text{f3+ (22} \ldots \text{h3?? 23 f2} \]

\[ 24 \text{e1 h5 25 d2} \text{f3} 26 \text{d3 g2} 27 \text{e3} \text{hxh2 28 f2 drawing - an} \]

\[ \text{other example of self-obstruction by pawn) 23 f2 f4} \]

\[ \text{and again the king crosses to} \]

\[ \text{the queenside (Karpov); } \]

\[ b) 21 \text{h1 g4 22 g2} \]

\[ 23 \text{f2 e4 and wins.} \]
Bishop v Knight

Bishop and One Pawn v Knight

Bishop and One Pawn

BN

A basic win

1  Qb4  Qc7
2  Qc3  Qa8
3  Qa5

The bishop takes up this square on principle - this is the method that wins against pawns in positions shifted to the right (when the knight must be fully dominated).

Here the white king could go to b6 earlier.

1 ... Qc7
2  Qb6!  Qa8+
3  Qa6 and
4  Qb7 winning
5

This is an important method, and applies to start positions shifted to the right.

1

Sevitov 1937, corrected by Shakhmatny v SSSR reader

1  Qe5!  Qf7!

Instead:

a) 1 ... Qf5? 2 a6 Qe7 3 Qc5 Qe8 4 Qc6 Qa7+ 5 Qb7 Qe8 (5 ... Qb5 6 Qb6) 6 Qf6+ Qd7 7 Qe7!! is an excellent illustration of White's weaponry. The bishop dominates both pieces, overloading them thanks to the pressure exerted by the white king;

b) 1 ... Qg4 2 Qg3 Qf6 3 a6 Qc8 4 Qc5 Qd7+ 5 Qb5! Qf6 6 Qc6 Qe8 7 a7 Qc7 8 Qb6 and wins as in the previous example.

2  Qf4  Qd7!

Preparing the c6-square for the knight.

1 ... Qa2 5 Qb1!!
3  Qb5  Qd8

Not 8 ... Qb5 9 Qb6 or 8 ... Qc8 9 Qg3 Qd8 10 Qh4+

9  Qb6  Qe7
10  Qg3

Or 10 Qc1 Qc8+! 11 Qb7 Qd6+ 12 Qb8 Qb5!.

10 ...
11  Qe1 Qc8
12  Qg3 Qd7
and draws

BN

Prokes 1946

1  Qb3+ Qxb3+
2  Qa3!! and draws

Black cannot promote meaningfully without stalemate. A common yet practical study theme. But there is another useful theme hidden here: 1 ... Qd5 (JT) 2 Qd2 Qd4 and now:

a) 3 Qb1! Qd3 4 Qa3 (4 Qa3 Qc2 transposes into the next note) 4 ... Qa2 5 Qb1!!

b) 3 Qa3 Qc3 4 Qb1+ Qc2 5 Qd2 Qg8 and wins.
Bishop v Knight

BN 4
A key position
1 ... 8e8
White to move would win with 1 Qd7. This is the position he seeks to reach. Again Black is hampered by the edge of the board; shifted one file to the left, this position would be drawn.

BN 5
Haik - Vaiser
Sochi 1985

74 ... 8c5
75 Qa3 Qg5
76 Qb4 Qd7
Or 76 ... Qd3+ 77 Qb5.
77 b7 Qf5
78 Qb5 Qe6

BN 6
Averbakh

1 Qd4
As often happens, Black will suffer due to the knight's lack of squares near the edge of the board. Even shifted just one file to the right, Black would draw.

1 ... Qc4
2 Qa5 Qb3
One file to the right ... Qa2 would draw, re-entering play with the threat of ... Qc3+.

BN 7
Krogdahl - Wolf
Hamburg Ol 1930

Without the king's help a knight is helpless against a bishop and pawn.

52 Qe4 Preventing the knight from getting back.

52 ... Qb6
53 Qf5 Qe2
54 g5 Qg3+
55 Qe5 Qc7

Or 55 ... Qh5 56 Qf3 Qg7
57 Qf6 Qe8+ 58 Qe7 Qg7
59 Qg4.

56 Qf3 56 g6 also wins easily: 56 ... Qh5 57 Qf3 Qg7 58 Qf6 Qe8+ 59 Qe7 Qd6 (59 ... Qg7 60 Qg4) 60 Qg4.
Bishop v Knight

Chess Player’s Chronicle 1856

1 ... b6

This is diag 11 one file to the left. Black loses here since the bishop has more squares on the d8-h4 diagonal! This allows him to arrange zugzwang. If White were to move, he reaches the solution with 1 c3.

2 c5 c5

3 c3 b6

The difference here is that White can wait on this diagonal and force the transfer to d4.

4 ... c5

5 ... c5

6 ... c5

7 ... c5

Black threatens ... e7-c6+. If the white king were on e8, ... e6 is a version of the basic draw.

1 ... e6

2 c7

A basic draw

A basic win

Mandeleilyu 1938

1 ... c6!

This is one of an interesting set of positions. Black’s task is to avoid the bishop arriving on e4 with zugzwang, so he takes care that e4 arrives with check. (Not 1 ... c5 2 e4 or 1 ... e5 2 e4 e6 3 d7 which is still zugzwang.)

2 ... a4+ c5

3 ... e8

2 ... a4+ c5

3 ... e8

The bishop is restricted by the need to prevent ... g6+.

4 ... d5

5 ... h5 c5!

and draws

Not 5 ... d5 6 f3+ and e4 next.

163
Although the knight on f8 looked vulnerable in the previous example, it served an important extra duty in guarding the e6-square. Here the “more active” knight on f6 loses.

1 \text{c5}

Or 1 ... \text{e5 2 d4.}

2 d4

Immediately drawing is 2 ... \text{e5 3 d5!} \text{e4}.

3 d5+\text{c5}

Not 3 d5?? \text{d4}.

4 \text{d6!}

Losing is 4 ... \text{d4.}

5 \text{d6!}

Zugzwang arises after 6 \text{c5? e3+-.

Bishop and One Pawn v Knight and Two Pawns

With pawns restricted to one side of the board, the knight’s stock rises against the bishop.

64 ... \text{e6}

Or 65 \text{a5} 66 \text{h5 f5+ 67 d4 g5+ 68 d5! h5+-.

65 \text{b6}

With pawns restricted to one side of the board, the knight’s stock rises against the bishop.

Later, a position of mutual zugzwang is reached (cf diag 11).

10 ... \text{e6}

11 \text{f3} \text{f7}

12 \text{e4} \text{g6+}

13 \text{f4}!

Not 13 \text{f3}? \text{c2 14 d4.}

14 \text{c2}

15 \text{e4} \text{c2+}

16 \text{f3}! \text{a4}

17 \text{f4!}+
Bishop v Knight

After 69 h3 Black plays 69 ... f3 intending ... f4+ and ... g4.

69 ... f6

The last white pawn proves too vulnerable.

70 g5 d5

71 g3 f4+

72 f2 e3

White cannot prevent the knight from attacking and winning the h4-pawn.

0-1

Bishop and Two Pawns v Knight

Cheron 1956

1 ... g6

2 g2?

White should play 2 d3!

2 ... f4 (2 ... h4 3 e4!) 3 e2 h5 4 h4+ h6 5 g4 f6 6 g5+ g7 7 g3 and wins as in diag 16.

2 ... h4+!!

An instructive trap mentioned by Cheron.

Fine/Averbakh/Cheron 1941

1 g4!

A violation of Philidor's rule (advance pawns onto squares of the opposite colour of your own bishop) but White can use zugzwang to foil blockading attempts. With the wrong rook's pawn, Fine contends that it is safer to advance the knight's pawn first, taking care to avoid real blockades, in order to make it harder for the knight to arrange a drawing sacrifice.

Also of great interest is the stereotyped dark-square push 1 h4 g6 (This position is also considered by Fine, and judged a draw by him, since the threat of sacrificing the knight to reach a wrong rook's pawn ending is so troublesome. Averbakh and Cheron point out that it is not the idea h4 at fault but Fine's idea f2.) 2 g2 (2 g4? xg4+) 2 ... g7 3 d1! (3 f2? - Fine - 3 ... g6! 4 h5 e5 5 e3 h6 6 f4 f7=) 3 ... g6 4 h3! (the crucial difference) 4 ... e5 5 e2 c4 6 d3 e3 7 h2 f6 8 g1 g5 9 f2 g4+ 10 e2 h2+ 11 e3 g4 12 a4 g4 13 b7+ e5 14 e8 g6 15 f3 d6 16 f5! e5? (This slightly eases White's task. It is better to wait with the king, playing e5 in response to g6, when White does not achieve f4 so easily. For this possibility see diag 17.) g6 (So that ... h5 does not foil f4) 17 e6 18 f4 d5+ 19 g5 f6 20 h5 and wins. So both g4 and h4 are possible to begin the advance, but h4 is much more difficult
Bishop v Knight

to win.

1 ... \( \text{e}c6 \)

Or 1 ... \( \text{g}g5, 2 \text{g}3 \text{g}6 3 \)

\( \text{d}3 \text{h}4 4 \text{e}4 \).

2 \( \text{g}3 \text{d}4 \)

3 \( \text{d}3+ \text{f}6 (16a) \)

4 \( \text{h}4 \text{e}6 \)

5 \( \text{c}4 \text{c}5 \)

6 \( \text{f}4 \text{d}7 \)

7 \( \text{d}3 \text{g}7 \)

And the pawns go through with a win for White.

BN

Smagin - Naumkin

Palma open 1989

An example illustrating the method with wrong rook's pawn ahead of knight's pawn.

93 ... \( \text{g}8 \)

94 \( \text{e}3 \text{f}6 \)

95 \( \text{g}6 \text{g}4+ \)

96 \( \text{f}3 \text{h}2+ \)

97 \( \text{e}2 \text{g}4 \)

98 \( \text{e}2 \)

The bishop must drive the knight back.

98 ... \( \text{h}2 \)

99 \( \text{d}1 \)

Averbakh manoeuvred the bishop to \( c8 \), but this makes no difference.

99 ... \( \text{g}4 \)

100 \( \text{f}3 \text{f}6 \)

101 \( \text{c}2 \text{e}6! \)

102 \( \text{d}3 \text{d}6! \)

Black waits for \( \text{g}6 \). He intends to reply ... \( \text{e}5 \), keeping the white king out of \( f4 \).

103 \( \text{g}6 \text{e}5 \)

104 \( \text{h}5 \text{d}5 (17a) \)

Or 104 ... \( \text{g}8 105 \text{g}4 \text{f}6 \)

106 \( \text{f}4 \text{h}6-107 \text{g}5+ \text{g}7 \)

108 \( \text{e}8 \) and now:

a) 108 ... \( \text{g}8 109 \text{b}5 \text{h}6 \)

(109 ... \( \text{f}6 110 \text{h}6+ \text{g}6 111 \text{d}3\text{f}7 112 \text{gxf6} \text{xf6} 113 \text{h7} \) winning) 110 \( \text{e}4 \text{h}7 \)

111 \( \text{g}6+ \text{g}7 112 \text{g}5 \text{g}8 \)

113 \( \text{d}5 (113 \text{f}6 \text{g}4+ 114 \text{f}7 \text{e}5+ 115 \text{f}8? \text{xf}6+ \text{g}6+) \)

113 ... \( \text{g}7 114 \text{e}6 \) transposing to the note above;

b) 108 ... \( \text{h}7 109 \text{g}6+ \text{g}7 \)

110 \( \text{g}5 \text{g}8 111 \text{d}7 \text{h}6 \)

112 \( \text{e}6 \text{h}8 113 \text{f}6. \)

105 \( \text{h}6 \text{f}6 \)

106 \( \text{f}5 \text{e}7 \)

107 \( \text{g}4 \text{f}7 \)

108 \( \text{e}4 \text{g}8 \)

109 \( \text{f}5 \text{h}8 \)

109 ... \( \text{f}7 \) cannot keep the white king out for long: 110 \( \text{f}4 \text{d}5+ 111 \text{e}5. \)

110 \( \text{e}6 \text{e}6 \)

After 110 ... \( \text{h}7 111 \text{g}5 \text{h}8 112 \text{f}4 \) White must only be wary of combinations involving stalemate and ... \( \text{hxh}6/\text{g}5 \). For example:

a) 112 ... \( \text{g}6+ 113 \text{f}5 \) and now:

a1) 113 ... \( \text{f}8 114 \text{e}5 \) and:

a11) 114 ... \( \text{g}6+ 115 \text{f}6 \text{f}8 (115 ... \text{h}4 116 \text{f}5 \text{g}8 \text{h}4 117 \text{e}4) 116 \text{f}5 \) transposes;

a12) 114 ... \( \text{h}7 115 \text{f}5+ \text{h}8 116 \text{f}6 \text{g}8 117 \text{e}7 \text{h}8 118 \text{f}7; \)

a2) 113 ... \( \text{e}7+ 114 \text{f}6 \text{g}6 115 \text{f}5 \text{h}4 116 \text{e}4 \text{g}8 \text{g}8 117 \text{e}5 \text{f}7 118 \text{f}4; \)

b) 112 ... \( \text{h}7 113 \text{f}5+ \text{g}8 114 \text{e}5 \text{f}7 115 \text{e}4 \text{g}8 116 \text{f}6. \)

111 \( \text{e}4 \text{f}8 \)

112 \( \text{f}5 \text{e}8 \)

113 \( \text{d}5 \text{f}7 \)

114 \( \text{e}5 \text{g}8 \)

115 \( \text{f}6 1-0 \)
White's hopes are based on the wrong rook's pawn, but the helplessness of the lone knight is seen.

75 ... a5
76 Qd4 a4
77 Qc3 Qe6
78 Qb4 Qd7
79 Qa3 Qd6
Intending ... Qe6 trapping the knight on h6.
80 Qg8 f5

A positional draw; White has not a hope of winning.

White's hopes are based on the wrong rook's pawn, but the helplessness of the lone knight is seen.

81 Qf6 Qc6
82 Qh5 Qe5
Preventing the knight from taking up a circuit directly in front of the f-pawn.

83 Qb4 Qe8
84 Qg3 f4
85 Qf1 Qd4
86 Qh2 Qh5
White resigned due to 87 Qxa4 (87 Qf1 Qd3) 87...
88 Qe3 88 Qb4 Qf2 89 Qc4 Qg2.

Averbakh in practice. The knight is helpless against bishop and pawn without the aid of its king.

51 ... Qe2!
First driving the knight further away.

52 Qb6
Or 52 Qd6 Qxg4+ 53 Qxf6 Qd7 54 Qe4 g4 55 Qf2 g3 56 Qd3+ Qe3 57 Qe1 Qe6 58 Qg5 Qe4 59 Qg4 (59 Qh4 Qf2 60 Qh3 transposes) 59... Qf2 60 Qh3! (by analogy to diag 13, not 60 Qh4 Qf5 or 60 Qf4 Qf5 61 Qf3 g2+) 60...
Qd2 61 Qg4 (61 Qh4? Qf5)
61 ... Qd1+ 62 Qh3 (62 Qf4? Qe2 or 62 Qh4 Qe2 63 Qh3

Not 54 ... g4 55 Qe5 g3 56 Qg6+ Qe3 57 Qh4 Qe4 58 Qh5=.

55 Qe5+ Qf5!
56 Qc6

Or 56 Qf3 g4 57 Qd4 (57 Qh4?! Qe4+) 57...
Qe8! transposing (not 57 ... Qd3? 58 Qe6+ Qe3 59 Qg5 g3 60
Bishop v Knight

\[ \text{Bishop} \quad v \quad \text{Knight} \]

\[ \text{\#f4} \text{Qe2} \text{61} \text{\#h3+}. \]

56 ... g4

57 \text{\#d4} \text{Qe8}

And White resigned due to

58 \text{\#e2+} (\ldots \text{\#e3-f2 is coming in any event}) 58 ... \text{\#f3} 59 \text{\#d4+} \text{\#f2}. 

has the \text{\#e2-f4} circuit. But 4 \text{\#f3} (4 \text{\#f5} \text{\#e3+} 5 \text{\#e5} \text{\#f8}) 4 ... \text{\#g3} 5 \text{\#e5} (5 \text{\#d1} \text{\#e4} 6 \text{\#xh5+} \text{\#f8} 7 \text{f7} \text{\#f6} 8 \text{\#g6} \text{\#g7} 9 \text{h5} \text{\#g8} and \text{\#h6=}) 5 ... \text{\#f7} 6 \text{\#d5+} \text{\#f8}

and now:

a) 7 \text{\#c4!} (JS). Again a waiting move by the bishop destroys Black's coordination: 7 ... \text{\#h1} 8 \text{\#f4} \text{\#f2} 9 \text{\#d5} (9 \text{\#g5} \text{\#e4+} 10 \text{\#g6} \text{\#g3}) 9 ... \text{\#d1} (9 ... \text{\#g4} 10 \text{\#g5} or 9 ... \text{\#d3+} 10 \text{\#g5}) 10 \text{\#g5} \text{\#e3} (10 ... \text{\#e3} 11 \text{\#e6} \text{\#g2} 12 \text{\#b3} 11 \text{\#f3+} (JS); b) 7 \text{\#f4} \text{\#f1} 8 \text{\#g5} \text{\#g3} 9 \text{\#g6} \text{\#e2}.

However, 3 ... \text{\#f8} loses immediately to 4 \text{\#f3+} (JS). The knight is very unfortunately placed.

4 \text{\#f3} \text{\#h6}

Not 4 ... \text{\#xf6??} 5 \text{\#xf6} \text{\#f8} 6 \text{\#d5}.

5 \text{\#xh5+} \text{\#f8 (21a)}

This ending, with the pawn possibly on h5 or h6 and the knight on this circuit, is critical. Perhaps it is also of theoretical interest since it differs from Averbakh and the endings which he cites.

6 \text{\#g6!}.

Not 6 \text{\#d1?} \text{\#g8} (6 ... \text{\#g8?} 7 \text{\#b3} \text{\#h6} 8 \text{\#e5} \text{\#g4+} 9 \text{\#f5+}--) 7 \text{\#b3} \text{\#h7} 8 \text{\#e7} \text{\#f5+} 9 \text{\#f8} (9 \text{\#e8} \text{\#g6} 10 \text{f7} \text{\#d6+} or 9 \text{\#e6} \text{\#h6} repeats, with the idea of \#g8, \text{\#g7}, \text{\#h6=}) 9 ... \text{\#g6=} (not 9 ... \text{\#h4??} 10 \text{\#c2+} winning).

6 ... \text{\#g8}

Or 6 ... \text{\#g8 intending \#h8, \#g8, \#g7, \#h6}. 

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For example, 7 \text{e}7 \text{h}8 8 \text{e}8 \text{g}4 9 \text{f}7 \text{f}6+ and now:

a) 10 \text{e}7 \text{f}8+ 11 \text{f}8 \text{h}6;

b) 10 \text{f}8 \text{d}7+ 11 \text{e}7 \text{f}8 12 \text{h}5 \text{g}7 13 \text{f}5 \text{h}8 14 \text{h}7! (this manoeuvre is known from a study of Behring in 1892, quoted by Averbakh) 14 ... \text{xh}7 (14 ... \text{g}7 15 \text{h}6+++) 15 \text{h}6+- zugzwang.

7 \text{h}7 \text{h}6

White’s win is problematic. The h6-circuit is powerful.

8 \text{h}5 \text{g}4

9 \text{f}5 \text{h}6+

Or 9 ... \text{e}3+ 10 \text{g}5 \text{d}5 11 \text{h}6 \text{f}7 12 \text{g}6+ \text{g}8 13 \text{f}7+ \text{f}8 14 \text{h}7.

10 \text{f}4! (JS)

Not 10 \text{g}6 \text{g}4 11 \text{h}6 \text{e}5+ 12 \text{h}5 \text{d}7 13 \text{g}5 \text{e}5 14 \text{g}6 \text{g}8 15 \text{f}5 \text{d}7 (intending ... \text{xf}6=) 16 \text{f}7+ \text{h}8= 17 \text{g}5 \text{f}8 18 \text{f}5 \text{g}6 19 \text{f}6 \text{f}8 20 \text{e}7 \text{g}6+ 21 \text{e}8 \text{f}8 22 \text{h}7 \text{g}7 23 \text{e}7 \text{h}8=.

7 \text{h}7 \text{h}6

White’s win is problematic. The h6-circuit is powerful.

8 \text{h}5 \text{g}4

9 \text{f}5 \text{h}6+

Or 9 ... \text{e}3+ 10 \text{g}5 \text{d}5 11 \text{h}6 \text{f}7 12 \text{g}6+ \text{g}8 13 \text{f}7+ \text{f}8 14 \text{h}7.

10 \text{f}4! (JS)

Not 10 \text{g}6 \text{g}4 11 \text{h}6 \text{e}5+ 12 \text{h}5 \text{d}7 13 \text{g}5 \text{e}5 14 \text{g}6 \text{g}8 15 \text{f}5 \text{d}7 (intending ... \text{xf}6=) 16 \text{f}7+ \text{h}8= 17 \text{g}5 \text{f}8 18 \text{f}5 \text{g}6 19 \text{f}6 \text{f}8 20 \text{e}7 \text{g}6+ 21 \text{e}8 \text{f}8 22 \text{h}7 \text{g}7 23 \text{e}7 \text{h}8=.

10 ... \text{f}7

Or 10 ... \text{f}7 11 \text{g}5 \text{g}4 12 \text{g}8+=.

11 \text{e}2 1-0

With the idea of \text{h}3. (See also diag 22.)

\text{Speelman 1992}

(after Khasin - Mariasin)

1 \text{g}5 \text{e}8!

Not 1 ... \text{e}27 2 \text{c}4 \text{g}3 3 \text{f}4 \text{h}1 4 \text{f}3--.

2 \text{h}6 \text{f}8

Or 2 ... \text{f}5+ 3 \text{g}6 \text{e}3 4 \text{g}7 \text{f}5+ 5 \text{g}8 \text{h}6+ 6 \text{h}7 \text{f}5 7 \text{e}4+-.

3 \text{g}6 \text{e}2

4 \text{c}4 \text{g}3

5 \text{d}3 \text{g}8

6 \text{e}5

Not 6 \text{h}6 \text{f}7! 7 \text{g}5 \text{f}8.

6 ... \text{f}8

Black is in zugzwang.

7 \text{f}4 \text{f}7

8 \text{e}5 \text{f}8

Or 8 ... \text{h}19 \text{c}4+ \text{f}8 10 \text{f}4 \text{f}2 transposing to the main line.

9 \text{c}4 \text{h}1!

Or 9 ... \text{e}3+ 10 \text{g}5 \text{d}5 11 \text{h}6 \text{f}7 12 \text{g}6+ \text{g}8 13 \text{f}7+ \text{f}8 14 \text{h}7.

10 \text{f}4! (JS)

Not 10 \text{g}6 \text{g}4 11 \text{h}6 \text{e}5+ 12 \text{h}5 \text{d}7 13 \text{g}5 \text{e}5 14 \text{g}6 \text{g}8 15 \text{f}5 \text{d}7 (intending ... \text{xf}6=) 16 \text{f}7+ \text{h}8= 17 \text{g}5 \text{f}8 18 \text{f}5 \text{g}6 19 \text{f}6 \text{f}8 20 \text{e}7 \text{g}6+ 21 \text{e}8 \text{f}8 22 \text{h}7 \text{g}7 23 \text{e}7 \text{h}8=.

10 ... \text{f}7

Or 10 ... \text{f}7 11 \text{g}5 \text{g}4 12 \text{g}8+=.

11 \text{e}2 1-0

With the idea of \text{h}3. (See also diag 22.)

\text{Speelman 1992}

(after Khasin - Mariasin)

1 \text{g}5 \text{e}8!

Not 1 ... \text{e}27 2 \text{c}4 \text{g}3 3 \text{f}4 \text{h}1 4 \text{f}3--.

2 \text{h}6 \text{f}8

Or 2 ... \text{f}5+ 3 \text{g}6 \text{e}3 4 \text{g}7 \text{f}5+ 5 \text{g}8 \text{h}6+ 6 \text{h}7 \text{f}5 7 \text{e}4+-.

3 \text{g}6 \text{e}2

4 \text{c}4 \text{g}3

5 \text{d}3 \text{g}8

6 \text{e}5

Not 6 \text{h}6 \text{f}7! 7 \text{g}5 \text{f}8.

6 ... \text{f}8

Black is in zugzwang.

7 \text{f}4 \text{f}7

8 \text{e}5 \text{f}8

Or 8 ... \text{h}19 \text{c}4+ \text{f}8 10 \text{f}4 \text{f}2 transposing to the main line.

9 \text{c}4 \text{h}1!
Bishop v Knight

Barlov - Eingorn
Zagreb IZ 1987

68 b6+ $d6
69 b7 $c7
70 $a6 $b8
71 $f7 $e4
72 $xh5 $e5+
73 $b6 $xb7

Another example that the “wrong” rook’s pawn can be just as dangerous as the “right”. The knight has problems with both.

74 $g4

The first priority: keeping the black king from approaching the corner.

Vaganian - Mikhalchishin
Lvov 1984

1 $f3!

Not 1 $g6 $b7? 2 $xh5 $c6 d6 3 c5 $f5+=.

1...
2 $xh5 $a4
3 c5 $d7

Or 3...
4 $d5+ 4 $d2 $d4 5 $c5 6 $e8 $d6 7 $h5 $f6 8 $h6.

Bishop and Two Pawns v Knight and Two Pawns

Novikov - Kiss
Budapest 1989

Minimal material does not save the knight when the action is spread over the entire board.

43 $e3 $h3

Or 43...
44 $f5+ 44 $f4
$d6 45 $e5 $e7 46 $d5 $e8 47 a5 $d8 48 a6 $c7 49 $e5+ $d6 (49...
$b6 50 $d3) 50 a7.

44 $d3 $e7
45 $e4 $a5+

Barlov - Eingorn
Zagreb IZ 1987

74...
75 $h5 $f7
76 $e6 $g5

Or 76...
77 $c6 $a7
78 $d6 $b7 79 $e7 $c7 80 $f6 $d6 81 $h3 $g8+ 82 $g7 $e7 83 $h6.

77 $h6 $h7

Also winning is 80 $e7 $a7 81 $d6 $b6 82 $e7 $h6 83 $f5 $g5 84 $f6.

80...
81 $b8

Vaganian - Mikhalchishin
Lvov 1984

1 $c6 $d6
5 $f3

Not 5 exd7 $xd7 6 $f4
$c7 7 $f5 $f8 8 $h6
$g8=.

5...
6 $h5 $e5
7 $h6! $e7

Or 7...
8 $e5 8 $h5.

Bishop and Two Pawns v Knight and Two Pawns

Novikov - Kiss
Budapest 1989

Minimal material does not save the knight when the action is spread over the entire board.

43 $e3 $h3

Or 43...
44 $f5+ 44 $f4
$d6 45 $e5 $e7 46 $d5 $e8 47 a5 $d8 48 a6 $c7 49 $e5+ $d6 (49...
$b6 50 $d3) 50 a7.

44 $d3 $e7
45 $e4 $a5+

Black could resign here.

46 $b4 $b7
47 $c6 $d6
48 $c5!

Hindering...

48...
49 a5 $d8
50 $b7 $e7
51 $b6

51...
52 a6 $f8
53 a7 $d7+
54 $b5 $c7
55 a8$w 1-0

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Bishop v Knight

A graphic illustration of how king and knight can shoulder aside defence with reduced material.

\[
\begin{array}{c}
43 \text{Qf4} \text{Qe2} \\
44 \text{Qe5} \text{Qc2} \\
45 \text{Qf4} \text{Qe3+}
\end{array}
\]

And White resigned without waiting to see 46 \text{Qg1} (46 \text{Qxe3} \text{Qxe3} 47 \text{Qg1} \text{Qf3} 48 \text{Qh2} \text{Qf2}+) 46 ... \text{Qf3} 47 \text{Qc7} \text{Qf5} 48 \text{Qh2} \text{Qf2} 49 \text{Qe5} \text{Qe3} 50 \text{Qd4} \text{Qf3} 51 \text{Qxe3} (51 \text{Qg1} \text{Qf5}+) 51 ... \text{Qxe3} 52 \text{Qg2} \text{Qe2}+.

0-1

Bishop and Two Pawns v Knight and Three Pawns

White's positional trumps give him practical chances, but Black should be able to prevent the invasion \text{Qc5}.

\[
\begin{array}{c}
57 \text{Qd3} \\
\text{Or 57 Qe6+ Qxe6 58 Qxe6 c5 59 bxc5 b4 60 a6 b3 61 a7 Qb7 62 c6+ Qxa7 63 c7 b2 64 c8=Q b1=Q.}
\end{array}
\]

Black should play 62 ... \text{Qd6}.

\[
\begin{array}{c}
63 a6 (63 Qc5 Qc7 64 Qe4 QgL+) 63 ... Qc7 64 Qc5 Qe6 65 Qe5 Qe8 66 a7 Qb7 67 Qxc6 Qd7=. \\
65 ... Qc5 Qf5 \\
64 Qc5
\end{array}
\]

Posting the king here is decisive.

\[
\begin{array}{c}
64 ... Qe4 (27a) \\
64 ... Qe4
\end{array}
\]

Black resigned without waiting for a move due to 65 Qf7 Qd5 66 Qd6 Qf3 67 a6 Qb8 68 Qb6 Qh5 69 a7+ Qa8 70 Qa6 Qg4 71 Qe8.

1-0

65 \text{Qe3} must be best. Preventing a king invasion is more important than losing a second pawn. After 65 ... \text{Qe4} White can try 66 \text{Qe2}?! with the idea of reaching diag 29.

White is better off without the...
Bishop v Knight

h3-pawn.

65 ... ♕f4
66 ♕b7 ♕e4+
67 ♕g2

By comparison to diag 59, here the presence of the h3-pawn renders counterplay against the h4-pawn impossible, so White cannot prevent Black from maximising his position before winning a second pawn.

67 ... ♕e3
68 ♕c8 f4

Zuckerman - Ostojic

Wijk aan Zee 1968

Here Black faces little danger since his pawn structure is sound and complements the bishop.

59 ♕e2 ♕e6
60 ♕g3 ♕f6
61 ♕f3 ♕f7
62 ♕e4 ♕a1
63 ♕h4 ♕g7
64 ♕g3 ♕b2
65 ♕h5 ♕c3

Black defends passively. Keeping the pawns on white squares avoids the problems we have seen in similar endings. Black also refrains from pawn exchanges that would produce a passed pawn for White.

BN

Korchnoi - Hübner

Johannesburg 1981

39 ♕f1 ♕b4
40 ♕e2 ♕c5
41 ♕d2 ♕f5
42 ♕f3 ♕h6
43 ♕c4 ♕f6
44 ♕b2 ♕f5
45 ♕d3 ♕b6
46 ♕h4 ♕d8
47 ♕g4+ ♕g6
48 ♕h5+ ♕f6

69 ♕a6 ♕d2
70 ♕h5 f3+
71 ♕g1 ♕f4
72 ♕h2 ♕e4
73 ♕a6 ♕c3
74 ♕g1

Or 74 ♕c4 ♕e2 75 ♕a6 ♕e3 76 ♕b7 ♕g3 77 ♕a6 ♕d2 78 ♕g1 ♕e1.

74 ... ♕g3

Black wins the h-pawn with his knight.

0-1

See also diags 29, 30 and 39.

BN
transposes to the main line) 53
... Qd8 was suggested by Marjanovic, with the idea of 54
g5?? hxg5 55 fxg5 Qxg5 56
Qxg5 Qh6.
53 Qf3 Qd6
54 g5 Qe7
Not 54 ... hxg5 55 fxg5 Qe7
56 Qf4+–.
55 g6 Qf6
56 e5 Qg7
57 d4 Qb4
58 Qc4 Qd2
59 Qd3 Qe3
60 Qb5 Qf6
61 Qc6 Qe7
62 g7!
White forces the ending of
diag 31.
62 ...
63 Qf7
64 Qxe6 Qd2
65 f5 Oe7
66 Qf2 Qh2
67 Qe4 Qc1
68 f6+ Qg8
Or 68 ... Qf8 69 Qf5 Qf7
70 e5+ Qg8 71 Qg6 as in
diag 28.
69 Qe7 Qa3+
70 Qe8 Qh7
71 Qe3 1–0

BN
Popchev - Cvitan
Dubrovnik 1990

1 ... f6
2 Qd5 Qb5
3 Qc6 Qc3
Threatening ...
... Qe3.

8 ... Qd4 9 Qg3 Qe2 (9 ... Qxf3? 10 Qxf3 e4 11 Qg2) 10
g2 Qe6 11 Qc6 Qf4+ 12
g1 (12 Qg3 Qf1 and ...)
Qe2+, ...
12 ...
Qg2 (13 Qb5 Qe3 and ...
Qg1) 13 ...
Qe1+ 14 Qg3 Qf1
15 Qb5+ Qg1 16 Qc4 Qg2 17
Qb5 Qe3 and ... Qf1+ ..., Qf2
and the f-pawn falls.
7 ...
Qe2+
8 Qg2 Qd4
9 Qb7 Qxf3!
10 Qxf3 e4
11 Qd1 Qd2
0-1

Bishop and Three Pawns v Knight and Two Pawns

BN
Nimzowitsch - Davidson
Semmering 1926

1 ... Qd6
2 Qd5+
Another interesting defensive try is 2 Qe6??
Qf2 3
g5 h6 4 Qf7 Qxg3 5 Qxh6
and now:
a) 5 ... Qf4 6 Qf7 Qc7 7
Qh8 (7 h5?? gxh5 8 Qh8) 7 ...
Qf4 and:
a1) 8 h5! f3 9 hxg6 Qe1 (9 ...

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b2) 7 h5?! (I think that White must try this while the g5-square is under control) 7 ... gxh5 8 \( \text{g}2 \) (8 \( \text{g}5 \)? intending \( \text{g}2, \text{e}6 \)) 8 ... \( \text{f}4 \) 9 \( \text{d}8 \)?! (9 \( \text{h}3 \)? with the idea of \( \text{h}4 \)) 9 ... \( \text{e}5 \) 10 \( \text{f}7 \) and White has excellent drawing chances;

b3) 7 \( \text{g}5 \) \( \text{e}5 \) 8 \( \text{g}2 \) \( \text{f}6 \) 9 \( \text{f}3 \) \( \text{e}3 \) (9 ... \( \text{f}4 \) 10 \( \text{g}1 \) \( \text{e}2 \) 13 \( \text{f}3 \) \( \text{d}8 \) 14 \( \text{d}4 \) (14 \( \text{e}5 \) \( \text{f}6 \) 15 \( \text{f}3 \) \( \text{e}3 \) 14 ... \( \text{e}3 \) 15 \( \text{c}2 \) \( \text{e}4 \) 16 \( \text{h}5 \) (16 \( \text{h}3 \)? \( \text{f}3 \)++) 16 ... gxh5 (16 ... \( \text{g}5 \)? 17 \( \text{h}6 \) \( \text{g}5 \) 18 h7 g4 19 b4 \( \text{e}5 \) 20 \( \text{c}6 \) f3 21 \( \text{f}1 \) \( \text{e}3 \) 22 \( \text{f}2 \) \( \text{f}4 \) 17 \( \text{e}1 \) \( \text{b}6 \) 18 \( \text{f}3 \) \( \text{e}3 \) 19 \( \text{g}5 \) \( \text{e}2 \) 20 \( \text{f}3 \) \( \text{f}2 \) 21 \( \text{e}5 \) h4 (see also diag 21) 22 \( \text{h}1 \) \( \text{d}4 \) 23 \( \text{g}6 \)? \( \text{f}3 \) 24 \( \text{f}4 \) looks like a successful version of the defence in (diag 21): 24 ... \( \text{f}1 \) 25 \( \text{h}3 \) \( \text{e}3 \) 26 \( \text{h}2 \) \( \text{e}2 \) 27 \( \text{h}1 \).

2 ... \( \text{f}3 \)
3 \( \text{f}6 \) h5?

Black should play 3 ... h6!+ (Kmoch) 4 \( \text{g}8 \) (4 \( \text{g}4 \) f4++) 4 ... \( \text{g}5 \) 5 \( \text{x}6 \) (5 \( \text{h}5 \) \( \text{x}5 \) 6 \( \text{h}6 \) \( \text{g}3 \) 7 \( \text{f}5 \) g4++) 5 ... \( \text{g}4 \) 6 \( \text{h}2 \) \( \text{g}3 \) 7 \( \text{h}1 \) (7 \( \text{g}1 \) \( \text{f}2 \) 8 \( \text{h}1 \) g3) 7 ... \( \text{f}4 \)! 8 h5 \( \text{g}5 \) and wins.

4 \( \text{d}5 \) \( \text{f}2 \)
Or 4 ... \( \text{g}3 \) 5 \( \text{e}7 \).
5 \( \text{f}6 \) \( \text{x}3 \)
6 \( \text{e}4 \)++ \( \text{f}4 \)

Notes based on analysis by Speelman.

\( \text{d}6 \)!
Not 54 h7? \( \text{e}5 \) 55 \( \text{f}3 \) \( \text{h}7 \)++.

54 ... \( \text{f}6 \)
55 \( \text{c}4 \) \( \text{g}6 \)
Or 55 ... \( \text{e}5 \) 56 \( \text{f}3 \) \( \text{g}6 \)(56 ... \( \text{e}4 \) 57 \( \text{f}4 \) \( \text{g}6 \) 58 \( \text{h}7 \)) 57 \( \text{d}6 \) (Sveshnikov).

56 \( \text{d}6 \) \( \text{h}2 \)
57 \( \text{h}7 \) \( \text{f}6 \)
Or 57 ... \( \text{e}5 \) 58 \( \text{h}7 \) \( \text{f}6 \)

60 \( \text{c}8 \)++ \( \text{f}6 \)
Or 60 ... \( \text{x}7 \) 61 \( \text{e}7 \)++.

61 \( \text{d}6 \) \( \text{g}6 \)
Also drawing is 61 ... \( \text{e}5 \) 62 \( \text{f}3 \) \( \text{e}6 \) 63 \( \text{c}4 \) \( \text{e}4 \) 64 \( \text{f}4 \) \( \text{f}6 \) 65 \( \text{e}3 \) \( \text{h}6 \) 66 \( \text{g}3 \) \( \text{f}4 \) 67 \( \text{g}4 \) \( \text{g}7 \) 68 \( \text{f}5 \) \( \text{x}6 \) 69 \( \text{x}6 \) \( \text{e}3 \) 70 \( \text{f}7 \) e2 71 \( \text{g}5 \) \( \text{g}6 \) 72 \( \text{f}3 \) (Sveshnikov).

62 \( \text{e}8 \) \( \frac{1}{2}-\frac{1}{2} \)
Bishop v Knight

Bishop v Knight

Bishop - Knight

The bishop has an extra pawn with play on both sides of the board. Only the reduced material gives Black hope.

44 ... f4

Forcing simplification.

45 gxf4+ xf4

46 c4 h5

47 a7!

Preventing ... g3.

48 b8 e6

49 d4 d5

50 e3 b4

51 c5 d3+

52 c4 e1

53 b4 c2

54 b5 d7

Black could not prevent the pawn's advance to b5, but now must make a stand on b7.

55 e5 e1

56 d5 d3

57 d4 f4

Or 57 g3 b4+ 58 c5 c3+ 59 b6 c8 60 a7 c5 61 b7 62 h4 a5 63 a6 b7 64 e7 b8 and White does not seem able to zugzwang Black on the queenside (see also diag 4). Here the king in the corner would lose (there is no stalemate with the g-pawn) but c8 seems safe.

58 e4 e2

59 e5 e8

60 e3 c1

61 b2

Playing to dominate the knight.

61 ... b3

62 d4 (34a)

62 ... b7?? is very similar to the critical line considered later: 63 d3 c1+ 64 d2 c3+ 65 c3 c1 66 e3 g3

67 f4 g2 68 f5 e2+ 69 b4 (not 69 c4 g1= 70 xg1 xg1 71 f6 f3=) 69 ... f4 70 c5+.

63 d2 b3+

64 c3 a5!!

A better try is 64 ... c1! and now:

a) 65 e3? and:

a1) 65 ... e2+ 66 d3 xg1

67 f4 f3 (67 ... h3 68 f5 g3 70 f4)

68 f6 d7 70 b6 g2 71 b7 c7 72 f7 68 e4! (intending to escort the f-pawn and attack the g-pawn) 68 ... h4 (68 ... h2 69 f5 g3 70 f4)

69 g2 71 f6 f1 72 xg1 d7 73 f7 h7 (74 b6) 69 f2! g6

70 f5 f8 71 f4+;

a2) 65 ... g3 66 f4 (66 fxg3 e2+=) 66 ... g2 67 f5 e2+ (67 ... g1= 68 xg1 e2+ 69 b4! xg1 70 f6 e7 71 f7
e7 72 b6 f3 73 b7 e5 74 f8=+) 68 b4 d7 69 b6 c6 and:

a21) 70 f6 e4 intending ... d5+;

a22) 70 a5! b7 71 f6
e4 72 f7 e6 73 b5 f8 (73 ... b8 74 a6!) 74 c5! winning as the f-pawn will claim the knight (but not 74
c4? c6 75 d3 d6 76 e2 d7 77 e2 e7=);

b) 65 c2 c6 (65 ... a2)

66 c5 66 d3 (66 e3 g3

67 f4 g2 68 f5 g1= 69 xg1
g1 70 f6 f3 71 f7 d4=

72 d3 e6=) 66 ... f4+ 67
e4 e2 and White has not made progress.

65 e5 d7

66 f4! c8

67 d4 e7

68 e5 c7

69 b4 b7

70 c7

And Black resigned due to

70 ... a8 71 b6.

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Bishop v Knight

Bishop v Knight: Many Pawns

Szabo - R. Byrne
Havana Ol 1966

16 d6+?! exd6 2 cxd6
3 d6+ (4 ... d8=!? 5 c6 d7 6 c7 d8 7 c6 f7 8 d7 f8 9 c8 d6 10 c7 d6 11 c8 c5 12 c7 c4 13 c7 14 c8 f6 cxe4 9 cxf6 (9 d6 e4 f3?) 9 ... fxe3 10 d5 e4=.

35 Havana OJ 1966

16 ... a3
2 b7 f6
3 ... b6
4 ... d7
5 ... b6 d8+ 6 d7 c8 7 d6 f7 8 f8 c6 d6 9 c6 f6 10 c6 e5 11 d6 c8 12 e6 c8 13 d6 f8 14 e7 e8 15 c7+ a7 d8 16 d7+ (zugzwang).

12 g8+! g7
13 d8+ g8
14 c7+ d7
15 ... a6

In the game Szabo actually let the win slip: 15 b6 d6 16 e7 d7 17 c6 f8 18 a5 b4 19 c4 f8 20 d2 e7 21 b3 d8+ 22 b5 e7 23 c5+ c7 24 e6+ c7 25 b6 b4 26 g7 e7 27 f5 f8 28 g3 e7 29 h5 d8+ 30 c5 e7+ 31 b5 d6 32 c7 g7 33 a6 c8 34 a5 b7 35 e8 c8 36 a6 d7 37 g7 c8 38 f5 f8 39 b6 d7 40 b7 b4 ¾-

Alternatively:

a) 15 ... e8 16 b6 (16 b7? d7) 16 ... f7 17 d6+;
b) 15 ... b8 16 b6 g7 17 b7;
c) 15 ... c7 16 b5 d7 17 c5 f8+ 18 b6 g7 19 b7 with a zugzwang: 19 ... h8 (19 ... d6 20 e7 or 19 ... d6 20 c8? f5 21 exf5 e4 22 f6+) 20 e7 g7 21 e8 f8 22 b6+ d6 23 e8+.

16 b6 f5!
17 exf5xd5

Or 17 ... e4 18 f6 h8 (18 ... f8 19 e7 19 b7 xd5 20 c7 e6 21 d8 f7 22 d7 c8 g8 23 e7 h7 24 f7 g7 25 f8= xf6 26 xf8 g6 27 e7+.

18 f6!

Not 18 c7? e4 19 f6 xd6 f4 20 xf5+ xe3 21 d6 f4 22 d5 e4=.

18 ... f8

Also losing is 18 ... h8 19 c7 e4 20 f7 g7 21 e7 f3 22 f5 f8 23 d7 xg8 24 d8=+

19 c7 e6

Or 19 ... e4 20 d7 xe3 21 e8 a3 22 f7 e4 23 e7.

20 e4! f7
21 ... e7 xf6
22 d5+ e6
23 c6 and wins

For example: 23 ... a3 24 c7+ e7 25 d5 b2 26 a6 c3 27 c5 d4 28 d3 e6 29 d6 e3 (29 ... a7 30 c5 b8+ 31 d5 e7 32 d3 f6 33 e4 b4 c7 34 c6 30 c5 b4 31 d5 e7 32 d3+.-

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White mobilises his pawn majority. The control of g4 and the ability to generate a protected passed e-pawn seem to make White’s pawn structure more dangerous than an unblemished one.

44 \( \text{e}7 \\
45 \text{e}1 \text{a}4 \\
46 \text{d}2 \text{b}6 \\
47 \text{d}3 \text{c}8 \\
Or 47 ... \text{d}7 48 \text{d}4 \text{d}6 \\
49 \text{b}5 \text{e}7 50 \text{e} f4 51 \\
f\text{e}4 \text{e}7 52 \text{e}5 \text{g}4 53 \text{d}3 \\
54 \text{d}5 and \text{d}6, e6 winning - Mikhalchishin.

48 \text{d}4 \text{a}7 \\
49 \text{c}5 \text{c}8 \\
50 \text{e}4 \text{f}xe4 (36a) \\
Or 50 ... \text{d}6 51 \text{e}5 \text{e}8 (51) \\
... \text{b}7+ 52 \text{b}6 \text{d}8 53 \text{c}7 \\
\text{e}8 54 \text{b}3 \text{e}7 55 \text{d}5 \\
\text{e}8 56 \text{d}6 52 \text{c}6 \text{f}7 53 \\
\text{c}7 \text{e}8+ 54 \text{c}8 \text{g}7 55 \\
\text{d}5 \text{e}8 56 \text{c}6 \text{g}7 57 \text{d}7 \\
\text{f}8 58 \text{d}8 \text{f}7 59 \text{c}8 \\
\text{e}8 60 \text{e}6+ \text{f}8 61 \text{e}7+ \text{f}7 \\
62 \text{e}6+.

51 f\text{e}4 \text{d}6 \\
52 \text{d}4 \text{e}8 \\
Alternatively, 52 ... \text{c}8! 53 \\
e5 \text{d}7 (53 ... \text{f}8 54 \text{c}5 \\
\text{e}7 55 \text{d}6 \text{e}8 56 \text{d}6 \\
\text{d}8 57 \text{d}7 \text{g}8 58 \text{c}6 \\
\text{e}7 59 \text{c}4 \text{e}8 60 \text{e}6++) \\
54 \text{b}5 \text{e}7 55 \text{f}7 \text{c}7 56 \\
e6 \text{d}8 57 \text{d}6 \text{f}5+ 58 \\
\text{e}5 \text{e}7 (58 ... \text{h}4 59 \\
\text{f}6++) 59 \text{f}6 \text{d}5+ 60 \\
\text{g}6 \text{f}4+ 61 \text{g}5 \text{d}5 \\
(61 ... \text{xe}6+ 62 \text{xe}6 \text{e}7 63 \\
c4 \text{f}8 64 \text{g}6++) 62 \\
\text{xf}5 \text{e}7 63 \text{g}6 and now:

a) 63 ... \text{f}8 (the toughest 
defence) 64 h5 \text{f}4+ 65 \text{f}6 
(65 \text{g}5? \text{xe}6+ 66 \text{xe}6 
\text{g}7=) 65 ... \text{d}5+ 66 \text{e}5 
\text{e}3 67 h6 \text{g}4+ 68 \text{d}6 
\text{f}6 (68 ... \text{h}xh6 69 \text{e}7+ 
\text{xf}7 70 \text{d}7) 69 \text{g}6 \text{g}8 
70 e7 \text{h}h8 71 \text{f}7 (71 \text{g}6? 
\text{g}8=) 71 ... \text{h}7 72 \text{e}6; 

b) 63 ... \text{f}4+ 64 \text{g}7 winning
by zugzwang.

53 e5 \text{g}7 \\
Or 53 ... \text{c}7 54 \text{c}5 \text{e}8 
55 \text{f}1 \text{c}7 56 \text{h}3 \text{a}6+ 57 
\text{b}5 \text{c}7+ 58 \text{d}6 and now:

a) 58 ... \text{a}6 59 \text{f}1 \text{b}4+ 
(59 ... \text{b}8+ 60 \text{d}5 \text{d}7 61 
\text{d}3 \text{f}8 62 \text{f}5 transposes) 60 
\text{c}5 \text{c}2 61 \text{d}3; 

b) 58 ... \text{e}8 59 \text{d}7 \text{g}8 
60 \text{c}7 \text{f}7 61 \text{d}6 \text{f}8 62 
\text{h}3 \text{e}8+ (62 ... \text{e}8 63 
e6+) 63 \text{d}7 \text{g}7 64 \text{e}6+-.

54 \text{d}3 \text{e}6+ \\
Also losing is 54 ... \text{f}7 55 
\text{d}5 \text{e}8 56 \text{c}6 \text{g}7 57 
\text{d}7++; 

55 \text{e}3 \text{f}8 
56 \text{c}2!

Zugzwang (not 56 f5?? 
\text{d}7! 57 \text{d}4 \text{g}5 58 \text{xf}5 
\text{xe}5=).

56 ... \text{e}6 
Alternatively:

a) 56 ... \text{f}7 57 \text{f}5++; 

b) 56 ... \text{e}8 57 \text{f}5 \text{d}7 58 
\text{a}4.

57 \text{d}4 \text{e}7 
58 \text{f}5 \text{g}5 
59 \text{xf}5 \text{f}7 
60 \text{e}4 \text{g}7 
61 \text{f}3! \text{h}6 
62 \text{f}4 \text{g}7 
63 \text{g}5 1-0
Bishop v Knight

Bishop and Four Pawns v Knight and Four Pawns

Gulko - Romanishin
Lvov 1978

This ending vividly illustrates the superiority of knight v bishop with action on one flank. White's pawn weaknesses make life very difficult. Though I believe White should draw, his practical task is difficult.

38 ... \(\text{g}6\)

Romanishin later suggested 38 ... \(\text{e}6?!\) planning to bring the king to c4 as an alternative method.

39 \(\text{g}3\) f5? 40 exf5+

White could consider passive play like \(\text{g}3\)-g2 etc, trying to make Black force this capture.

40 ... \(\text{xf}5\)
41 \(\text{e}3\) \(\text{e}1\)
42 \(\text{d}2\) \(\text{e}2\)
43 \(\text{c}1\) \(\text{d}4\)
44 \(\text{e}3\) \(\text{e}2+\)
45 \(\text{g}2\) h5
46 h4?

The decisive error; the pawn proves to be accessible here. White must defend passively. Mikhalchishin considers allowing ... h4 to be winning for Black as well but his analysis is unconvincing. After 46 \(\text{d}2\) h4 Mikhalchishin claims that Black wins by putting his king on d5 and knight on f4 (see diag 43): 47 \(\text{h}2\) \(\text{f}4\) 48 \(\text{c}3\) (or 48 \(\text{e}3\) \(\text{d}3\) and ... \(\text{e}1+\)) 48 ... \(\text{e}6\) 49 \(\text{d}2\) with drawing chances.

46 ... \(\text{e}6\)
47 \(\text{e}7\) \(\text{d}5\)
48 \(\text{e}7\) \(\text{d}4\)
49 \(\text{d}8\) \(\text{f}5\)
50 \(\text{f}1\) \(\text{d}4\)

51 \(\text{g}2\) \(\text{e}6\)
52 \(\text{e}7\) \(\text{e}4\)
53 \(\text{d}6\)
54 \(\text{e}7\) \(\text{d}5\)
55 \(\text{c}3\) \(\text{d}4\)
56 \(\text{a}8\)

56 \(\text{a}3\) is given as stronger by Romanishin but Black seems to win after:

a) 56 ... \(\text{e}4?!\) (Mikhalchishin) 57 \(\text{b}2\) creates difficulties and perhaps even better is 57 f4? \(\text{e}2+\) 58 \(\text{f}3\) \(\text{xf}4\)

59 \(\text{e}4\) \(\text{g}6\) 60 \(\text{b}2\) \(\text{h}4\)

61 \(\text{e}5\) and White should draw easily;

b) 56 ... \(\text{f}5+!\) and after 57 \(\text{h}3\) e4 Black transposes to the game structure.

56 ... \(\text{f}5+\)
57 \(\text{h}3\) \(\text{d}4\)
58 \(\text{e}7\) e4
59 \(\text{fxe}4\)

Clearly 59 f4 would only increase the number of pawns White is likely to lose, without any positive effect on the position.

59 ... \(\text{xe}4\)
60 \(\text{b}6\) \(\text{f}3\)
61 \(\text{c}5\) g6
62 \(\text{b}6\) \(\text{d}6\)

Preparing to attack f2.

63 \(\text{h}2\) \(\text{c}4!\)

Here d2 is the ideal square for the knight.

64 \(\text{d}4\) \(\text{d}2\)
65 \(\text{b}6\) \(\text{g}4\)

White is unable to guard both weaknesses.

66 \(\text{d}8\) \(\text{f}3+\)
67 \(\text{g}2\) \(\text{h}4+\)
68 \(\text{h}2\) \(\text{f}3+\)
69 \(\text{g}2\) h4
70 \(\text{e}7\) h3+
71 \(\text{f}1\) g5
72 \(\text{d}8\) \(\text{f}5\)
Bishop v Knight

73 \( \text{B}c7 \) \( g4 \)
74 \( \text{B}b8 \) \( \text{B}e4 \)
75 \( \text{B}c7 \) \( \text{B}d4 \)

Yielding the f3-square to the king.

76 \( \text{B}b8 \) \( \text{B}f3 \)
77 \( \text{B}c7 \) \( \text{B}e2 \)

Intending ... g3, ... h2.

78 \( \text{B}h2 \) \( \text{B}c3 \)
79 \( \text{B}b8 \) \( \text{B}e4 \)
80 \( \text{B}g1 \) \( \text{B}xf2 \)

0-1

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BN

Mikhailchishin 1978

1 ... \( \text{B}d3 \)
2 \( \text{B}g2 \) \( \text{B}c4 \)
3 \( \text{B}d2 \)

Here Mikhailchishin again defends cooperatively with 3 \( \text{Ba}5 \) \( \text{B}f4+ \) 4 \( \text{B}h2 \) \( \text{B}d3 \) (now the black king has come too far) 5 \( \text{B}c7 \) \( \text{B}g6 \) 6 \( \text{B}g2 \) \( \text{B}e2 \) 7 \( \text{B}d6 \) \( \text{B}f4+ \) 8 \( \text{B}h2 \) \( \text{B}d3 \) 9 \( \text{B}c7 \) \( \text{xf}3 \) 10 \( \text{B}hx4 \) \( \text{B}xf2 \) and the e-pawn wins - Mikhailchishin. Nevertheless, as the main line shows, the key defensive diagonal is c1-h6, and even if Black can achieve this position (which I do not believe) Mikhailchishin's winning method does not consider the best defence.

3 ... \( \text{B}d4 \)
3 ... \( \text{B}f4+ \) 4 \( \text{B}xf4 \) \( \text{exf}4 \) 5 \( \text{B}f1 \) \( \text{B}d3 \) 6 \( \text{B}e1= \).
4 \( \text{B}f1 \)

And \( \text{B}g3 \) with good drawing chances.

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BN

Ivanchuk - Ribli
Reggio Emilia 1988

White is winning due to action on both flanks and a black kingside exposed to invasion.

56 \( \text{B}e8 \)

Also possible is 56 \( \text{B}xa4!! \) \( \text{B}xe3 \) 57 \( \text{fxe}3 \) \( \text{B}d5+ \) 58 \( \text{B}c5 \) \( \text{B}xe3 \) 59 \( \text{B}b5 \) \( f4 \) 60 \( \text{gxf}4 \) \( \text{B}d6 \) 61 \( \text{B}xe4 \) (61 ... \( \text{xf}4 \)? 62 \( \text{B}f1+\) 62 ... \( \text{B}f5 \) 63 \( \text{B}e5 \) \( h4\)--) 62 ... \( \text{B}f1 \) 63 \( \text{B}f1 \) \( \text{xf}4 \) 64 \( \text{B}xf4 \) \( \text{h}4 \) 65 \( \text{g}4 \) \( g5 \) 66 \( \text{B}e2 \) \( \text{B}b7 \) 67 \( \text{B}f1 \) \( \text{B}a7 \) 68 \( \text{B}g5 \) \( h3 \) 69 \( \text{B}xh3 \) \( \text{B}a6 \).

56 ... \( \text{e}3 \) ?

57 \( \text{fxe}3 \) \( \text{B}d5 \)
58 \( \text{B}xg6 \) \( \text{B}xe3 \)
59 \( \text{B}xh5 \) \( \text{B}f1 \)

Not 60 \( \text{B}f3 \) b3.

57 ... \( \text{B}xg3 \)
60 ... \( \text{B}xg3 \)
61 \( \text{h}5 \) \( \text{B}e4 \)
62 \( \text{h}6 \) \( \text{B}e5 \)

63 \( \text{B}c2 \) \( f4 \)
64 \( \text{h}7 \) \( \text{B}f7 \)
65 \( \text{B}g6 \) \( \text{B}h8 \)
66 \( \text{B}h5 \) 1-0

cf diag BBNN1a
Bishop v Knight

Rodriguez - Eingorn
Havana 1986

1 c4

Not 1 e4 g6 2 f4

h6 3 e4 g8 4 f3 h6 5
g4 hxg4 6 fxg4 e5 7
g5 h6 8 h5! gxh5 9
gxh5 g8 looks drawn to
me - JS) 9 ... g8=.

1 ... f8

Better was 2 ... e8.

2 c5 e7

Alternatively: 3 e8 d6

Alternatively: 3 e8 h6 4
d5 exd5 5 dx5 e7 6 h3
g8 7 f3 f6! 8 e6 h6 and
now:

a) 9 exf6+ xf6 10 d6

(10 f4 f5! 11 xf5 xf5 12
d6 g4 13 e5 gxg3 14
t5) 10 ... g5 11 hxg5+ (11
d7 gxh4 12 gxh4 f5 13
xf5 xf5 14 e7 f4 15
ef6 xf3 16 g5 e4 17
hxh5 f5 11 ... xg5 12
e5 h4 13 f4+ h5 14 gxh4
hxh4 15 ef6 g3 16 g5
f3 17 qa2 g3 18 qd5
h3! 19 qe4 g3 20 qh3
f3 21 qd1+ e3! (21 ... 
g3?? 22 qh5 g8 23 t5++)
22 qh5 qe4=;

b) 9 g4 hxg4 10 fxg4 9xg4!

11 xg4 xe5 12 xe5 ef7 13
ef4 qf6 14 qdl ef7 15 g5
qg7 16 qc2 as in the game
Rodriguez - Eingorn.

3 ... e7 (40a)

Not 3 ... e6?! 4 qd6 (in-
tending qxg6) and now:

a) 4 ... qg7 5 f3 g8 6 qd7
h6 7 qe8 qg8 8 d5 exd5 9
qxd5 qg7 10 qb3 (zugzwang)
to ... f5 (10 ... qg8 11 e6!
fxe6 12 qxe6+ qh7 13
qh7 11 qf7 qg3 11 ... 
g5 12 hxg5 qxg3 13 e6 qf5
14 qd7 h4 15 e7 qe7 16
exe7 h3 17 f4 h2 18 qd5) 12
q7! qf5 13 e6 qf6 14 qxg6

b) 4 ... qg4 and:

b1) 5 f4?! qg7! (5 ... h5? 6
qxg6 fxg6 7 qxg6 qf5 8
d5+ since White is a tempo
up on the line above); 6

b2) 5 f3 h6 (5 ... h2 6
d5 exd5 7 qxd5 qf1 8 qxh7!
xf7 9 qd7+ or 5 ... e3 6
qxg6 fxg6 7 qxg6 will trans-
pose to the main line) 6 qxg6
fxg6 7 qxg6 qf5 8 d5 qg3
9 d6 qe8 10 qf6 qf5 11 f4
and now:

b21) 11 ... qd7 12 qg6
qh4+ 13 qf6! (13 qxh5? 
qf5 with a blockade and
drawing chances) 13 ... qg2 14
e6+ and wins;

b22) 11 ... qxh4 12 e6 qf5
13 d7+ qd8 14 qxg6 and:

b221) 14 ... h4 15 qxh5 h3
16 qe5! h2 (16 ... qc7 17 qf6
h2 18 qe7 h1w 19 db8+ winning
or 16 ... qe7 17 f5 h2
18 f6+) 17 qd6 h1w 18 e7+;

b222) 14 ... qe7+ 15
qxh5+;

b223) 14 ... qg3 15 f5+;

b224) 14 ... qd4 and:

b2241) 15 qf6? qc6 16 f5
h4 17 qf7 (17 qg7 qd4 18
qf6 qxg5=) 17 ... h3 18 f6
e5+ 19 qg7 h2 20 f7
qxd7 21 exd7 h1w 22 qf8+ 
qxd7=;

b2242) 15 qf7? qf5 (15 ... 
qg7 16 f5 h4 17 f6 qe5+ 18
qg7 and White is a tempo up
on the line above) 16 qf6! 
qg7 (16 ... qd6 17 qg5 qh5
18 f5 qd4 19 qf6 transposes
to the main line) 17 qg5 qc6
18 f5! (18 qh5?? qd4+) 18 ...
d4 19 qf6 qd6 20 qf7 h4
21 f6 qe5+ 22 qg7+ etc.
5 f3
This is probably winning. Also 5 c7 g8 6 f3 and now:
a) 6 ... e7 7 g4 hxg4 8 fxg4 g8 9 c6+! (after 9 g5? e7 White is in zugzwang) 9 ... f8 (9 ... e7 10 g5 f8 11 d7 e7 12 e4) 10 d7 h6 11 f3 (zugzwang) 11 ... g8 (11 ...

b) 6 ... e7! and:
b1) 7 c2 h6 8 d3 g8 9 f1 h6 10 h3 g8 11 g4 hxg4 12 fxg4 e8 and:
b11) 13 g5 e7 14 d6 (14 g4 d5+ 15 d6 e3 16 h3) 14 ... c8+ 15 c5 e7;
b12) 13 g2 h6! 14 f3 e7;
b2) 7 g4! hxg4 8 fxg4 h6 and now:
b21) 9 g5! and:
b211) 9 ... f5 10 xf5 gx5 11 h5 f4 12 h6 f8 13 g6 fxg6 (13 ... f3 14 h7 g7 15 gx7) 14 d5 f3 15 d6 f2 16 d7 f1+ 17 d8+ winning, e.g. 17 ... f7 18 d7+ f8 19 g7+ e8 20 xg6+ e7 21 g7+ e6 22 d7+ e8 23 xe6 c1+ 24 e6 etc;
b212) 9 ... g4!;
b22) 9 f3 e8 10 d6 d8 should hold.

5 ... d8
Not 5 ... c8+ 6 c7 e7 7 g4++ or 5 ... g8 6 xg6 fxg6 7 xe6 e7 8 d5 f5 9 f6 c3 10 xg6+.

6 g4 hxg4
Also possible is 6 ... e8+?

7 c5 e7.

7 fxg4 c8+

8 e5 e7

9 d5

Or 9 h5 gxh5 10 gxh5 g8 11 d6 h6.

9 ...

10 xd5 e8

11 d6 c8+

12 c7 e7

13 c4 g8

14 d6

Not 14 g5? e7 15 d3 d5+ (15 ... f5? 16 xf5 gx5 17 h5 f4 18 h6 f8 19 g6 fxg6 20 e6 f3 21 h7 f7 22 e7) 16 d6 f4 17 e4 f8.

14 ...

15 e6 d8!

Alternatively:
a) 15 ... f8? 16 d7 and now:
a1) 16 ... g8 17 f3 e7 (17 ... f6 18 e6++ 18 d4 e8 19 g5 e7 20 e6 fxe6 21 xe6+);
a2) 16 ... g7 17 e4 g8 18 g5! f5 19 c4 xh4 (19 ... g7+ 20 e7 f5+ 21 f6++) 20 xg7+ g8 21 d5+;
b) 15 ... g8 16 g5 e7 17 g4 e8 18 e6 fxe6 19 xe6 e7 20 e5+ e.g. 20 ... f8 21 f6 e8 22 f7+ f8 23 xg6 d5+ 24 e5++.

16 d1!

Not 16 e6? fxe6 17 xe6 e8 18 f6 (18 g5 f5 19 h5 g7+ 20 f6 xh5=) 18 ... f8 (18 ... xg4+? 19 xg4 f8 20 e6++) 19 g5 f5 20 h5 g3 21 h6+- e4+ 22 xg6 g8= (22 ... xg5? 23 f4!).
Bishop v Knight

### Key position 1

**White to move draws:**

1. \( \text{c:txa8} \) \( \text{c:txc8} \)

And draws. See knight endings, fortresses/positional draws. The start position is critical as it is mutual zugzwang.

### Key position 2

**Mutual zugzwang. Black to move in the starting position loses since the black king must allow \( \text{c:txc7} \), when White gradually achieves key position 1, as demonstrated in the next example.**

1. \( \text{c:txc7} \)

### Prokop 1930

**Black cannot really prevent White from achieving the critical position:**

1. \( \text{c:txc6} \)

   \( \text{c:txe6} \) \( \text{c:txf6} \) \( \text{g5} \) \( \text{c:txf5} \)

2. \( \text{h5} \) \( \text{g8} \)

Alternatively, 22 ... \( \text{c:txd4} \) 23 \( \text{c:txd5}! \) \( \text{gxh5} \) 24 \( \text{g6} \) or 22 ... \( \text{c:txh4} \) 23 \( \text{h6} \) \( \text{g8} \) 24 \( \text{c:txe4} \)...

Now we have arrived at key position 2.

1. \( \text{c:txe5}!! \) \( \text{a8} \)

   Black cannot really prevent White from achieving the critical position:

   a) 1 ... \( \text{b7} \) 2 \( \text{d6} \) \( \text{d8} \) (2 ... \( \text{g2} \) 3 \( \text{b6} \) \( \text{b7} \) 4 \( \text{c7} \) \( \text{g2} \) 5 \( \text{c:txe8!} \) transposes) 3 \( \text{d6} \) transposes;

   b) 1 ... \( \text{f3} \) 2 \( \text{b6} \) (with the idea of \( \text{c:txd5} \)) 2 ... \( \text{b7} \) 3 \( \text{e6!} \) !

2. \( \text{b6} \) \( \text{b7} \)

3. \( \text{e6!} \) \( \text{d8} \)

Reaching key position 1.

4. \( \text{d6} \)

   Now we have arrived at key position 2.

   4 ... \( \text{e8} \)

   5 \( \text{c7} \) \( \text{g2} \)

   6 \( \text{c8!} \) \( \text{a8} \)

   7 \( \text{b8} \) \( \text{d8} \)

   8 \( \text{d6!} \) \( \text{d7} \)

   9 \( \text{b7} \)

10 \( \text{xa8} \) \( \text{c7} \)

11 \( \text{d6} \) and wins
Bishop v Knight

Black's extra diagonal is so short that he still cannot cope with the dangerous pawn. The only salvation is an excellent king position, on a5 or a4.

1... $\texttt{e}b4$

Or 1... $\texttt{e}b8$ 2 $\texttt{b}6$ and 2 $\texttt{c}7$ $\texttt{e}5$+

3 $\texttt{c}6$ $\texttt{h}8$

Not 2... $\texttt{c}4$ 3 $\texttt{c}6$ $\texttt{e}3$

4 $\texttt{b}6$ $\texttt{a}4$

Now $\texttt{a}6$-$\texttt{c}7$ is unstoppable.

Or $\texttt{e}5+!$ or 2... $\texttt{e}4$ 3 $\texttt{c}8$!

4 $\texttt{b}5$ $\texttt{b}8$

and draws

Here the presence of the black king prevents White from making any progress.

$\texttt{c}e5$+ or 2... $\texttt{e}4$ 3 $\texttt{c}8$!

and $\texttt{c}6$.

3 $\texttt{c}6$ $\texttt{c}5$

4 $\texttt{c}8$ $\texttt{d}6$

5 $\texttt{b}4$ and wins

Now $\texttt{a}6$-$\texttt{c}7$ is unstoppable.

A practical example of the previous two diagrams.
A vivid example of the knight’s potential for domination when centralised. Even the proximity of his king does not save Black. (Not 1 ... f4? \( \text{d1}= \text{d5} \text{e2}+ 3 \text{a5} \text{c6}. \)

1 ... \( \text{d1} \)
Or 1 ... c2 2 d5! d3+ 3 a5 c6 4 b4+.

A realistic study that illustrates the winning method with a knight’s pawn on the sixth rank. Black’s second diagonal (a6-c8) is very short and his only hope is that his king will arrive in time to assist in defence. White must avoid:

a) 1 b6? a8 and draws as in 1 d6?;

b) 1 d6? a8l 2 c6 e3 3 c7 d3 4 b8 c4 5 a7 f3 6 b6 c5 7 c7

\( \text{g2} \) (the diagonal can no longer be blocked).

1 ... \( \text{f1} \)

1 ... h3 2 b6 c8 3 d6 b7 4 c7 transposes.

2 b6 a6
3 d6 b7
Not 3 e3 4 c7 and \( \text{b4} \) winning.

4 c7 a8
5 a5 e3
6 b7 d4
7 b8

And the black king is one move too late: unable to attack b6, Black loses.
White has just enough time to bring his king back and draw. Critical is his ability to reach a square that prevents $\text{g}5$, a move which drives the bishop off $\text{h}4$-$\text{e}1$ as well as preparing diagonal blocks $\text{c}3$/$\text{g}3$. Black's threats are instructive. (Not 1 $\text{c}7$+$ $ $\text{e}4$ - intending $\text{g}3$ - 3 $\text{e}1$ $\text{c}5$ and ... $\text{d}3$, ... $\text{h}3$ drives the bishop off the diagonal.)

1 $\text{c}7$+$ $ $\text{e}2$
2 $\text{g}1$+$

The only move to draw. Alternatively:

a) 2 $\text{c}7$+$ $ $\text{d}5+$ $3 $ $\text{d}6$ $\text{e}3$;

b) 2 $\text{b}7$+$ $ $\text{d}1$ (intending ... $\text{e}3$) 3 $\text{g}1$ $\text{f}2$ 4 $\text{c}6$ (4 $\text{h}2$ $\text{h}3$!! 5 $\text{g}3$ $\text{f}4$ 6 $\text{c}6$ $\text{h}5$ 7 $\text{h}4$ $\text{g}7$! and ... $\text{g}5$ wins the diagonal) 4 ... $\text{f}1$ 5 $\text{h}2$ $\text{g}4$! 6 $\text{g}3$ (6 $\text{c}7$ $\text{e}2$ 7 $\text{g}3$ $\text{e}3$ and ... $\text{f}5$) 6 ... $\text{e}3$! 7 $\text{h}7$ $\text{f}5$ 8 $\text{c}7$ $\text{e}2$ 9 $\text{b}6$ $\text{e}3$.

2 ... $\text{d}1$

3 $\text{e}7$!

Not 3 $\text{c}8$? $\text{f}2$ 4 $\text{d}7$ (4 $\text{h}2$ $\text{h}3$ 5 $\text{g}3$ $\text{f}4$ and again ... $\text{h}5$-$\text{g}7$-$\text{f}5$ occurs in time to win) 4 ... $\text{f}1$ 5 $\text{h}2$ $\text{g}4$ 6 $\text{g}3$ (6 $\text{c}7$ $\text{e}3$ 7 $\text{g}3$ $\text{f}5$ 8 $\text{c}7$ $\text{e}2$) 6 ... $\text{g}2$ 7 $\text{h}4$ (7 $\text{e}1$ $\text{e}5+$ 8 $\text{e}6$ $\text{d}3$ 9 $\text{h}4$ $\text{h}3$) 7 ... $\text{h}3$ 8 $\text{e}1$ $\text{e}5+$ and ...

$\text{d}3$.

3 ... $\text{f}2$
4 $\text{h}2$! $\text{f}1$

Or 4 ... $\text{h}3$ 5 $\text{g}3$ $\text{f}4$ 6 $\text{d}6$ $\text{h}5$ 7 $\text{h}4$ $\text{g}7$ 8 $\text{e}5$!

5 $\text{e}5$!

Not 5 $\text{c}6$? or 5 $\text{f}4$? $\text{g}4$

6 $\text{g}3$ $\text{e}3+$ $\rightarrow$ $\text{f}5$
5 ... $\text{g}4$
6 $\text{d}4$ $\text{e}2$
7 $\text{g}1$ $\text{f}2$
8 $\text{h}2$!

With a draw (by repetition).

The king invades. A simple study but one that illustrates maximal use of the white pieces.
**Bishop v Knight**

*BN Averbakh 1958*

An illustrative position from one of Averbakh's many excellent drawing "charts". He notes that a bishop draws against pawns, (other than rook's pawns) that have not crossed the diagonals controlled from d7/e7 (light/dark), without the help of the black king.

1. \( \text{b6} \) \( \text{c6} \)
2. \( \text{b7} \) \( \text{c4} \)
3. \( \text{b5} \) \( \text{b5} \)

White's task is obviously hopeless.

---

**Bishop v Knight and Two Pawns**

*BN Horwitz 1885*

1. \( \text{b8}+ \)
   
   A drastic solution but there is no way to make simple progress.

1. ... \( \text{b5} \)
2. \( \text{a6} \) \( \text{a8} \)

Instead 2 ... \( \text{xb4} \) leads to a position analysed by Cheron:

3. \( \text{b6} \) \( \text{a8} \) 4. \( \text{c6}+ \) \( \text{c4} \) 5. \( \text{d8} \) \( \text{b4} \) (5 ... \( \text{d4} \) 6. \( \text{a7} \) \( \text{f3} \) 7. \( \text{b7} \) \( \text{c4} \) 8. \( \text{b6} \) 6. \( \text{b7} \) \( \text{c4} \) 7. \( \text{d4} \) (7 ... \( \text{b4} \) 8. \( \text{a7} \) \( \text{c4} \) 9. \( \text{c7} \) leads to the previous diag, i.e. 9 ... \( \text{b5} \) 10. \( \text{b8} \) \( \text{c6} \) 11. \( \text{a8} \) \( \text{c7} \) 12. \( \text{d6} \) 8. \( \text{c7} \) \( \text{d5} \) 9. \( \text{b8} \) \( \text{c6} \) 10. \( \text{c8} \) \( \text{c7} \) 11. \( \text{c5} \).

3. \( \text{a7} \) \( \text{xb4} \)

Here 3 ... \( \text{f3} \) 4. \( \text{d7} \) \( \text{xb4} \)
5. \( \text{b6} \) \( \text{c4} \) 6. \( \text{c5} \) \( \text{a8} \) 7. \( \text{b7} \) \( \text{d5} \) \( \text{c7} \) transposes.

4. \( \text{b6}! \)

It is vital to shoulder out the black king.

4. ... \( \text{c4} \)
5. \( \text{a6} \) \( \text{d4} \)

Or 5 ... \( \text{g2} \) 6. \( \text{c5} \) \( \text{a8} \) 7. \( \text{b7} \) \( \text{d5} \) 8. \( \text{c7} \) transposing.

6. \( \text{c7} \) \( \text{g2} \)
7. \( \text{e6}+ \) \( \text{e5} \)
8. \( \text{d8} \)

Intending \( \text{b7} \).

8. ... \( \text{a8} \)
9. \( \text{c7} \) \( \text{d5}! \)
10. \( \text{b7}! \)

Not 10. \( \text{b8} \) \( \text{d6} \) 11. \( \text{b7}+ \)
(11 \( \text{c8} \) 12. \( \text{c7} \) \( \text{b5} \)) 13. \( \text{b8} \) \( \text{b6} \) 14. \( \text{f7} \) \( \text{f3} \) 15. \( \text{d6} \) \( \text{g2} \) 16. \( \text{c4}+ \) \( \text{a6} \) as White can no longer block the diagonal 11 ... \( \text{d7} \) (see the previous diagram) 12. \( \text{a5} \)
13. \( \text{d8} \) 13. \( \text{a8} \) \( \text{c7} \)
10. ... \( \text{a6} \)
11. ... \( \text{a5} \) \( \text{e6} \)

Or 11 ... \( \text{e5} \) 12. \( \text{b8} \) \( \text{d6} \) 13. \( \text{c4}+ \) \( \text{c6} \) (13 ... \( \text{d7} \) 14. \( \text{b6}+ \) 14. \( \text{a8} \) \( \text{c7} \) 15. \( \text{a6} \).

12. \( \text{c8} \) \( \text{e8} \)

For 12 ... \( \text{d6} \) 13. \( \text{a8} \) \( \text{d7} \) 14. \( \text{b7} \) see diag 41.

13. ... \( \text{g7} \)
14. \( \text{b8} \) \( \text{d8} \)
15. \( \text{a5} \) \( \text{d7} \)
16. \( \text{c7} \) and wins

Mission accomplished - diag 41 is reached with the right person to move.
Despite the knight’s ability to “change colours” it still experiences tremendous difficulties in breaking a bishop’s blockade. Here the bishop succeeds in stopping the pawns which have been ‘misplaced’ (Philidor’s rule - advance pawns on the colour of the enemy’s bishop). Note that Black must avoid 1 ... $f3$ 2 $d5+$ $f2$ 3 $b7$ $f3$ 4 $g4$ $g1$ 5 $xg5=$ (Cheron). Black is several tempi away from reaching a winning Horwitz position: 5 ... $g3$ (5 ... $h3$ 6 $h4$ $h2$ 7 $h1$ $e2$ 8 $h3$ $g1$ 9 $b7$) 6 $e8$.

2 $e8!!$

The only move according to Cheron:

a) 2 $d7??$ $f2+$ (1 - JT - do not see why Cheron inserts this repetition. Black should play 2 ... $f3$! and get on with it) 3 $g2$ $d3$ 4 $h3$ $f3$ and now:

a1) 5 $c6+$ $f2$ 6 $g4$ $e5+$ 7 $xg5$ $g3$ 8 $g2!$ (8 $h1$ $h3$ 9 $f5$ $g4$ 10 $g5$ $e3$ 11 $h5$ $g2+$ - Cheron - 12 $g5$ $h2$ 13 $h5$ $f2$ 14 $e4$ $g1$ 15 $f3$ $xh1$ 16 $f2$ $e3$) 8 ... $g4$ 9 $h5$ $e3$ 10 $h1$ $h3$ 11 $g5$ $h2$ 12 $h5$ $g2$ etc;

a2) 5 $g4+$ $f2$ 6 $g4$ 6 $d7$ $f4+$ 7 $g4$ $h3$ 8 $xg5$ $h2$ 9 $c6$ $g2$ 6 ... $f4+$ 7 $h2$ $e2$ 8 $h3$ $f3$ 9 $a4$ $f4+$ 10 $h2$ $g4$ lifting the blockade and winning;

b) 2 $c4$ (or other bishop moves along this diagonal) 2 ... $f2+$ 3 $g2$ $e3$ 4 $e6$ $d3$ 5 $c8$ $f4+$ 6 $h2$ $f3$ 7 $b7+$ $g4$ (with the idea of ... $h3$, ... $h4$, ... $g4$) 8 $c8+$ $h5$ and ... $g4$.

2 ... $f2+$

Not 2 ... $f3$ 3 $b7+$ $f2$ 4 $g4$ $e5+$ 5 $xg5$ $h3$ 6 $h4$ $h2$ 7 $h3=$.

3 $g2$ $e3$ ($55a$)

Or 3 ... $g4$ 4 $h3$ $e3$ 5 $a6$ and now:

a) 5 ... $g4+$ . This deserves a look (JT). Again White will be saved because his lightsquared bishop copes better in these endings than the dark-squared one could in the ending one rank back (see diag 56): 6 $xh4$ $f5+$ 7 $h5$ $d6$ 8 $f1$ $g3$ (8 ... $f3$ 9 $e2+$) 9 $h4$ $f3$ 10 $h3$ $f2$ 11 $g2$ $f5$ 12 $b7$ $d4$ $g4$; b) 5 ... $f5$ 6 $e2$ $d4$ 7 $g4$ $f3$ 8 $e8$=

4 $f5$!

4 $d7??$ $d3$ 5 $h3$ $f3!$ transposes to 2 $d7??$.

4 ... $d3$

Not 4 ... $g4$ 5 $xg4$ $xg4$ 6 $h3$.

5 $h3$ $e5$

For some reason, neither Cheron nor Averbakh analyse this move, which is analogous to the winning method with the pieces one rank back (see diag 57). They only give 5 ... $f4+$ 6 $g4$ $h3$ 7 $g3$ drawing.

6 $f6$ $f4$

7 $c8$ $f3$

8 $d7$ ($55b$)

This position (Horwitz 1880) is analysed by Cheron who gives it as equal, but Black’s next, analogous to diag 57, is not considered.

8 ... $g1+$

9 $g2$ $e2$

10 $h3$ $f3$

11 $c6+$ $f2$

Intending ... $g1+$ reaching
Bishop v Knight

 diag 54.
 12 \textit{Bishop} g4 \textit{Knight} f4
 13 Bxg5 \textit{Bishop} g3

 Averbakh/Geller 1954
 1 \textit{Bishop} d7!

 Here the excellent white piece placement allows a win - most critical is that Black must wait before taking up the ideal king position on h5, allowing White time to break the blockade or create a decisive passed pawn. (Also 1 ... \textit{Bishop} d1 2 \textit{Knight} f5 \textit{Knight} c2+ 3 \textit{Bishop} g4 - intending h5, \textit{Knight} h4, g4 - 3 ... \textit{Bishop} d1+ 4 \textit{Bishop} h3 and g4+-.)

 2 \textit{Knight} e5 \textit{Bishop} g4
 3 \textit{Knight} e4 \textit{Bishop} e8
 Or 3 ... \textit{Bishop} g7 4 \textit{Bishop} d5 \textit{Bishop} h6 5

 14 \textit{Bishop} d7!=

 This last move is not possible in diag 57.

 Cheron, correcting
 Averbakh 1964
 1 \textit{Bishop} d5

 This exact version of Horwitz's study, one rank back, shows that White's extra manoeuvring room for the knight (e.g. g8) and the restricted space for the bishop on the d1-h5 diagonal, are decisive differences, though it appears drawn by analogy.

 1 \textit{Bishop} d1

 Alternatively:
 a) 1 ... \textit{Bishop} a6 2 \textit{Bishop} f6+ \textit{Bishop} g6 3 \textit{Bishop} e8 \textit{Bishop} h5 4 \textit{Bishop} g7+ \textit{Bishop} g6 5 \textit{Bishop} f5 shows the extra room for the knight proving vital;
 b) 1 ... \textit{Bishop} b5 2 \textit{Bishop} f6+ \textit{Bishop} g6 3 \textit{Bishop} e5 \textit{Bishop} e2 4 \textit{Bishop} d5 and White will reach diag 55.
Bishop v Knight

With White to play: 1 $f1+
2 $a5 $g2
3 $b4!! $f1

Alternatively:

a) 3 ... $e4 4 $b5+ $d7 (4 ...
   $c6 5 $a7 $d7 6 $a5) 5 $d6 $a8 (5 ...
   $g2 6 $b5 $c7 7 $e8+ $d7 8 $b6
   $xe8 9 $c6 or 5 ...
   $c6 6 $a5
   $c7 7 $b5+) 6 $c4 $c7 7

b) 3 ... $d5 4 $b5 $e4 5
   $e6+ (5 $c6? $d3+ 6 $a5
   $e4 7 $a7 $xc6 8 $xc6 $b7)
   5 ...
   $d7 6 $b5 and $b6.

In Averbakh's studies the white king always enjoyed a
dominant position, and the
difficulty of this kind of
ending is somewhat over-
looked because of this.

Since the h4-pawn occupies
a square Black would rather
have for his king, he regroups.

and Black has not achieved
king entry.

82 ... $d4+ is also threaten-
ning, but leads to no clear win:

a) 83 $g2 $f4 84 $h3
   $g5 85 $a6 $e6 86 $c8
   $f4+ 87 $h2 $g4 88 $a6?
   (88 $d7 $e2 89 $c8 $d4 90
   $d7 is better, when Black's
   progress is impeded) 88 ...
   $e6 89 $e2+ $g5 90 $d1?

b) $b6 and the bishop falls to
   the a-pawn;

b) 3 ... $d5 4 $b5 $e4 5
   $e6+ (5 $c6? $d3+ 6 $a5
   $e4 7 $a7 $xc6 8 $xc6 $b7)
   5 ...
   $d7 6 $b5 and $b6.

(90 $f3 $f4 followed by
   $g5, $e3, $f5-$f3; but still
   90 $a6?? is best) 90 ...
   $d4 91
   $a4 (91 $g2 $f4 92 $f2 $h3
   93 $a4 $h4 94 $d7 $f3) 91 ...
   $f4 92 $h3 $f3 93 $d7 $e2 94
   $b5 $f4+ 95 $h2 $f2 and the
   march ... $h1 wins. An exam-
ples of what White must avoid;

b) 83 $e3 $h3 (83 ...
   $f4+ 84 $f2 $f5 85 $f3 $h3 86 $d7
   $h4+ 87 $f2 $h2 88 $c6
   $f5 89 $d7+ $e5 90 $c6
   and Black cannot progress) 84
   $b7 $f4+.

(85 $g2) 85 ...
   $d4+ 86 $f2 $d4
   87 $b7+ $f5 88 $c8+ $g6
   89 $d7 $h3 90 $g4.

86 $b7 $f4+

Or 86 ...
   $d4 87 $f3 $f4 88
   $c8! (88 $xe4 $h2) 88 ...
   $d2+ (88 ...
   $g5+ 89 $f2
   could transpose to the game)
   89 $f2 $h2 90 $b7 $f3 91 $xf3
   $xf3 92 $g2=. This is
   White's main defensive
   trump; Black's greatest hurdle.

87 $f2 $d4

After 87 ...
   $f6 88 $c8
   Black cannot reach diags 58 or
   60.

88 $a8?
Bishop v Knight

Losing immediately. A better try was 88 \texttt{c6}!!? (Or 88 \texttt{c8}!!? and I - JT - do not see how Black can make progress - his king cannot approach, the knight is tied to \texttt{h3}, and ... \texttt{h2} or ... \texttt{f3} cannot be arranged without allowing a liquidating combo) 88 ... \texttt{e4}+ 89 \texttt{f3} \texttt{f3} 90 \texttt{g2} \texttt{f3}+ 91 \texttt{xh2} \texttt{e3}

Averbakh 1958

\begin{center}
\begin{tabular}{|c|c|c|c|c|}
\hline
\texttt{d3} & \texttt{c2}! & & & \\
\hline
\texttt{d3} & \texttt{c2}! & & & \\
\hline
\end{tabular}
\end{center}

A material situation investigated by Averbakh. The knight wins if White avoids advancing the pawns too quickly (i.e. without full support of his pieces), and can penetrate with his king. The start position is virtually identical to diag 59, the difference being White's (i.e. the side with the pawns) king position.

1 ... \texttt{d3}

Or 1 ... \texttt{h3} 2 \texttt{a6}+ \texttt{a7} (2 ...

Also possible is 7 ... \texttt{h3} - Averbakh points out that this straightforward approach also works: 8 \texttt{c5} (8 \texttt{g1} \texttt{g3} 9 \texttt{c5} \texttt{f3}+ 10 \texttt{h1} \texttt{e5} 11 \texttt{g1} \texttt{d3} transposes) 8 ... \texttt{f3} 9 \texttt{b6} \texttt{e1}! 10 \texttt{g1} \texttt{d3} 11 \texttt{h2} \texttt{f3} 12 \texttt{g1} \texttt{g3} 13 \texttt{a7} (13 \texttt{e7}+ \texttt{f4} 14 \texttt{b6} \texttt{e2}+ 15 \texttt{h1} \texttt{f2}) 13 ... \texttt{h2}+ 14 \texttt{h1} \texttt{f2}.

8 \texttt{c7}

As the notes show, there is nothing to be gained by trying to prod the pawn forward quickly, as in the analogous ending with a white-squared bishop defending. When the bishop does not control the queening squares, the win is easier, as both pawns are more dangerous.

\begin{center}
\begin{tabular}{|c|c|c|c|c|}
\hline
\texttt{e4} & & & & \\
\hline
\texttt{e4} & & & & \\
\hline
\end{tabular}
\end{center}

Cohn - Lowitzky 1912

1 ... \texttt{d4}

2 \texttt{f2} \texttt{c6}

3 \texttt{b6} \texttt{g4}

4 \texttt{c7} \texttt{f5}

5 \texttt{d6} \texttt{f4}

6 \texttt{c7} \texttt{d4}

7 \texttt{d6} \texttt{f5}

180
Two Bishops v Knight

The Fortress
Black’s best chance of holding this endgame is to attempt to construct the Horwitz and Kling fortress and hope to last out for fifty moves. However, even the fortress position is not sufficient to force a theoretical draw.

Horwitz and Kling 1851
There are four ways to break the Horwitz and Kling fortress:

1. In the diagram Black to move loses in 38 moves.
2. With white bishops on a4 and g3 Black to move loses in 40.
3. With white bishops on g2 and g3 Black to move loses in 39.
4. Put the black king on c7 and the bishops on a4 and f2. Black to move loses in 39.

Botvinnik - Tal
World Ch, Moscow 1961
In this example Black never quite manages to establish the fortress.

77... axa6
77 ... c5+ d6 78 a6 also fails to reach Horwitz and Kling viz. 78 ... d2 79 b8 c5 80 a6 d8+ 81 a7 c6.

The Longest Win
This position demonstrates a longest win:

1 f8 g3 2 d6+ f3 3
4 d4 5 b7 f3 f2 6 a6 f1 7 d6 f2 8 e6 f3 9 f5 f2 10 g4 e3+ 11 h3 c4 12
g2 a3 13 f4 c4 14 e4
e2 15 b4 d2 16 g6 f1 17 g5 f3 18 d6 e3 19 c5 f3 20 f5 e3+ 21 e5 g2 22 h5+ g3 23 b6 f4 24 d1 g2 25 d4 e1 26 e3 g2+ 27 f4 28 e2 f5 29
c2+ e6 30 b3+ d6 31 f2 f4+ 32 e3 e6 33 g3+ e7 34 e5 c5 35
c4 40 d4 d6+ 41 d5 f5 d7 38 f4 b6 39 f3
g5 44 e5+ e7 45 e3
e6 46 e5 d8 47 e1 f7+ 48 d5 h8 49 h4+
17 50 d6 g6 51 b3+ f8 52 f6 e8 53 c3 f4
54 d4 g6 55 d1 f8 56 c3 e7 57 h5 f5+ 58

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John Roycroft has broken the process down approximately as follows:
a) Bring up the king - 11 or 12 moves.
b) Drive the defender into a corner where he will set up Horwitz and Kling - 14 or 15 moves.
c) Force the defender out into the open - by starting from one of the known winning positions above one can in principle prevent him from re-setting in another corner.
d) Contain the enemy. He must also be prevented in practice from reaching Horwitz and Kling while the pieces gradually assume better positions.
e) Catch him in a corner - the rest is relatively straightforward.

Obviously this description (which I have summarised) is rather tenuous; and stage four in particular is extremely difficult. I have included diagram diag 4 only for the explanation above and its curiosity value. We will see a practical example of man's frailty in diag 5 below.

BBN A

Practical Example
Timman - Speelman
Linares 1992

This was the adjourned position. And since I had just missed a forced draw with 60 ... Ejf3! instead of the asinine 60 ... b6 I was not best pleased! Both of us had a chance to appeal to the silicon monsters for help overnight. But in fact while Jan received a great sheet of information from Jaap van den Herik of the University of Lindburg, my stuff somehow went astray. Still, I feel that it is much more important for the attacker to have proper information on such a position rather than the defender. And I was certainly extremely feeble in any attempt to see the grim truth in black and white.

The analysis below is based on an article by Professor van den Herik in the ICCA (International Computer Chess Association) Journal (Volume 15, March 1992).
A cardinal error. By insisting on maintaining the Horwitz and Kling position for as long as possible, I made his task immeasurably easier as now when Black is forced to abandon it his opponent is already well coordinated. 70 ... Bc6+ was correct: 71 Bg7 Bg5 72 Bb2 Bc5 73 Bf1 Be6 74 Bd3 Bd5 75 Bg2+ Bc4 76 Bf6 Bc5 reaching a 'pseudo-fortress'.

The best.

71 Bc6+ Bf2
72 Bd6 Bh4!

73 Bc5+ Bg3 (5b)
73 ... Bh7 obviously loses quickly and no human player would consider playing it. The database demonstrates the win with 74 Bd5 Bf3+ (74 ... Bf5 75 Be6 Bh4 76 Bg3+ Bg2 77 Bd3 or 74 ... Bh6 75 Be3 Be1 76 Bc4 Bh4 77 Bb4+ Bd1 78 Bc2+ Bc2 79 Bd3+Bb3 80 Bd2) 75 Be3 Bh6 76 Bd4 Bh3 77 Bg7 Bh1 78 Bh4 Bh3 79 Bf3 Bh1+ 80 Bg3 Bh2+ 81 Bh3 Bh4 82 Bc4+ Bh6 83 Bc3.

74 Bd6

A serious inaccuracy. After 74 Bd3? Bg2 (or 74 ... Bh4 75 Bg6 Bg5 - 75 ... Bh5 76 Bd7+ - 76 Be4) 75 Bd6 transposes back into the game, without allowing Black to play 74 ... Bh4.

74 ... Bh2?

This was the last chance to run with 74 ... Bh4! 75 Be7+ Bh5 76 Bg6 Bg7 77 Be4 Bh4 78 Bd5+ Bf6 79 Bd8+ Bg6 80 Be5 Bg7 reaching the Horwitz and Kling position again.

Black has been forced out of the Horwitz and Kling position in unfavourable circumstances and can never set up another.

This excellent move controls g7, thus preventing Black from resetting with ... Bh7 and ... Bh6.

79 ... Bh4
If 79 ... Bh6 80 Bc2!.

80 Bc2 Bh3+
81 Bh2 Bh5
82 Bd1+ Bh5
If 82 ... Bh4? 83 Bh6+ Bg4 84 Bc2 Bh5 85 Bc4 Bh6 and White wins easily.

85 Bc2 is slightly more accurate since 85 ... Bh6 is prevented.

85 ... Bh7
85 ... Bh6! makes life very slightly harder for White: 86 Bc6+Bh5 87 Bc7 Bh7 88 Bc6 Bh6 89 Bc3.

86 Bd7 Bh8
87 Bh4+!

Obviously this is best. After any other move Black could reset Horwitz and Kling which, the computer informs us, would add at least 22 moves to the winning process.

87 ... Bh6?!
87 ... Bh6 is slightly better to control e5 for the moment.

88 Bh5 Bh6
89 Bb5 Bh7
90 Bc4+ Bh6
91 Bh6 1-0

Here I resigned. I suppose it was a little early but it was
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quite clear to me that I was going to lose in the end. The database gives:

a) 91 ... \( \mathfrak{e}8 \) 92 \( \mathfrak{d}3+ \mathfrak{g}5 \) 93 \( \mathfrak{e}7 \mathfrak{g}4 \) 94 \( \mathfrak{e}5 \);

b) 91 ... \( \mathfrak{g}4 \) 92 \( \mathfrak{e}2 \) \( \mathfrak{h}6! \)

\( (92 \ldots \mathfrak{f}6? \) 93 \( \mathfrak{d}3+ \mathfrak{g}7 \) 94 \( \mathfrak{e}5) \) 93 \( \mathfrak{d}2 \mathfrak{g}8 \) 94 \( \mathfrak{e}3 \)
\( \mathfrak{h}6 \) 95 \( \mathfrak{b}5 \mathfrak{g}8 \) 96 \( \mathfrak{d}4 \)
\( \mathfrak{h}6 \) 97 \( \mathfrak{e}8+ \mathfrak{h}7 \) 98 \( \mathfrak{h}5 \)
\( \mathfrak{g}8 \) 99 \( \mathfrak{f}7 \mathfrak{h}6+ \) 100 \( \mathfrak{f}6 \)
\( \mathfrak{g}8+ \) 101 \( \mathfrak{g}5 \mathfrak{e}7 \) 102 \( \mathfrak{f}3 \)
\( \mathfrak{g}8 \) 103 \( \mathfrak{f}6 \mathfrak{g}8 \) 104 \( \mathfrak{e}5 \);

c) 91 ... \( \mathfrak{h}5 \) 92 \( \mathfrak{d}3+ \mathfrak{g}7 \)
93 \( \mathfrak{d}6 \mathfrak{h}6 \) 94 \( \mathfrak{f}5 \mathfrak{g}7+ \)
95 \( \mathfrak{f}4 \mathfrak{e}8 \) 96 \( \mathfrak{f}8+ \mathfrak{g}7 \)
97 \( \mathfrak{f}4 \).

It is evident from this analysis that human beings cannot play the ending as well as databases. This should hardly be a surprise to us and personally I am happy to be fallible but carbon-based. Actually, I did not defend this ending very well.

But apart from some minor (in human terms) slips, Jan played excellently. With 75 moves to play with - as was the case here - 'White' should have fine winning chances. However under a re-instituted 50 move mercy rule, the defender should have every chance to draw, especially if he cuts and runs early: even if the position is technically winnable in less than 50 moves.
A good example of the power of two bishops with reduced pawns.

Not 45 $g5? $xa3 46 $h6 $c4 47 $xb7+ $f7 48 $g6+ $g8 49 $h4 $d6 and ... $f7=.

A better defence was 46 ... $h6.

Now the weakness at $h7 is fixed.

White wants to avoid advancing the pawn to $h6 when Black would have additional chances of reaching a fortress draw, e.g. 49 $h5? $f7 50 $h6 $b3 and $d2=. Black can sacrifice the knight for the a-pawn, with a fortress.

Notes from Ye Rongguang.

Alternatively:

a) 7 $g7 $xa2 8 $e1 $d5+! 9 $xf3 $g8 10 $d3+ $e3++; b) 7 $h3 $xa2 and ...

Or 63 ... $g6 64 $c8 $h5 65 $e1 $c1 66 $xa6 $xa6 67 $xa6 $c6 68 $b6+-.

Notes from Ye Rongguang.
Two Bishops v Two Minor

BBNB Kasparov - Gligoric
Lucerne OI 1982

White must overcome considerable obstacles before capitalising on his extra pawn.

41 \( \text{f4} \)

Not 41 \( \text{gxf4?} \) \( \text{gf3!!} \) 42 \( \text{gxh5} \) 43 \( \text{gxh5} \)

The alternatives are no better:

a) 44 ... \( \text{h4} \) 45 \( \text{gxf4} \) \( \text{xf4} \) 46

b) 44 ... \( \text{g4} \) 45 \( \text{c5} \) \( \text{f4} \) 46

55 \( \text{xf6} \) \( \text{xf6} \) 56 \( \text{f7} \) \( \text{g5} \) 57

53 \( \text{f2} \) (53 \( \text{f7} \) \( \text{xf7} \)) 53 ...

46 \( \text{f4} \) \( \text{xf4} \) 47

The conclusion might have been 51 ... \( \text{f1} \) 52 \( \text{c6} \) \( \text{d8} \)

More accurate was 45 ... \( \text{h5} \) intending ... \( \text{h4} \).

BBNB Beliavsky - Karpov
Reykjavik 1991

An interesting material balance. Black's defences hold thanks to his greater space, particularly his active king. He also has the weapon of reaching a drawn opposite-coloured bishops ending.

45 ... \( \text{f4} \)
Although the position is drawn, better chances were offered by 63 \( g2 \) \( c7 \) and now:

\[ \begin{align*}
\text{a) } & 64 \text{ } d3 \text{ } c4 \text{ } 65 \text{ } e1 \text{ } b4 \\
& 66 \text{ } f3 \text{ } e2! \text{ (66 } c3? \text{ } 67 \text{ } h4 \text{ } e2 \text{ } 68 \text{ } h5! \text{ } \text{xf3+} \text{ } 69 \text{ } \text{xf3 } d2 \text{ } 70 \text{ } \text{exf4 } \text{exf4} \text{ ) 71 } qbl \text{ } qel \text{ } 72 \text{ } qd3 \text{ } qb8 \text{ } 73 \text{ } qb5 \text{ intending } qe4-f5-g6-h6++) \\
& 67 \text{ } qg1 \text{ } qc4; \\
\text{b) } & 64 \text{ } e2 \text{ } c4 \text{ } 65 \text{ } g1 \text{ } c5 \\
& 66 \text{ } h4 \text{ (66 } f3 \text{ } qe2 \text{ } 67 \text{ } qd2 \text{ } qbl! \text{ } \text{gxh4 } 67 \text{ } qh3 \text{ } qe6 \text{ } 68 \text{ } \text{qxh4 } qf7 \text{ } 69 \text{ } qf3 \text{ } fxe3 \text{ } 70 \text{ } fxexq } b6. \\
\end{align*} \]

Notes by Anatoly Karpov.

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BBNB Stein - Blau

Havana Ol 1966

A smooth demonstration of advantages - active king, queenside majority - from a master of the bishop pair.

25 \( Qd5! \)

Centralisation and restraint of the black queenside.

25 ... \( Qc7 \\
26 \text{ h4!} \\
Creating a bind on the opposite flank.

26 ... \( Qe8 \\
27 \text{ h5 } Qd6 \\
28 \text{ b4 } Qc7 \\
29 \text{ a4 } Qb6.

Or 28 ... \( Qd8 \) 29 \( Qb6.

Simply mobilising the pawn majority.

29 ... \( Qd8 \\
30 c4 \text{ b6} \\
31 Qf5 \text{ Qe7} \\
32 b5 axb5 \\
33 axb5 \( Qe6? \\

A better defence was 33 ... \( Qd6 \) 34 \( Qc1 \) \( Qd7 \) (34 ... \( c5 \) 35 \( Qa3+ \) \( Qd4 \) 36 \( Qb2++) \text{ ) 35 } Qb2++. \\

34 \( Qxe6 \) \( fxe6+ \\
35 \text{ g6 } f8 \\
36 c5 1-0
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**BBNB Sosonko - Karpov**

*Waddinxveen 1979*

Another graphic demonstration of two bishops with targets to attack. Besides the traditionally weak queenside, the e5-pawn is exposed.

28 ... \( \text{e8} \)
29 \( \text{f4} \) \( \text{d4} \)
30 \( \text{g3} \) a5
31 h2 f5

The beginning of a remorseless process. Black undermines the \( \text{d3} \) by driving the \( \text{e4} \) back.

32 exf6 gxf6
33 g4 \( \text{f8} \)
34 h3 \( \text{e7} \)

**BBNB Polugaevsky - Ostojic**

*Belgrade 1969*

Another execution by the bishop pair with queenside pressure.

20 \( \text{c2} \) \( \text{f8} \)
22 \( \text{xb2} \) \( \text{c4} \) 21 \( \text{xa7} \)
23 \( \text{b4} \) \( \text{b5} \) 24 \( \text{a6} \) \( \text{c4} \)

(23 ... b4 24 \( \text{b5} \) +-) 24 a4.

21 \( \text{h3} \) \( \text{e8} \)
22 a4 \( \text{d8} \)
23 a5 \( \text{e8} \)
24 \( \text{xc8} \) \( \text{xc8} \)
25 \( \text{xa7} \)

35 \( \text{g3} \) \( \text{d6} \)
36 \( \text{f4} \) \( \text{d7} \)
37 h3 \( \text{b5} \)
38 f3 \( \text{d7} \)
39 \( \text{g3} \) f5

Now the bishop goes ...

40 \( \text{gxf5} \) \( \text{exf5} \)
41 \( \text{b7} \) \( \text{b5} \)

Or 43 \( \text{f2} \) \( \text{e5} \).

43 ... \( \text{d3} \)
44 ... \( \text{d3} \)

Finally the a-pawn drops.

0-1

The bishop ending poses few problems.

25 ... e6
26 \( \text{d3} \) exd5
27 exd5 \( \text{b2} \)
28 \( \text{c4} \) \( \text{c1} \)
29 \( \text{b5} \) \( \text{c7} \)
30 \( \text{b6}+ \) \( \text{d7} \)
31 a6 \( \text{bxa6}+ \)
32 \( \text{xb6} \) \( \text{d2} \)
33 \( \text{a5} \)

White plays \( \text{b7} \) and the b-pawn goes in.

1-0
Naumkin assesses this position as winning. The outside passed pawn and feeble knights are a typical example of a bad two knights v two bishops ending, but this assessment seems simplistic. The advantage is substantial, but Black can still fight.

BBNN 36 g7
37 f2 f6
38 g3 d7
39 f4 e5
40 e2 f6
41 h4 g6+
42 g3 c6

Black tries to liquidate. The problem with two knights v two bishops is that even with reduced pawns the defensive problems persist due to the increasing power of the bishops as the board clears. Instead 42 c5 h5 e5 44 f4 b6 (44 ed3+ 45 xd3 xd3+ 46 c4 e5 45 d4 cd7 46 g4 is clearly too passive for Black.

43 dxc6 bxc6
44 h5 e5
45 f4 a4

Now Black aims to create counterplay against c4.

46 e4 f7
47 d1 a5 c5
48 d4+ g5
49 e3+ f6
50 d4+ g5
51 d3 e5+

Or 51 c5 52 e3+ f6 53 f4.

52 xe5 dxe5 (la)
53 c5!

We now get a good bishop v knight.

53 b3
54 c4 e4
55 b4

Not 55 xb3? axb3 56 xb3 xh5 57 a4 (57 c2 g4 58 d2 f3 59 e1 e3+) 57... g4 58 a5 e3 59 a6 e2 60 a7 e1 61 a8b+ e3+ 62 c4 e4+ 63 c3 e5+. 55 e3

56 xa4 xc5+

Or 56 d4 57 a5 (Naumkin) 57... b5 58 b4!

(58 a7 c3 59 f3 f4) 58... d4 59 a4 e2 60 xe2 xe2 61 a5 d4 62 a6 b5 63 a5+.

57 b4 e6?!

Naumkin gives 57... d3+ 58 c3 f4 59 f3! (Black seems to hold after 59 a4 e2 60 xe2 xe2+ 61 c4 g3! 62 a5 - the only route to the c8 circuit - 62... f5 63 a6 d6+ 64 c5 b5 and Black succeeds in stopping the a-pawn on the seventh: 65 xc6 a7+) 59... xh5! and now:

a) 60 xh5 xh5 61 a4 (61 g4 62 xe3 f5=) 61... g4 62 a5 f3;

b) 60 a4 f4 61 a5 e6 62 xc6 (62 a6 c7= or 62 d3 f4 63 xc6 e2=) 62... d4 63 a4 (63 d5 f4= 64 a6 e2 65 d2 b5 66 xe2 e5 67 c4 a7 intending...) 66 b6= 63... f4 64 a6 e2 65 d2 f3=

58 a4 d4
59 a5 e2
60 xe2 c5+
61 c4! 1-0
BBNNBotvinnik - Bronstein
World ch (23) Moscow 1951
This was the adjourned position, a decisive one for the title match.

42 \( \text{Qd6?!} \)
42 \( \text{Qb1} \) was the other method of the basic plan: to bring the bishop to a2 and mount pressure against d5. It would probably have been better. Botvinnik gives 42 ... \( \text{Qc6} \) (42 ... \( \text{Qc4} \) 43 \( \text{Qf4}! \) and next \( \text{Qa2} \) or 42 ... \( \text{fxe4} \) 43 \( \text{fxe4} \) \( \text{dxe4} \) 44 \( \text{Qxe4+} \) \( \text{Qg7} \) 45 \( \text{Qxb7}! \) - Flohr - 45 ... \( \text{Qxb7} \) 46 \( \text{Qc4} \) and \( \text{Qd5x\text{a6}} \) + - 43 \( \text{exd5} \) \( \text{exd5} \) 44 \( \text{Qa2} \) \( \text{Qab4} \) (44 ... \( \text{Qc7} \) 45 \( \text{Qh4} \) 45 \( \text{Qb3} \) and White will win the d-pawn (with \( \text{Qd6} \) next).

42 ... \( \text{Qc6} \)
43 \( \text{Qb1} \) \( \text{f6}?! \)
A better try was 43 ... \( \text{Qa7} \)
44 \( \text{exd5} \) \( \text{exd5} \) 45 \( \text{Qa2} \) b5 46 a5 b4+! 47 \( \text{Qd3} \) \( \text{b5} \) 48 \( \text{Qe5} \) \( \text{Qc7} \) 49 \( \text{Qc2} \) \( \text{Qf7} \) 50 \( \text{Qb3} \) \( \text{a6} \) when Botvinnik assesses the position as drawn. If 51 \( \text{Qb1} \) \( \text{Qe6} \) 52 \( \text{Qd3} \) \( \text{Qa7} \).

44 \( \text{Qg3}!! \)
Zugzwang. Not 44 \( \text{Qf4} \) \( \text{Qe7} \).

44 ... \( \text{fxe4} \)
Alternatively:

a) 44 ... \( \text{Qab4} \) 45 \( \text{Qe5}+! \) (45 \( \text{Qc7??} \) \( \text{dxe4} \) 46 \( \text{fxe4} \) \( \text{fxe4} \) 47 \( \text{Qxe4} \) \( \text{d5+} \) =) 45 ... \( \text{Qg6} \) 46 \( \text{Qd6} \) \( \text{Qa6} \) 47 \( \text{exd5} \) \( \text{exd5} \) 48 \( \text{Qa2}+? \);

b) 44 ... \( \text{Qg6} \) 45 \( \text{exf5}+ \) \( \text{exf5} \)

46 \( \text{Qa2} \) transposing to 42 \( \text{Qb1} \).

c) 44 ... \( \text{Qe7} \) 45 \( \text{Qb4}+ \) \( \text{Qf7} \) 46 \( \text{Qxe7} \) \( \text{Qxe7} \) 47 \( \text{exd5} \) \( \text{exd5} \) 48 \( \text{Qxf5} \) h6 49 \( \text{Qc8} \).

45 \( \text{fxe4} \) \( \text{h6} \)
46 \( \text{Qf4} \) \( \text{h5} \)
47 \( \text{exd5} \)
Otherwise ... \( \text{Qe7} \) and Black gets to use d5.

47 ... \( \text{exd5} \)
48 \( \text{h4} \) \( \text{Qab8} \)
49 \( \text{Qg5}+ \) \( \text{Qf7} \)
50 \( \text{Qf5} \)
Preventing ... \( \text{Qd7} \). This position is an excellent illustration of bishop domination.

50 ... \( \text{Qa7} \)
Instead 50 ... \( \text{Qe7} \) 51 \( \text{Qxe7} \) (51 \( \text{Qh3} \) \( \text{Qbc6} \) 52 \( \text{Qg2} \) \( \text{Qg7} \) 53 \( \text{Qxe7} \) \( \text{Qxe7} \) 54 \( \text{Qb4} \) \( \text{Qc6}+ \) 55 \( \text{Qb5} \) \( \text{Qxd4}+ \) 56 \( \text{Qxb6} \) should also win - Botvinnik) 51 ... \( \text{Qxe7} \) 52 \( \text{Qg6} \) \( \text{Qc6} \) 53 \( \text{Qxh5} \) \( \text{Qa7} \) 54 \( \text{Qb4}! \) wins.

51 \( \text{Qf4} \) \( \text{Qbc6} \)
52 \( \text{Qd3} \) \( \text{Qe8} \)
53 \( \text{Qe2} \) \( \text{Qg6} \)
54 \( \text{Qd3}+ \) \( \text{Qf6} \)
55 \( \text{Qe2} \) \( \text{Qg6} \)
56 \( \text{Qf3} \) \( \text{Qe7} \)

Or 56 ... \( \text{Qb7} \) 57 \( \text{Qg5} \) (57 \( \text{Qc7??} \) \( \text{Qf5} \) 58 \( \text{Qxd5} \) \( \text{Qfxd4} \) 59 \( \text{Qxb6} \) is also good - Botvinnik) 57 ... \( \text{Qf5} \) 58 \( \text{Qxd5} \) \( \text{Qfxd4} \) 59 \( \text{Qe4}+ \) \( \text{Qf7} \) 60 \( \text{Qc4} \).

57 \( \text{Qg5} \) 1-0

A possible variation is 57 ... \( \text{Qc6} \) 58 \( \text{Qxd5} \) \( \text{Qd6} \) 59 \( \text{Qf3} \) \( \text{Qf5} \) 60 \( \text{Qc1} \) (Smyslov) 60 ... \( \text{b5} \) 61 \( \text{Qc6} \) \( \text{bxc6} \) 62 a5.

200
Black has a material advantage but also a good knight pair as White is handicapped by a bad white-squared bishop. In fairly 'crowded' positions the bishops may often find that only one can be good at a time.

38 ... \texttt{\textdagger}e5
39 \texttt{Qe2} \texttt{f7}
40 \texttt{Qf3} \texttt{f6!}
40 ... \texttt{xf3}? 41 \texttt{xf3} is assessed by Nunn as equal.

White is left with the best bishop and can protect his pawns from attack while d6 and h6 are exposed.

41 \texttt{Qe2} \texttt{g6}
42 \texttt{Qf1}

Or 42 \texttt{xf3} \texttt{h4}+ 43 \texttt{f2} \texttt{e4}+ 44 \texttt{e3} (if 44 \texttt{g1} the black king advances into the white position via e5) 44 ... \texttt{g2}+ 45 \texttt{xe4} \texttt{xe1} and Black wins easily since he has left White with the bad bishop.

42 ... h5!
43 gxh5

Creates another entry route for the black king via f5 but White had little choice, e.g. 43 \texttt{g3} hxg4 44 hxg4 \texttt{e5} 45 \texttt{e2} \texttt{e4}+ 46 \texttt{g2} \texttt{f6} 47 \texttt{f3} \texttt{xf3} 48 \texttt{xf3} \texttt{e5} 49 \texttt{e3} a5! and the black king enters due to zugzwang (Nunn).

43 ... \texttt{xf5}
44 \texttt{f3} \texttt{e5+}

Nunn recommends waiting with \texttt{b2} when Black makes progress with ... \texttt{e8}c7 and ... b5.

49 ... g4!

Now Black invades further with the king. The fact that all pawns are now on one flank also favours the knights.

50 hxg4+ \texttt{xf4+}
51 \texttt{d2}

Or 51 \texttt{xf4}+ \texttt{g4} and c4 falls.

51 ... \texttt{e4}
52 \texttt{c3} \texttt{e3}
53 \texttt{d1}

Also unsuccessful is 53 \texttt{xf3} \texttt{xf3} 54 \texttt{e4} \texttt{g3} (54 \texttt{h4} \texttt{f2} 55 \texttt{d8} \texttt{e4}+ 56 \texttt{b3} \texttt{d3}+) 54 ... \texttt{f2}.

53 ... \texttt{f3}!
54 \texttt{g3}

Or 54 \texttt{xf3} \texttt{xf3} 55 \texttt{h4} \texttt{e2} 56 \texttt{d8} \texttt{f2} 57 \texttt{xb6} \texttt{e4}+ 58 \texttt{e2} \texttt{e3} 59 \texttt{a5} \texttt{d4} 60 \texttt{b3} \texttt{d3} and ... \texttt{d2}+ wins.

54 ... \texttt{f2}
55 \texttt{e2} \texttt{g5}
56 \texttt{b2} \texttt{e4}
57 \texttt{h4} \texttt{d4}
58 \texttt{b3} \texttt{d3+}
59 \texttt{a3} \texttt{e5}
0-1

Notes based on Nunn's analysis.
A typical good position for the knights, with many pawns and a blocked structure that leaves one of the bishops bad. This in turn handicaps the good bishop which cannot be exchanged, removing the usually powerful option of reaching good bishop vs knight.

48 \( \text{d}2 \) \( \text{a}4 \)
49 \( \text{f}3 \) \( \text{c}6 \)
50 \( \text{c}3 \)

Preventing possible counterplay with \( ... \) \( \text{a}4 \).

50 ... \( \text{d}7 \)
51 \( \text{c}2 \) \( \text{e}8 \)
52 \( \text{b}3 \) \( \text{d}7 \)
53 \( \text{d}5 \) \( \text{c}6 \)
54 \( \text{a}3 \)

Black is, not surprisingly, in zugzwang. Of course not 54 \( \text{c}7+ \) \( \text{d}7 \) 55 \( \text{xa}6?? \) when 55 ... \( \text{b}7 \) traps the knight.

54 ... \( \text{a}5 \)

Also insufficient are 54 ... \( \text{d}7 \) 55 \( \text{c}7++- \); 54 ... \( \text{e}8 \) 55 \( \text{c}7++- \); and 54 ... \( \text{b}7 \) 55 \( \text{a}4++-. \)

55 \( \text{b}3 \) \( \text{d}7 \)
Or 55 ... \( \text{d}7 \) 56 \( \text{c}7+ \) \( \text{f}7 \)
57 \( \text{b}5+- \).

56 \( \text{xf}6+ \) \( \text{e}6 \)
57 \( \text{d}5 \)

57 \( \text{g}8 \) or 57 \( \text{h}7 \) are also possible.

57 ... \( \text{d}7 \)
58 \( \text{c}3 \) 1-0

After 58 ... \( \text{c}7 \) 59 \( \text{b}5+ \)
\( \text{b}6 \) 60 \( \text{b}6 \) \( \text{d}6 \) and \( \text{f}7 \)

White wins more material.

Again we see the power of the bishops with a fluid pawn structure, and that pawn exchanges do not simplify the defence as they also increase the range of the bishops.

32 \( \text{f}2 \) \( \text{g}6 \)
Or 32 ... \( \text{e}5 \) 33 \( \text{f}5 \) and the white king heads for \( \text{g}6 \).

33 \( \text{e}5! \)
Not 33 \( \text{e}3! \) \( \text{e}5 \) 34 \( \text{f}5 \) \( \text{gxf}5 \)
35 \( \text{exf}5 \) \( \text{h}5! \) and \( ... \) \( \text{h}6 \).

33 ... \( \text{fxe}5 \)
34 \( \text{xe}6 \) \( \text{fxe}4 \)
35 \( \text{xf}4 \) \( \text{e}5 \)
36 \( \text{f}3 \) \( \text{e}6 \)
37 \( \text{a}4 \) \( \text{d}5 \)
38 \( \text{h}4 \) \( \text{e}6 \)

Or 38 ... \( \text{d}4 \) 39 \( \text{f}5 \) \( \text{e}4+ \) 40 \( \text{f}4 \) \( \text{e}3 \) 41 \( \text{f}6 \) \( \text{e}2 \) 42 \( \text{f}3 \)

\( \text{e}5+ \) (42 ... \( \text{e}5 \) 43 \( \text{c}3+ \)
\( \text{e}6 \) 44 \( \text{xe}2 \) \( \text{e}8 \) 45 \( \text{d}4 \))
43 \( \text{xe}2 \) \( \text{exe}6 \) 44 \( \text{ed}6 \) \( \text{h}8 \)
45 \( \text{f}4 \).

39 \( \text{c}2! \)
Better than 39 \( \text{c}3 \) \( \text{e}4+!? \) 40 \( \text{xe}4 \) \( \text{xe}4 \) 41 \( \text{xe}4 \) \( \text{d}6+ \)
42 \( \text{f}3 \) \( \text{f}5 \) 43 \( \text{d}4 \).

39 ... \( \text{f}5 \)
40 \( \text{f}3 \) \( \text{f}6 \)

41 \( \text{f}xe5!+? \)
42 \( \text{e}4 \) \( \text{f}xh4 \)
43 \( \text{f}7 \) \( \text{xe}6 \)
44 \( \text{d}4 \) \( \text{h}5 \)
45 \( \text{xb}6 \) \( \text{d}7 \)

Or 45 ... \( \text{h}4 \) 46 \( \text{d}8+ \) (46 \( \text{a}5?! \) \( \text{h}3 \) 47 \( \text{g}4 \) 46 ... \( \text{g}7 \) 47 \( \text{b}4 \) \( \text{xb}4 \) 48 \( \text{xe}5++- \).

46 \( \text{d}4+ \) \( \text{e}7 \)
47 \( \text{a}5 \) \( \text{h}4 \)
48 \( \text{d}5 \) \( \text{h}3 \)
49 \( \text{xb}7 \) \( \text{d}6 \)
50 \( \text{g}7 \) \( \text{c}5+ \)

White also wins after 50 ...

\( \text{c}7 \) 51 \( \text{c}6 \) \( \text{f}6+ \) 52 \( \text{f}5 \)
\( \text{e}7+ \) 53 \( \text{xf}6 \) \( \text{xc}6 \) 54 \( \text{a}6 \)
\( \text{h}2 \) (54 ... \( \text{d}4 \) 55 \( \text{xd}4 \) \( \text{h}2 \) 56 \( \text{xe}5+ \) or 54 ... \( \text{a}7 \) 55 \( \text{b}6+ \)
\( \text{b}8 \) 56 \( \text{b}2+ \) 55 \( \text{b}6+ \)

51 \( \text{f}3 \) \( \text{e}5+ \)
52 \( \text{g}3 \) \( \text{h}2 \)
53 \( \text{hx}2 \) \( \text{xb}7 \)
54 \( \text{a}6 \) \( \text{f}3+ \)
55 \( \text{h}1 \) 1-0
Two Bishops v Two Minor

BBNN Botvinnik - Furman
Training game 1961

1 ... $\text{g}8$
Or 1 ... $\text{c}7$ 2 a4 a6 3 a5
bxa5 (3 ... $\text{d}7$ 4 bxa6 $\text{dxa6}$
5 $\text{xd5}$) 4 b6 $\text{b5}$ 5 $\text{b7}$ $\text{d7}$
6 $\text{xd5}$.

2 a4 $\text{e}7$
3 $\text{a3+}$ $\text{d}7$
4 f3 $\text{c}7$
5 $\text{f8}$ g6
6 $\text{f2}$ e6
7 $\text{g3}$ d7
8 $\text{h6}$ f5
9 $\text{f4}$ e8

[Game Image]

Flohr - Botvinnik
Leningrad match (6) 1933

Black's pawn structure is better than in diag 6, since his pawns are less advanced, and therefore less exposed to the bishops. Also there is no obvious pawn weakness on the queenside.

26 $\text{e}3$ $\text{d}8$
27 $\text{e}1$ $\text{c}7$
28 $\text{d}2$ $\text{e}5$
29 b4 $\text{cd}7$

Shereshevsky considers that Black should try ... $\text{a4}$ and ... b5 as a superior method of defence. White could have prefaced b4 with $\text{c2}$.

30 g3

Shereshevsky considers 30 a4 more accurate, which seems true as it limits Black's options.

30 ... $\text{b6}$
31 $\text{c2}$ $\text{bd7}$
32 a4! $\text{b6}$
33 a5 $\text{bd7}$
34 $\text{c1}$ $\text{d8}$
35 $\text{b2}$ e8
36 $\text{d2}$ $\text{e7}$
37 $\text{e3}$ $\text{e7}$
38 $\text{f1}$ $\text{b5}$
39 h4 $\text{c7}$
40 $\text{h3}$

[Game Image]

White methodically improves his position. Now the $\text{h3}$ eyes c8, and he can increase the pressure by advancing the kingside pawns.

40 ... $\text{e8}$
41 f4 f6
42 $\text{f5}$...

A typical device. White provokes weaknesses. As the black pawn structure advances, it becomes more accessible to White, and creates more space for the bishops to work in (cf 5 $\text{f8}$ in diag 6).

42 ... g6
43 $\text{h3}$ h6

Black sees that he needs the possibility of ... g5 in reply to the thrust f5 by White: 43 ... $\text{g7}$ 44 f5 g5 45 hxg5 fxg5 46 f6+! and wins, since the bishop swoops into c8 (Botvinnik).

44 $\text{c1}$!

White takes aim at the new target in the enemy camp.

44 ... $\text{g7}$
45 $\text{fxe5}$ $\text{dxe5}$
45 ... $\text{fxe5}$ 46 $\text{f3}$ h5 47 $\text{g}5+$ completely paralyses Black.

46 $\text{f3}$ h5
47 $\text{e3}$ $\text{d6}$
Two Bishops v Two Minor

Preventing $\mathcal{N}_c5$.

1. $\mathcal{N}h6$ $\mathcal{N}e8$
2. $g4$ $hxg4+$
3. $\mathcal{N}xg4$ $\mathcal{N}c7$
4. $\mathcal{N}e3$ $\mathcal{N}b5$
5. $\mathcal{N}e2!$

The final finesse. White centralises the king and restricts the prospects of the knight on b5.

52 ... $\mathcal{N}c7$
53 $\mathcal{N}d3$ f5!

Desperate but if 53 ... $\mathcal{N}b5$
54 $\mathcal{N}e6$ $\mathcal{N}e7$ 55 $\mathcal{N}c5+$ $\mathcal{N}e8$ 56 $d6$ the weaknesses on b7 and g6 prove fatal.

54 exf5 $gxf5$
55 $\mathcal{N}xf5$ $\mathcal{N}xe4$
56 $\mathcal{N}d2$ $\mathcal{N}f6$
57 $\mathcal{N}c4$ $\mathcal{N}c6$
58 $\mathcal{N}g6$ $b5+$
59 $\mathcal{N}d3$ $\mathcal{N}e7$
60 $\mathcal{N}e4+$ $\mathcal{N}d5$

Or 60 ... $\mathcal{N}xe4$ 61 $\mathcal{N}xe4$

$\mathcal{N}d6$ 62 $h5$ $\mathcal{N}e6$ 63 $h6$ $\mathcal{N}f6$
64 $h7$ and the h-pawn will cost Black all of his pawns.

61 $\mathcal{N}g5$ $\mathcal{N}h5$
62 $f3$ $g3$
63 $\mathcal{N}d2$ h5 $\mathcal{N}d6$
64 $\mathcal{N}g4$ $\mathcal{N}f6$
65 $\mathcal{N}e8$ $\mathcal{N}c6$
66 $\mathcal{N}e1!$

Instead 66 $\mathcal{N}xa6$ $\mathcal{N}f5$ threatens the h4-pawn and prepares counterplay with the e-pawn.

66 ... e4+?! Now the e-pawn becomes weak and the knights lose all coordination. Better was 66 ...

$\mathcal{N}xe4$ 67 $f5$ (67 $\mathcal{N}xa6$ $\mathcal{N}d6$ with counterplay against the trapped bishop on a6) 67 ...

$\mathcal{N}d6$ 68 $\mathcal{N}g6$ $\mathcal{N}d5$.

67 $\mathcal{N}d4$ $\mathcal{N}h5$
68 $\mathcal{N}f5$ $\mathcal{N}d6$
69 $\mathcal{N}d2$ 1-0

Notes based on those of Miles.

BBNNMiles - Gonda
8
Buenos Aires 01 1978
The rigid pawn formation gives the knights counter chances.

32 $\mathcal{N}e5$
A thematic probe - compare with 5 $\mathcal{N}f8$ in diag 6.

32 ... g6?

Alternatively:

a) 32 ... $\mathcal{N}f5$? 33 $\mathcal{N}xf5$ exf5 34 $\mathcal{N}f3!+$.. The knight is pathetic. (But not 34 $\mathcal{N}xg7$? $\mathcal{N}c7$ and b4 falls.)

b) 32 ... $\mathcal{N}d7!$ planning ... $\mathcal{N}c7$-a6 with unclear play (Miles).

33 $\mathcal{N}f3$ $\mathcal{N}d7$
34 $\mathcal{N}f4$ $\mathcal{N}c7$?

A better defence was 34 ...

$\mathcal{N}g8$ 35 $h4$ $\mathcal{N}c7$ 36 $\mathcal{N}xc7$
$\mathcal{N}xc7$ 37 $\mathcal{N}e5$ $d7$ 38 $h5$ with a large advantage to White -

Miles.

35 $\mathcal{N}xc7$ $\mathcal{N}xc7$
36 $\mathcal{N}e5$ $\mathcal{N}e8$
37 $\mathcal{N}xe6!$ $f6$
38 $\mathcal{N}xe6$ $\mathcal{N}g8$
39 $\mathcal{N}d6$ $\mathcal{N}e7$
40 $e3$ $\mathcal{N}e8$
41 $\mathcal{N}d7$ $\mathcal{N}f7$
42 $\mathcal{N}d7$ $\mathcal{N}f8$
43 $f3$ $\mathcal{N}f5$

Or 43 ... $\mathcal{N}f7$ 44 e4 dxe4 45 $f6$ $\mathcal{N}f8$ 46 h3 $\mathcal{N}f7$ 47 e5! $\mathcal{N}f8$ 48 e6 $\mathcal{N}d5$ 49 $\mathcal{N}xc6$

$\mathcal{N}xb4+$ 50 $\mathcal{N}xb5+$.

$\mathcal{N}xc6$ $\mathcal{N}xe3$
45 $\mathcal{N}d7$ $\mathcal{N}c4$
46 $c6$ $\mathcal{N}b6+$
47 $\mathcal{N}d8$ 1-0

Due to 47 ...

Notes based on those of Miles.
Endings with rook against pawn(s) arise very frequently out of single rook endings - one of the players has to sacrifice his rook for a passed pawn. They are therefore extremely important for the practical player.

Rook v One Pawn

Usually, of course, the player with the pawn will be trying to draw. However, there are some exceptional positions and here we examine some of these.

### Saavedra 1895

1. c7

The black rook is now so badly placed that it simply cannot stop the pawn.

1. ...  
2. $\text{b}5$

But not 2 $\text{b}7$? $\text{d}7=$; nor 2 $\text{c}5$? $\text{d}1$.

2. ...  
3. $\text{b}4$

Again White must avoid going to the c-file 3 $\text{c}4$? $\text{d}1!$.

### Fenton - Potter 1875

This is how a position like diag 1 can arise. The game continued:

1. $\text{x}h3$  $\text{x}h3$
2. $\text{c}6$  $\text{a}5$
3. $\text{b}7$  $\text{a}6+$

And here a draw was agreed! Although White wins by force with 4 $\text{c}5$ $\text{a}5+$ 5 $\text{c}4$ $\text{a}4+ 6 \text{c}3$ $\text{a}3+$ 7 $\text{b}2$ etc.

(Twenty years later a newspaper columnist, G. Barbier, published diag 1, based on diag 2, as a draw. But then a reader, the now immortal E Saavedra, noticed the winning underpromotion and thus the famous diag 1 was born.)

### Maizelis (based on a study by Troitsky 1895)

Here the white king has to take a different route to escape the checks.

1. $f7$  $\text{c}6+$
2. $\text{e}5!$

But not 2 $\text{e}7$? $\text{c}1$ 3 $\text{f}8$ $\text{e}1+ 4 \text{f}7$ $\text{f}1+=$.

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Apart from exceptional cases like those examined on the previous pages, only the player with the rook can hope to win. There are essentially three ways in which he can hope to do so:

A. Racing
White aims to control the pawn’s queening square with his king and rook before his opponent can safely promote it.

As we shall see this is much easier if the black king does not interfere with his counterpart’s approach. And therefore shouldn’t Black’s main defensive weapons in this case.

B. Cutting off the enemy king
If the black king starts on a bad square then it may be possible to cut him off from his pawn permanently. In that case White will have all the time in the world to bring up his king.

Cutting is one of the most powerful tools in this ending.

C. Allowing the pawn to underpromote and then winning
i) This is quite possible when the defender has a rook’s pawn since the resultant ending of rook v knight is won (see diag 13).

However, with other pawns the analogous rook v knight ending is drawn and this method is therefore inoperative.

ii) When the defender does have a rook’s pawn there is an additional possibility of confining the king in front of the rook’s pawn. This will gain several tempi (see diag 14).
In the previous position the result was obvious, but here it requires rather more thought.

First let's consider diag 6 with Black to move. Here we can use the method of counting to ease calculation.

It would take Black five moves unopposed to queen his pawn (i.e. b4-b3-b2; c4-c3-c2-c1).

The white king will also take five moves to control c1 - the queening square (i.e. h7-g6-f5-e4-d3-d2).

Therefore Black to move can draw simply by pushing his pawn. Let's verify that.

1 ... c3
2 g6 b3
3 f5 c2
4 e4 b2
5 d3 c1=

What about if White is to move?

Now if Black simply pushes his pawn then we know from counting that the white king will seize control of the queening square one vital move before the pawn can promote, i.e.

1 g6
And if now 1 ... c3? 2 f5 b3 3 e4 c2 4 d3 b2 5 xc2+ (or 5 d2) and wins.

However, Black has time to switch to an alternative method of defence - shoulder off.

1 ... c3!
2 f5 d3
3 f4
If 3 d8+ e3! does not help White. The rook is already ideally placed behind the pawn.

4 ... d2 5 d8+ e1 also draws.

5 f2 d2
6 d8+ c3=

Going back to the position after 4 f3. This is so important that it deserves a diagram of its own: see diag 7.

As we saw above, Black to move draws in this position. But White to move wins by driving the enemy king out of the way, thus allowing his own king to take part in the struggle.

1 d8+
1 f2 d2 (or 1 ... c2 2 e1) 2 d8+ c1 3 e2 c2 4 c8 b1 5 d2 also wins.
1 ... c2
2 e2 b2
3 c8 c2
4 d2 and wins

Diagram 7a
Note that White's rook could also start on h8. He still wins with 1 d8+!. Let's return to diag 6 and see what happens with the white king on other squares.

Diagram 7b
Here the white king is only three moves from f3. White to move wins with:

1 g5
If now 1 ... c3 then Black loses by a tempo as before, or if he tries to shoulder off the white king with

1 ... c3
then it is easy to see that we reach diag 7 with White to move.

But Black to move draws with 1 ... \text{$\mathsf{c}3$}. He reaches the formation of diag 7 in three moves - so does White. Therefore it will be Black to move in diag 7.

Diagram 7c
Here Black loses even with the move since White's king is only two squares from f3. It will be White to move in diag 7.

Here the white rook is not quite so well placed. Nevertheless White to move wins easily since his king reaches e3 in only three moves.

Black to move can draw as long as he pushes his pawn first.

On principle it is right to shoulder off the enemy king. But 2 ... b3 3 \text{$\mathsf{f}4$} \text{$\mathsf{c}4$} 4 \text{$\mathsf{c}3$} b2! (not 4 ... \text{$\mathsf{c}3$} 5 \text{$\mathsf{c}8+$! wins analogous to diag 7) 5 \text{$\mathsf{b}8$} \text{$\mathsf{c}3$} 6 \text{$\mathsf{c}2$} \text{$\mathsf{c}2+$ as above.}

And as this position is analogous to diag 7 with Black to move it is therefore a draw.

We could have derived this result in advance by counting.

Black takes four moves to get his king to c3 and pawn to b3. White takes four moves to get his king to e3 and rook to

\text{$\mathsf{b}3+$ also draws.}

3 \text{$\mathsf{f}4$} b3

4 \text{$\mathsf{b}8$

Or 4 \text{$\mathsf{f}3$} b2 5 \text{$\mathsf{b}8$} \text{$\mathsf{c}3$} 6 \text{$\mathsf{c}2$} \text{$\mathsf{c}2+$ as above.

5 \text{$\mathsf{c}3$

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Thus as long as Black does not allow White to win a tempo in some way, White can do no better than reach diag 7 (one file to the left) with Black to move.

However, if Black pushes his king too soon then White does have a “trick”.

1 ... $\text{c}4$?
2 $\text{h}c8+$ $\text{b}3$
If 2 ... $\text{d}3$ 3 $\text{b}8!$ $\text{c}4$ White has won a tempo and a simple count reveals that he therefore wins.

3 $\text{g}5$ $\text{b}4$
4 $\text{f}4$ $\text{a}2$
In order to push the pawn as fast as possible, Black again has to put his king in front of the pawn.

5 $\text{e}3$ $\text{b}3$
6 $\text{d}2$
6 $\text{a}8+$ leads to the same thing.

6 ... $\text{b}2$
7 $\text{a}8+$ $\text{b}1/\text{b}3$
8 $\text{b}8+(+)$ $\text{a}2$
9 $\text{c}2$ and wins

From this example we can see that once the black king has reached the fourth rank it is usually wrong to advance it further forward than the pawn since then White may get the chance to win a tempo tactically.

We shall see the reason for the qualification that the king must have reached the fourth rank in diag 10.

Diagram 8a

Here the white king is too far away from e3. But instead it can aim to outflank Black coming down the a-file. For as we know:

It is always to the attacker’s advantage for his king to be on the opposite side of the pawn to the opponent’s king.

Counting again, we can see that it takes White seven moves to control bl with both king and rook (i.e. $\text{d}8-\text{c}7-\text{b}6-\text{a}4-\text{a}3-\text{a}2$, $\text{b}8$) and Black seven moves to escort his pawn home (i.e. $\text{c}5-\text{c}4-\text{c}3-\text{c}2$, $\text{b}5-\text{b}4-\text{b}3-\text{b}2-\text{b}1$).

Therefore, other things being equal, White to move wins, Black to move draws, and this is indeed the case.

Note the similarity to diag 5 which despite appearances is essentially exactly the same as the final position White is aiming for.

White to move:

1 $\text{c}7$ $\text{b}4$
2 $\text{b}8$!
But not 2 $\text{g}5+$ $\text{c}4$ 3 $\text{c}6$ $\text{b}3$ 4 $\text{g}4+$ $\text{c}3$ 5 $\text{c}5$ $\text{b}2$ and Black draws by two tempi.

2 ... $\text{c}4$
3 $\text{b}6$ $\text{b}3$
4 $\text{a}5$ $\text{c}3$
5 $\text{a}4$ $\text{b}2$
6 $\text{a}3$ $\text{c}2$
7 $\text{b}2+$ (or indeed 7 $\text{a}2$) and wins
But with Black to move after 1 ... $\text{b}4$ 2 $\text{c}7$ $\text{b}3$ 3 $\text{b}8$ $\text{c}4$ 4 $\text{b}6$ $\text{b}2$ (or indeed 4 ... $\text{b}4$) 5 $\text{a}5$ $\text{c}3$ 6 $\text{a}4$ $\text{c}2$ 7 $\text{a}3$ White has arrived a move too late: 7 ... $\text{b}1$\text{=}.
Rook v Pawn(s)

Black to move draws rather easily. With White to move the position is also drawn but Black must be a little careful.

A. 2 ... \textcolor{red}{d}4!

Shouldeering off the white king.

3 \textcolor{red}{f}4

If 3 \textcolor{red}{h}3 \textcolor{red}{c}4 4 \textcolor{red}{e}4 \textcolor{red}{b}3 or 3 \textcolor{red}{b}1 \textcolor{red}{c}3 4 \textcolor{red}{e}4 \textcolor{red}{b}3 = in each case.

3 ... \textcolor{red}{b}3

4 \textcolor{red}{b}1 \textcolor{red}{c}3

5 \textcolor{red}{e}3 \textcolor{red}{b}2=

B. 2 ... \textcolor{red}{c}4?

Cutting off the enemy king

White’s king is a very long way off from the action and a count reveals that the normal racing technique will draw by a tempo.

White must play \textcolor{red}{a}8 to stop the black king from shouldeering off his own and \textcolor{red}{h}8-d3, i.e. six moves, while Black takes only five to reach the dispositions of diag 7 (see also diag 12).

But White to move wins on the spot with

1 \textcolor{red}{g}5!

Now Black’s king is cut off on the third rank.

1 ... \textcolor{red}{a}4

2 \textcolor{red}{g}7

And Black is completely helpless since if ...

2 ... \textcolor{red}{b}3? 3 \textcolor{red}{e}4 \textcolor{red}{c}4 4 \textcolor{red}{c}1+ is even simpler for White.

3 \textcolor{red}{e}4 \textcolor{red}{c}3

4 \textcolor{red}{e}3 \textcolor{red}{b}3

If 4 ... \textcolor{red}{c}2 hoping for 5 \textcolor{red}{h}8? \textcolor{red}{b}3 6 \textcolor{red}{c}8+ \textcolor{red}{d}1!= White plays 5 \textcolor{red}{h}2+ \textcolor{red}{c}3 6 \textcolor{red}{h}8 \textcolor{red}{b}3 7 \textcolor{red}{c}8+ transposing into diag 7 with White to move.

5 \textcolor{red}{c}1+ \textcolor{red}{b}2

Or 5 ... \textcolor{red}{b}4 6 \textcolor{red}{d}3 \textcolor{red}{b}2

7 \textcolor{red}{b}1 \textcolor{red}{b}3 8 \textcolor{red}{d}2 \textcolor{red}{c}2 etc.

6 \textcolor{red}{d}2

6 \textcolor{red}{c}8 also wins.

6 ... \textcolor{red}{a}2

And here White must avoid the stalemate trap 7 \textcolor{red}{c}3? \textcolor{red}{b}2

8 \textcolor{red}{e}2 \textcolor{red}{a}1! 9 \textcolor{red}{x}b2, but instead 7 \textcolor{red}{c}8 \textcolor{red}{b}2 8 \textcolor{red}{a}8+ and 9 \textcolor{red}{b}8! or indeed 7 \textcolor{red}{h}1 both win very easily.

2 ... \textcolor{red}{a}3

3 \textcolor{red}{g}3

Or indeed 3 \textcolor{red}{h}6 \textcolor{red}{a}2 4 \textcolor{red}{g}1 - a1x\textcolor{red}{a}2.

3 ... \textcolor{red}{a}2

4 \textcolor{red}{a}3 and wins

Black to play in diag 10 must give first priority to getting his king beyond the third rank.

1 ... \textcolor{red}{b}5!

Not 1 ... \textcolor{red}{a}4?? 2 \textcolor{red}{g}5!. But now he draws easily. Note that if

2 \textcolor{red}{g}4 \textcolor{red}{a}4

3 \textcolor{red}{g}7 \textcolor{red}{a}3

4 \textcolor{red}{f}6 \textcolor{red}{a}2

5 \textcolor{red}{g}1 \textcolor{red}{b}4=

i.e. Cutting off only works if the black king is on the third rank or further back.
Rook v Pawn(s)

Zugzwang
This is not a very frequent motif in these endings. But it can occur when the rook is on the pawn's queening square.

Réti 1928
White must retreat his rook. If 1 \( \text{h}4 \text{ d}4 \) 2 \( \text{h}5+ \text{ e}4 \) 3 \( \text{d}6 \) 3 White draws by a tempo - White requires five moves to control d1 twice. Black needs only four to escort his pawn home. That leaves:

A.

1 \( \text{d}1 \)
The most "natural" move, but incorrect.
2 \( \text{d}7 \) \( \text{d}5! \)
White is in zugzwang! If 3 \( \text{e}7 \) \( \text{e}5 \) or 3 \( \text{c}5 \) \( \text{c}7 \) doesn't help, and if the rook leaves the d-file Black plays simply 3 ... \( \text{d}3 \). So
3 \( \text{d}2 \) \( \text{e}4 \)

Or 3 ... \( \text{c}4 \) 4 \( \text{e}6! \) etc. White must always attack with his king on the opposite side of the pawn to Black's if possible.

B.

1 \( \text{d}2!! \)
1 \( \text{d}3! \) has the same effect.
2 \( \text{d}4 \)
2 \( \text{d}4! \) Now it is Black who is in zugzwang
2 \( \text{d}7!! \) \( \text{c}4 \)
Or 3 ... \( \text{c}4 \) 4 \( \text{e}6! \) etc.

Special Cases with a Rook's Pawn
Although this position is very similar to diag 7 there is one important difference.
White to play still wins very easily viz. 1 \( \text{b}8+ \text{a}2 \) 2 \( \text{c}2 \) \( \text{a}1 \) 3 \( \text{b}3 \) \( \text{a}2 \) 4 \( \text{b}8 \) \( \text{b}1 \) 5 \( \text{b}1 \) mate!

Black to move:

1 ... \( \text{b}2! \)
In diag 7 Black could also simply push the pawn, but here that loses: 1 ... \( \text{a}2? \) 2 \( \text{b}8+ \text{a}3 \) 3 \( \text{c}2 \) \( \text{a}1\downarrow+ \) 4 \( \text{c}3 \) \( \text{a}2 \) 5 \( \text{b}7 \) and wins.
2 \( \text{b}8+ \)
If 2 \( \text{h}2+ \) \( \text{b}3\downarrow= \)
2 ... \( \text{c}1! \)
But not 2 ... \( \text{a}1? \) 3 \( \text{c}2 \) \( \text{a}2 \)

Diagram 12a
Here Black loses even with the move: 1 ... \( \text{b}2 \) (or 1 ... \( \text{a}2 \) 2 \( \text{b}8+ \) \( \text{a}3 \) 3 \( \text{c}2! \) \( \text{a}1\downarrow+ \) 4 \( \text{c}3 \) \( \text{a}2 \) 5 \( \text{b}7 \) wins) 2 \( \text{b}8+ \) \( \text{a}1 \) 3 \( \text{c}2 \) \( \text{a}2 \) 4 \( \text{b}3 \) etc.
Rook v Pawn(s)

Attacking from behind

White to play wins easily with 1 \( \text{d}6 - 4 \text{d}3 \) and, exactly as in diag 12, 5 \( \text{b}8+ \). Black cannot oppose this since the pawn is not far enough advanced for him to shoulder off the white king.

Black to move must choose between 1 ... \( \text{b}4 \) and 1 ... \( a4 \).

A.

1 ... \( a4! \)

This draws fairly comfortably, viz:

2 \( \text{d}6 \)

If 2 \( \text{h}5+ \text{c}4 3 \text{c}6 \text{a}3 4 \text{h}4+ \text{b}3 5 \text{b}5 \text{a}2! \) the white king is too far behind the pawn.

2 ... \( a3! \)

But not 2 ... \( \text{c}4? 3 \text{h}4+ \text{b}3 4 \text{c}5 \text{a}3 5 \text{h}3+ \) and wins as in variation B.

3 \( \text{d}5 \text{b}4 \)

4 \( \text{d}4 \text{a}2 \)

Or 4 ... \( \text{b}3 5 \text{h}3+ (5 \text{d}3 \text{b}2! \) in diag 12) 5 ... \( \text{b}2 6 \text{c}4 \text{a}2 7 \text{h}2+ \text{a}3! = \)

5 \( \text{a}8 \text{b}3 \)

6 \( \text{d}3 \text{b}2 = \)

B.

1 ... \( \text{b}4? \)

This method of attacking from behind and then forcing underpromotion works only against a rook's pawn.

For if we move the final position one file to the right (ignoring the rook) then the knight has sufficient room to draw (see diag RN1) - it can go to a3.

Finally note that with White to move his king must be only two ranks behind the black pawn.

Imprisoning the black king

White to move wins with:

1 \( \text{b}8! \)

As a result, despite his bad king position he wins by a tempo: 1 ... \( \text{a}3 2 \text{g}7 \text{a}4 3 \text{f}6 \text{a}2 4 \text{c}5 \text{a}3 5 \text{d}4 \)

\( \text{a}1 \text{c}3 \text{a}2 7 \text{b}3 \text{bl} 8 \text{h}8 \text{a}1\text{c}+ 9 \text{c}3 \text{a}2 10 \text{b}8 \text{etc.} \)

Diag R95 and R96 variation B show this appalling black king position arising in practice.
Rook v Pawn(s)

Rook v Two Pawns

**Connected Pawns**

- **a)** If the “white” king can get in front of the two pawns then he will win easily, e.g. diag 15.
  - Here White to move must avoid the trap 1 $\text{fxe3? g2!!}$, but he simply plays
    1 $\text{f1!! f4}$
    - Or 1 $\text{e2+ 2 g1 g2 3 h3 f2 h4 e8}$ (or 5 $\text{g1}$) 5 ... $\text{g4}$ 6 $\text{f8}$ zugzwang and wins.
    2 $\text{e7}$

**Zugzwang.**

- 2 ... $\text{e2+}$
  - Or 2 ... $\text{f2}$ $\text{g2}$ zugzwang and wins at once.
    3 $\text{f2}$ $\text{g4}$
    4 $\text{f7}$
  - Zugzwang and wins.
  - Black to move obviously cannot achieve much, e.g. if 1 ... $\text{f4}$ 2 $\text{f1}$ or 1 ... $\text{f2}$ 2 $\text{g8+}$ $\text{g1}$ 5 ... $\text{g4}$ 6 $\text{f8}$ zugzwang.

In the absence of both kings, two connected passed pawns beat a rook if they are both on the sixth rank. However, if the rook can prevent them both reaching the sixth rank then it wins.

- In diag 16 Black to move wins easily with either 1 ... $\text{g2}$ or 1 ... $\text{f3}$, i.e. 1 ... $\text{g2}$ 2 $\text{g6}$ $\text{f3}$ followed by 3 ... $\text{f2}$. Or:
  1 ... $\text{f3}$
  - This is the fundamental type of position.
    2 $\text{g6}$
    - If 2 $\text{f6}$ $\text{g2!}$ or 2 $\text{a3 f2/g2}$ wins.
    2 ... $\text{f2}$
    3 $\text{f6}$ $\text{g2}$ and wins

But White to move wins with:

1 $\text{g6!!}$

Immobilising both pawns.

- Black must bring up his king to try to help.
  1 ... $\text{d7}$
  2 $\text{g1}$ $\text{g2}$
  - Or 2 ... $\text{e6}$ 3 $\text{xf4}$ and 4 $\text{g4}$ etc.
    3 $\text{xf4}$ $\text{e6}$
    4 $\text{g5!!}$ and wins

Diagram 16a

Here Black draws even when White is to move (of course, Black to move still wins easily).
Rook v Pawn(s)  

Shapiro 1914

Despite the two pawns on the sixth, White actually wins here since he can create threats against the black king and sometimes win a pawn with check.

1 \(\text{d}2+ \text{b}1\)

If 1 ... \(\text{a}3 2 \text{d}3+\) and \(\text{axg}3\), or 1 ... \(\text{a}1 2 \text{b}3\) and \(\text{d}1\) mate!

2 \(\text{c}3! \text{c}1\)

If 2 ... \(\text{h}2 3 \text{d}1+ \text{a}2 4 \text{h}1!\) or 2 ... \(g2 3 \text{d}1+ \text{a}2 4 \text{h}1!\) in each case with decisive zugzwang.

3 \(\text{h}1\) 4 \(\text{a}2\) \(\text{d}1\)

3 ... \(\text{b}1 4 \text{e}2 \text{h}2/g2 5 \text{e}1+ \text{a}2 6 \text{h}1/\text{g}1\) and wins.

4 \(\text{d}3 \text{c}1\)

5 \(\text{e}3! \text{h}2\)

Or 5 ... \(g2 6 \text{f}2\) etc.

6 \(\text{a}1+ \text{c}2\)

7 \(\text{h}1!\) \(\text{c}3\)

8 \(\text{f}3\) and wins

---

Defence by Perpetual Attack

Keres - Eliskases  
Nordwijk 1938

Black to play would obviously like to win easily with 1 ... \(\text{c}5\). But with White to move the pawns are unstoppable. Nevertheless Eliskases was able to draw by a very typical manoeuvre. Black pursues the white king round the board always by threatening mate and checking. As a result, White simply has not got time to promote his pawns.

A.

The game continued:

1 a7 \(\text{a}2\)

2 b6 \(\text{c}3!\)

3 \(\text{b}1\)

The only way to make progress. If 3 \(\text{d}1\) Black follows the white king with his own 3 ... \(\text{d}3 4 \text{e}1 \text{e}3 5 \text{f}1 \text{f}3 6 \text{e}1 \text{e}3\) etc.

3 ... \(\text{a}6\)

4 b7 \(\text{b}6!\)

5 \(\text{c}1\)

Or 5 \(\text{a}1 \text{a}6\).

5 ... \(\text{h}6!\)

And here the draw was agreed. For if 6 \(\text{d}1 \text{d}3 7 \text{e}1 \text{e}3 8 \text{f}1 \text{f}3 9 \text{g}1 \text{g}6+! 10 \text{h}2 \text{h}6+ 11 \text{g}1 \text{g}6+ 12 \text{f}1 \text{h}6! 13 \text{e}1 \text{c}3\) etc.

---

B.

White could also have tried:

1 b6

... but Black can still draw:

1 ... \(\text{c}3\)

2 \(\text{d}1 \text{d}3\)

3 \(\text{e}1 \text{e}3\)

4 \(\text{b}7\)

4 a7 \(\text{a}2\) would soon transpose back into A above.

4 ... \(\text{h}2!\)

5 \(\text{f}1\)

If 5 \(\text{d}1 \text{d}3 6 \text{c}1 \text{c}3 7 \text{b}1 \text{h}1! 8 \text{a}2 \text{h}2+ 9 \text{a}3 (9 \text{b}1=) 9 ... \text{h}6 (or 9 ... \text{h}1=) 10 \text{a}4 \text{a}6+ 11 \text{b}5 \text{a}1=.

5 ... \(\text{f}3\)

6 \(\text{g}1 \text{h}8!\)

But not 6 ... \(\text{g}2 7 \text{a}7 \text{b}1+ 8 \text{h}2 \text{b}2+ 9 \text{h}3 \text{b}1 10 \text{b}8t;\) and wins.

7 a7 \(\text{g}8+\)

8 \(\text{h}8+\)

9 \(\text{g}8+\)

10 \(\text{f}1 \text{h}8\)

11 \(\text{e}1 \text{e}3\)

12 \(\text{d}1 \text{d}3\)

13 \(\text{c}1 \text{c}3\)

14 \(\text{b}1 \text{h}1+\)

15 \(\text{a}2 \text{h}2+\)

16 \(\text{a}3 \text{h}1\)

17 \(\text{a}4 \text{c}4\)

18 \(\text{a}5 \text{c}5=\)

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c) The "white" king is much better placed than the black king.

Tarrasch - Janowski
Ostend 1907

Here White's king is supporting his pawns whilst the black king is rather badly placed. Obviously only White can hope to win. Tarrasch played:

A. 1... g6

Although this looks natural, White could have won more simply with 1... e6, e1+ 2... f7, d5; 3... g6, g1 (or 3... e5, 4... g7!; f5 5... f7, e6 6... g8) 4... g5! (not 4... g7, e5=) 4... e6 5... f7 and wins.

1... e1+!

2... d6, g1!

In the game, Janowski played 2... d1+? 3... e7, e1+ 4... f7, 1-0 in view of 4... d5 5... g7, g1 6... g8; etc.

3... g7

If 3... f7? xg6+, 4... e5, g5+ 5... e4, g1!= as in B(i) below.

3... d4!

4... c6!

Not 4... f7, g6+!; and if 4... e6, e4 5... e7? (5... d6l) 5... e5=.

4... c4?

5... d7!

6... e8!; e6

7... f7, a1

8... f8+, and

9... g8+wins

B. (Diagram 19a)

In diag 19 Black has two ways to draw:

i) 1... g1!

2... f7

If 2... f5? d5 is already almost winning for Black! (see the note to 3... g1! in diag 19a).

2... xg5+

3... e4

Or 3... e6, g6+ 4... e7, g7=.

3... g1!

And now White must acquiesce in a draw with 4... e5 since if 4 f8? e1+ and 5... f1+ wins for Black!

ii) 1... e5

2... e6

Or 2... g6, e1+ 3... f5, d5!

(but not 3... d6? 4... g7, f1+ 5... g6, g1+ 6... f7, e5 7... e7, g2 since White can make no progress.

2... e1+!

3... f7

This is forced eventually. If 3... d7, f1 (or 3... d1+) 4... e7, e1+ 5... f8? (5... f7) 5... g1=.

3... g1

4... g6, d6

5... g7

Or 5... g7, e5 (as in the note to 2... e6).

5... f1!

6... f7, e7=

With White to move this is variation B(ii) directly above. But Black to move wins:

1... e1+

2... f5, d6

3... g6

Or 3... g6, f1+ 4... g5, e6 etc.

3... g1!

But not 3... e6 4... g7, f1

5... g6, xf6 6... h7, f1 7... g7, h1+ (7... f6 8... g8, g1) 8... g8!, g1 (or 8... f6 9... f8, a1 10... g8, g1) 9... f8!=.
Rook v Pawn(s)

4 \( \text{gf}5 \)

Or 4 f7 e7 and wins.

4 ... \( \text{d}7 \)

5 \( \text{g}6 \)

and wins

(cf diag 15).

Diagram 19c

Black to play just manages to draw with

1 e\(a\)l+ 

2 \( \text{d}6 \)

Isolated Pawns

a) The rook trying to win

This will usually be the case unless the pawns are very far advanced. White must concentrate on the more dangerous of the enemy pawns since one passed pawn unsupported by the king is not very dangerous.

Benko 1980

Here White must get his rook back into play as fast as possible so:

1 \( \text{b}7+! \)

If 1 \( \text{xc}6? \) a5 2 \( \text{b}6+ \) c3

3 \( \text{a}6 \) b4=. It takes Black only three moves to get c3, a3 and White five to get his king to d3 - hence Black even has a spare move, cf diag 12.

1 ... \( \text{c}3 \)

2 \( \text{c}7 \) a5

3 \( \text{a}7! \)

Gaining a vital tempo (cf diag 8).

3 ... \( \text{b}4 \)

4 \( \text{d}6! \)

It is vital to leave Black with his c-pawn! If 4 \( \text{xc}6? \) we merely reach diag 12 with Black to move when he defends with stalemate.

4 ... a4

5 \( \text{e}5 \) a3

6 \( \text{d}4 \) \( \text{b}3 \)

7 \( \text{d}3 \) \( \text{b}2 \)

8 \( \text{d}2 \) a2

9 \( \text{b}7+ \) a3

With the black c-pawn still alive 9 ... \( \text{a}1 \) fails trivially to 10 \( \text{c}2 \) c5 11 \( \text{h}7 \) c4 12 \( \text{h}1 \) mate.

10 \( \text{c}2 \) a1+

11 \( \text{c}3 \) a2

12 \( \text{b}2+ \) a3

13 \( \text{b}6 \) a2

14 \( \text{xc}6 \) b1

15 \( \text{b}6+ \) c1

16 \( \text{b}2 \) and wins

(Indeed a game - Sultan Khan - Michell, Scarborough 1930, ended in Black's resignation in this position - play was identical from 12 \( \text{b}2+ \) onwards.)
This is another example of avoiding a stalemate and also of the order of priorities in this sort of ending. Black’s main task here is to get his king into a decent position - not to take “irrelevant” material.

A.

The game continued:

1 h5

Black now wrongly took on c4: 1 ... ♘xe4? and a simple count shows that Black can now do no better than to reach diag 12 (with colours reversed) but with the opponent to move. Rather incredibly however, Black did succeed in winning: 1 ... ♘xc4? 2 h6 ♘d5 3 ♘f5 ♘f1+ 4 ♗g6 ♘e6 5 ♘g7 ♘g1+ 6 ♗f8 ♘f1+ 7 ♘g7 ♘f7+ 8 ♗g8?? (8 ♘g6=) 8 ... ♘f6 9 h7 ♘g7+ 0-1

But the right move wins:

1 ... ♗h1

Or 1 ... ♘d4 2 h6 ♗h1.

2 ♗g5 ♘d4!

3 ♗g6

3 h6 ♘e5 transposes back to the text. Or if 3 c5 ♘xc5! wins by a tempo - the king reaches e7 in only two more moves:

3 ... ♗e5

4 ♗h6

Or 4 c5 ♘e6 5 c6 ♘g1+ 6 ♘h7 ♘f7 and wins.

4 ... ♗e6

5 ♘h7

If 5 c5 ♘g1+ 6 ♘h7 ♘f7 etc, and 5 ♗g7 ♘e7 6 ♘h7 ♘g1+ 7 ♗h8 (7 ♗h6 ♘f7 is the main line) loses due to the extra c-pawn.

5 ... ♘g1+

6 ♘h6 ♘f7

B.

White can also try:

1 c5 ♘d4!

He must attend to his king first. If 1 ... ♘f1+? 2 ♗e5! ♘b4 3 c6! ♘c1 (or 3 ... ♘f8 4 ♘h5 ♘b5 5 ♘c7 ♘c6 6 ♘h4=) 4 ♘f6 (also 4 h5= but not 4 ♘d6? ♘b5 and wins) 4 ... ♘xc6+ 5 ♘g7+ (or even 5 ♘g5=).

Or if 1 ... ♗h1 either 2 ♗e5 or 2 c6 draws.

2 c6 ♘f1+!

Driving away the enemy king to make room for his own. Not 2 ... ♗h1? 3 c7 ♘h4+ 4 ♘f5 ♘h8 5 ♘g6=; nor 2 ... ♘c1 3 h5 ♘xc6 4 ♘g5 ♘e5 5 h6= And 2 ... ♘d5 is the right idea but is inefficient viz. 3 c7 ♘c1 4 ♘f5 ♘xc7 5 ♘h5 ♘f7+ 6 ♘g6 ♘e6 7 h6 ♘f1 8 ♘g7= (cf diag 12).

3 ♘g5 ♘e5

4 c7

Or 4 h5 ♘g1+ 5 ♘h6 ♘f6l.

4 ... ♘g1+!

Forcing White to obstruct his own pawn. Not 4 ... ♘c1 5 h5 ♘xc7 6 h6=.

5 ♘h6 ♘c1

Also 5 ... ♘g8 wins.

6 ♘g6 ♘c6+!

Gaining yet another tempo - though 6 ... ♘xc7 7 h5 ♘c6+ also wins.

7 ♘g5 ♘xc7 and wins

I reiterate: The most important thing about this example is that Black must attend to his king first.
b) The pawns are trying to win

White wins easily after:
1 ♗g6 ♖c8
2 ♗f6

Of course not 2 ♗h7?? ♗xc7=.
1 ...
3 ♗e6

And the black rook has nowhere to go. White threatens 4 ♗d7 and if 3 ... ♗g8 4 ♗f7! wins.

But here the pawns are far enough apart for the rook to be able to deal with them:
1 ♗g6 ♖b8
2 ♗f6 ♖g2
3 ♗e6 ♖f3
4 ♗d6 ♖g8!
5 ♗e6 ♖b8=.

Since White cannot threaten both ♗c7 and ♗f7 simultaneously it's only a draw.

Berger and Kockelhorn 1888

Obviously with pawns so close together there is no hope in putting the rook on the first rank.

But Black to move can force the draw by a policy of harassment:
1 ... ♗d2+
2 ♗c7 ♖a2
3 ♗b6 ♖b2+

Whenever the white king emerges onto an open file, Black checks it. If it hides in front of a pawn he attacks the other one with his rook.
4 ♗a7 ♖c2=

But White to move wins:
1 a6
1 c7 ♗d2+ 2 ♗c8 ♖a2 3 a6! transposes into the main line.
1 ...
2 ♗c8 ♖a2
3 c7

Actually 3 ♗b7 wins slightly more simply: 3 ...

For reference:
Le Roi ne recham [1888]

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Rook v Pawn(s)

Doubled Pawns
These are pretty unlikely in practice.

*Tarrasch 1911*
White to play draws since his rook can get to the first rank with his king sufficiently near the pawns.

1. $\text{c7}+$ $\text{d4}$
   If 1 ... $\text{b4}$ 2 $\text{b7}+$ $\text{c5}$ 3 $\text{b1}$ $\text{d4}$ 4 $\text{g2}$ $\text{c3}$ 5 $\text{f2}$ $\text{c2}$ 6 $\text{e3}$!

2. $\text{d7}+$ $\text{e4}$
3. $\text{e7}+$ $\text{f5}$
4. $\text{f7}+$ $\text{e5}$!

Not 4 ... $\text{e6}$?? and Black actually loses: 5 $\text{f1}$ $\text{e5}$ 6 $\text{g2}$ $\text{d4}$ 7 $\text{f2}$ $\text{c3}$ 8 $\text{e3}$ $\text{c2}$ 9 $\text{f2}$! etc.

5. $\text{f1}$ $\text{e4}$
If 5 ... $\text{d4}$ 6 $\text{g2}$ $\text{c3}$ 7 $\text{f2}$ $\text{c2}$ 8 $\text{e3}$!! as above in the note to 1 ... $\text{d4}$.

6. $\text{g3}$
Also 6 $\text{g2}$ $\text{e3}$ 7 $\text{f3}$+ $\text{e2}$ 8 $\text{f2}$+ $\text{d1}$ 9 $\text{f8}$! draws (Cheron).

6 ... $\text{e3}$
7 $\text{h1}$ $\text{e2}$
8 $\text{h2}$+ $\text{d1}$
9 $\text{h8}$ $\text{e2}$
10 $\text{h2}!$=

But not 10 $\text{e8}$? when the black king can hide on gl.

**Diagram 24a**

*Berger*
Here, however, Black wins easily by hiding his king on h1: 1 $\text{c7}+$ $\text{d4}$ 2 $\text{d7}+$ $\text{e5}$ 3 $\text{g2}$ $\text{d4}$ 4 $\text{f2}$ $\text{c3}$ 5 $\text{e3}$ $\text{c2}$ 6 $\text{f2}$! etc.

Rook v Three or More Pawns

Since there are several possible pawn structures, many positions with this material balance are "un-theoretical". We can distinguish the following three cases:

A. Rook vs Three connected passed pawns. There is a considerable body of theory on this; see diags 25-29.

B. Two of the pawns are connected, the third is isolated. Normally the rook should try to deal with the more dangerous connected pawn first, see diag 30.

C. All pawns isolated (or doubled). Often a third isolated pawn unsupported by its king will make little difference. If his king is well placed, then the player with the rook can often hope to win. See diag 31.

**Diagram 25**

*Van der Lasa 1943*

1 $\text{f2}$ $\text{g6}$
2 $\text{f4}$ $\text{f6}$
3 $\text{e2}$ $\text{f7}$
4 $\text{e5}$

Not 4 $\text{xf5}!!$ g3 and Black wins!

4 ... $\text{g6}$

*En haut, dans la course...
Vive la fin..."*
Rook v Pawn(s)

5 a5 h6
6 a6+ g7
7 f6 f7
8 h6 g7
9 h5

Not 9 g5? f4 10 h4 f3! (10 ... g3? 11 xf4 g2 12 g4+ wins) and now Black wins.

9 ... g6
10 g5+
10 xf5? h2.
10 ... h6
11 g8
11 xf5? h2 12 f8 g7! wins.
11 ... h7
12 d8 g7!

But not 12 ... g6? 13 f8 g7! (zugzwang) 13 ... h6 14 f6+! and wins (cf diag 26).

13 d6 f7!

Not 13 ... h7? 14 g5 g7 (14 ... h2 15 h6+) 15 d7+ g8 16 f4! followed by d5xf5 and wins.

14 h6 g7
15 h5 g6=

White is merely going round in circles. This position has already arisen after Black’s ninth move.

Diag 25 is a fundamental position for Black to aim for. This type of position is also drawn if the position is “moved over” one or more files (e.g. e3, d1 v e5, d5, e4, f3 is also a draw).

In this position, however, the white rook has penetrated to an ideal post behind the black pawns. (The reader can check through diag 25 again to verify that starting from that less favourable position the rook can never reach such a good square.) Black to move is in zugzwang and loses quickly:

1 ... h7
Or 1 ... h5 2 f4 h6 3 xf5.
2 g5 h6
3 xf5 h2
4 f1 g3
5 f3 and wins

But with White to move, the position is much more difficult. (This position used to be thought drawn in this case, but Kopaev found the win.)

1 e2!

If 1 f4? h7 is a position from diag 25 (after 11 ... h7).

After 2 g5 h6 3 g8 h7

4 d8 g7!, as we saw, White can never again manoeuvre his rook to a sufficiently favourable square.

1 ... h5

Now, however, Black cannot disturb the rook since if 1 ... h7 2 g5 h6 3 xf5 wins – the white king is much better defensively on e2 than f4.

2 f2 h4
If 2 ... h6 3 e3! zugzwang and wins. And 2 ... f4 leads to the main line.

3 g7 f4

Forced since if 3 ... h5 4 e3 h6 5 g8 (zugzwang) etc; or 3 ... g3+ 4 xg3 h2 5 g8 wins.

4 h7+ g5
5 g1!

Although Black’s pawns are slightly further advanced they are now much less secure - both the g- and f-pawns are loose. White now forces the win by transferring his king to h2 in front of the most dan-
Rook v Pawn(s)

Given the critical nature of the play in diags 25 and 26 it is hardly surprising that here White wins easily.

1... f3 2... h1 3... f3
4... g2+ 5... h2
6... f2
7... f7+ and wins.

White to play draws with:
1... h1!
Not 1... h1? f3+ 2... h1... h3 and wins.
2... f3
3... h3 2... f3
4... h4 3... g5
5... h7

or... stalemate.

In this practical position Black's only real chance is to aim for diag 25. For if he abandons the f-pawn then White's king will simply be too close. However, I think that White can just manage to frustrate this plan, e.g.
1... h4
2... g5
If 2... g5 simply 3... xf7 wins: 3... g4 4... d2 h3
5... e2... g3 6... f1... h2 (6... h2
7... h7 is simple) 7... f2 g5
8... g7... h1 9... g3 h2
10... a7 or
10... h7 and wins.
He must embarrass the black king. If 4 e4 f5 5 b8 g7 and White cannot prevent Black from reaching move 25.

Or 4 e4 f5 + 5 e5 h3! if 5 g4? 6 b6+ g5 7 b8! and wins) 6 b6+ h5 7 xf5 h2 8 b1 (or 8 b8 h4) 8 h4=.

Maybe White can also play 4 b8 aiming at once for the g8- or h8-square. But then the check seems more forcing.

4 f5

If 4 ... f6 5 e4! h5 6 f3 f5 7 f6 wins easily. And 4 ... h5 5 e3 g4! transposes to the main line - 5 f5 if 6 f3 is much worse for Black. While of course if the black king retreats, 4 ... g7, then 5 e4! wins.

5 e3 g4 (29a)

If 5 ... g4? 6 b5++; or 5 ... h3 6 f3 g4 + 7 g3 g5 8 h8! f5 9 f8 g6 10 f4 zugzwang and wins.

6 g2!

As usual, it is correct to improve the king’s position first. If 6 f6? White wins the f-pawn but Black’s king gets very active. As a result it would appear to me that Black draws, viz. 6 ... g3 7 e2 and:

a) 7 ... h3? 8 f1 h2 (8 ... h2 9 f2+! h1 10 xf7 wins) 9 h6 (now the pawn is doomed and Black soon runs out of moves) 9 g4 10 h8 f5 11 h7 f4 12 h8 f3 13 h7 f2 (else White reaches a position like diag 15) 14 h8 f3 15 xh2 g3 16 h3! (interestingly this position is zugzwang - White to move would draw with the only move 16 h2!) 16 ... g4 17 h8 f3 18 f8+ e3 19 g2 e2 20 e8+ d2 21 f1! and 22 g8, 23 xg3 etc.

b) 7 ... g2! shouldering off the white king: 8 f2+ g1 9 f5 (if 9 f3? g4++; or 9 f7 h3 10 f1+ g2 11 f2+ g3! draws similarly to diag 12 - but not 11 ... g1! 12 f3) 9 g4 10 f4 f5! 11 xf5 h3 12 g5 h2 13 xg4+ h1=.

6 ... f5

But now if 6 ... h3 7 f6 does win: 7 h2 8 f7 g4 9 g7 g3+ 10 f3 g1 (10 ... h3 11 g4 g2 12 g8! or 10 ... h1 11 g4 g1 12 xh4 etc.) 11 g4 g1 f1 12 a4! g1 13 xh4 g2 14 g4?! h1 15 h4+! g1 16 g3 f1 17 f4+ g1 18 f8 h1 19 h8+ g1 20 h2 and wins of the end of diag 26.

And prevarication by 6 ... f5 does not help at all, e.g. 7 b6 e5 8 g2 f5 9 h3 etc, similar to the main line.

7 g2 h5

If 7 ... f4 8 b5 h5 9 f3 h3 10 b8 etc. Or 7 ... f4 8 h3 e3 9 g6 f4 10 g4! f2 11 a6 wins.

8 f6 g4

9 f8 e4

10 h3 e2

11 g8 f4

12 g7 zugzwang and wins

Although the detail of diag 29 is rather complex, in essence White’s plan is very simple.

He forces the black king to make a choice, either:

a) It retreats, in which case it cannot support its pawns
and so White wins easily. 

b) It advances. In that case the king, although quite active, is not really dangerous to White. But being so far advanced it cannot easily guard the first rank. Therefore White can force his rook to the favourable squares behind the pawns and thus win.

Two pawns Connected, The
Third One Isolated
Reti 1929

Obviously, White is on the defensive. Black is threatening 1 ... g3 after which it would be impossible to deal with all the pawns - or indeed 1 ... f3.

So White’s move must be a choice between 1 f8 and 1 g8, but which one? The answer is provided by diag 22. There we can see that White will draw if Black is left with b- and g-pawns, but b- and f-pawns would win. Therefore: 
1 g8!

But not 1 f8? f3 2 f4 b4 3 xg4 b3 4 g1 (checks don’t help - the black king simply approaches the rook) 4 f2 5 f1 b2 6 g7 d4 7 f6 d3 and wins.

Isolated Pawns
Tartakower - Anon 1933

Although he has three pawns, Black is lost since White can dominate Black’s king with his own king. Eventually Black will be forced to abandon the f-pawn. But if White is careful, even then the black king will remain out of play.

1 b1 g4
2 d2 f3
3 a1 c4

If 3 ... g2 4 e2 and obviously he should advance the queenside pawns before trying to support them with his king. Not 3 ... e4 4 e2 and 5 xa5 winning easily.

4 c1 a4
5 a1 c3+

This abandons d3 to the white king thus making it harder for the black king to reach the queenside. However, 5 ... a3 does also lose, e.g.

6 c1 a2 7 a1 e4 8 e2 c3
9 xax2 f1+ 10 xf1 d3 11 e1 c2 12 a3+ and 13 d2 etc.

6 d3 c2
7 d2?

There was no point in relinquishing this excellent square. Simply 7 c1 was better.

7 ... a3
8 f1 a2
9 c1??

9 d3! was correct: 9 g2 10 e2 g3 11 a1 g2 12 c1 g3 13 f1 zugzwang and wins as in the game.

9 ... e4!

Now is the time to transfer the king towards queenside. With three strings to his bow, Black can just draw. Instead in the game he played 9 g2?? 10 e2 g3 11 f1 f4 (or 11 ... g2 12 xf2+ 223
and 13...\(f1\) 12...\(xf2\) \(e4\) 13...\(e2\) 1-0.

10...\(e2\)

If 10...\(xc2\) \(e3\) draws easily - the a-pawn is already superfluous. Or 10...\(f1\) \(d4\) (not 10...\(f3??\) 11...\(d3\)).

10... \(d4\)

11... \(d2\)

Practical Examples.
Steinitz - Gunsberg
9th Match Game 1890
The white king cannot hide from the black rook for if 1...\(h6\) \(g5\). White is therefore definitely going to lose his rook. And, since he can win the g-pawn he will get an ending of rook vs pawn.

But which particular ending of rook vs pawn should White aim for? And conversely, what should Black try to get?

This is a very difficult practical question. It's all very well analysing an ending of rook vs pawn on a board during the adjournment or even at home later. But during a game one may have to make snap decisions as to which ending is drawn and which is won or lost (depending on which side you are playing).

In order to facilitate these decisions, it's helpful to have some knowledge of theoretical positions (diags 5 and 7-12 are especially important); and then counting as explained in the text there may well ease calculation.

White played:

1... \(a4+\)

If 1...\(xg6\) \(gl+\) 2...\(f6\) \(al\) + 3...\(xa1\) \(xal\) 4...\(h5\). Now the attempt to reach diag 12 fails by a tempo - it will be

White to move (after 4...\(h1\) \(g6\) \(e5\) 6...\(h6\) \(e6\)). But Black can use another approach effective only against rook's pawns (cf diag 13). He will attack from behind: 4...\(f4\) 5...\(h6\) \(a6+\) 6...\(g7\) \(g5\) 7...\(h7\) \(a7+\) 8...\(g8\) \(g6\) 9...\(h8\) \(f6\) and wins. 1...\(h6\) \(g5\) 2...\(hxg5\) (if 2...\(h5\) \(g4\) is too quick) 2...\(h1+\) is also clearly lost.

Steinitz therefore decided to give some checks, hoping that his opponent would move his king in the wrong direction - this was clearly the best practical chance.

A.
And in the game it paid off.
Black played:

1... \(f3?\)

2... \(a3+\)

If 2...\(xg6\) \(gl+\) 3...\(f7\) \(al\) + 4...\(xa1\) \(xal\) 5...\(h5\) \(g4\) 6...\(h6\) \(g5\) 7...\(h7\) \(a7+\) 8...\(g8\) \(g6\) still wins.

2... \(f2??\)

2... \(e4\) still won followed by a transposition into B.

3... \(xg6\) \(gl+\)

4... \(f7\) \(al\)

5... \(xa1\) \(xal\)

And with the black king so far away it is completely drawn.

B.
Instead the black king should have run towards the rook.
From the side it is well posted
Rook v Pawn(s)

Nunn - Smejkal
Lucerne 01 1982

Clearly White is going to lose his rook for the e-pawn. Here he must choose between 1 g5 activating the king first and 1 g5. In fact both lose.

A.

1 g5 f2
2 e8 e1

But not 2 ... g3 (threatening 3 ... e3) 3 xe2+ xe2 4 f5 and now the attempt to play for diag 7 fails - the black king takes four moves to reach d6. White takes only three to play g5 - g6 - f6. Whilst if 4 ... f3 5 g5, the rook interferes with the king - if it were on g2 or g1 then 5 g3! would win.

3 xe1 xe1!

Not 3 ... xe1 4 f6=. 4 f4 Trying to hold off the enemy king. If 4 f5 f2 5 g5 g3 etc.

4 ... f2
5 g5 h2!

Zugzwang.

Note that when fighting against a g-pawn it is sometimes useful to give a check on the h-file. This will drive the king in front of the pawn. (If instead White had had an f-pawn then 1 ... a1 would be met by h1 - h-file not blocking the pawn).

3 ... g1+
4 f7 a1
5 xa1 xa1
6 h5 h1!
7 g6 d7
8 h6 e7!

and wins.

But not 6 ... e6? 7 g7= see diag 12.

B.

1 g5

This was the game continuation.

1 ... f2
2 f8+ e3

Not 2 ... g2? 3 e8 e1+

4 xe1 xe1 5 g6 f3 6 g5=.

3 e8+ d3

If 3 ... f4 4 f8+ forces 4 ... e3 again.

4 h5 continues.

Clearly it cannot help to drive the black king towards f7.

4 ... e1

A vital choice. Not 4 ... g3? 5 xe2 xe2 6 g6! f3 7 f5=. As in the note to 2 ... e1 in variation A, the black rook interferes with its king.

5 xe1 xe1
6 g6

If 6 g6 gl 7 h6 e4
g7 \( \text{f5} \) 9 \( \text{h7} \) \( \text{h1+} \) etc. as in the main line.

But now Black must find just one more good move. If the obvious 6 ... \( \text{e4} \), 7 \( \text{f6} \) shoulders the king off and White can do no better than reach a drawn position of rook vs knight: 7 ... \( \text{f1+} \) 8 \( \text{e6!} \) \( \text{a1} \) 9 \( \text{g6} \) \( \text{a6+} \) 10 \( \text{f7} \) \( \text{f5} \) \( \text{g7} \) \( \text{a7+} \) 12 \( \text{f8} \) \( \text{f6} \) 13 \( \text{g8\text{\texttt{a6}}+} \). Remember that attacking from behind only works against a rook’s pawns.

Instead Smejkal played:

\[ 6 \ldots \text{f1!!} \]

\[ \begin{array}{c}
\begin{array}{|c|c|c|c|c|c|c|c|}
\hline
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
\hline
\end{array}
\end{array} \]

\text{Marco - Maroczy}

\text{Vienna 1903}

Here White’s pawns are very dangerous. But Black managed to create one passed pawn. And that one pawn, \textit{supported by the rook}, was sufficient to decide the game in his favour.

The game continued:

1 ... \( \text{d7} \)
2 \( \text{e3} \) \( \text{c8} \)
3 \( \text{b3} \)

If 3 \( \text{c5} \) \( \text{b6} \) is also good for Black. But this move loses clearly - if a trifle dramatically.

3 ... \( \text{b5!} \)
4 \( \text{c5} \) \( \text{a5} \)
5 \( \text{d3} \) \( \text{a4} \)
6 \( \text{bxa4} \)

\text{Obviously White must use his king actively. If, for example, 6 \( \text{c2} \) \( \text{a3} \) 7 \( \text{b1} \) \( \text{c6} \) 8 \( \text{a2} \) \( \text{a8} \) White soon runs out of moves and loses all his beautiful passed pawns.}

\[ 6 \ldots \text{bxa4} \]
7 \( \text{c4} \) \( \text{b8} \)

Allowing a little drama. Of course 7 ... \( \text{a3} \) 8 \( \text{b3} \) \( \text{a8} \) 9 \( \text{a2} \) \( \text{c6} \) also wins easily.

8 \( \text{d5} \) \( \text{a3} \)
9 \( \text{c6+} \) \( \text{c7} \)
10 \( \text{c5} \) \( \text{a2} \)
11 \( \text{d6+} \) \( \text{c8} \)
12 \( \text{e6} \) \( \text{a1}\uparrow \)

0-1

True, Black won by ‘only one tempo’. But really that was his choice rather than his opponent’s.
Rook v Rook

Rook and Pawn v Rook

Philidor 1777
If the defending king is in front of the pawn and cannot be displaced then the position is of course drawn.
In diag 1 White threatens to advance his king with 1 $d6$. Philidor found an excellent recipe to avoid this:

1 ... $h6!$

The white king is cut off from the sixth rank. White cannot drive the black rook away since any exchange of rooks will lead to a drawn pawn ending, e.g. 2 $c7$ $g6$
3 $c6$ $xc6$ 4 $xc6$ $e7+$. Therefore White advances his pawn.

2 $e6$
Now 3 $d6$ is a terrible threat, but 2 $e6$ removed the king's shelter from "checks from behind".

2 ... $h1!$
3 $d6$ $d1+$
4 $e5$ $e1+$
The king has no reasonable shelter from the checks so it is quite drawn.

Now let's assume that it is White to move in diag 1.

1 $d6!$ (2)
If 1 $e6? $h6+.

Lasker
White is threatening to win with 2 $a8+$ $f7$ 3 $e6+$ $f6$
4 $f8+$ $g7$ 5 $e7$ etc. There is in fact only one good defence.

1 ... $h6!$
This move stops the e-pawn's advance after 2 $a8+$ $f7$.
Alternatively:
a) 1 ... $h6+? 2 e6 and wins;
b) 1 ... $d1+? (this seems plausible but in fact the rook is misplaced on $d1$)
2 $e6$ and:
   b1) 2 ... $f8$ 3 $a8+$ $g7$ 4 $e7$ $d2$ 5 $e6$ (see diag 6),
   b2) 2 ... $d8$ 3 $a8+$ $c7$ 4 $e7$ $h2$ 5 $e6$ (cf diag 7).

2 $e6$
As mentioned above 2 $a8+$ $f7$ gets nowhere since the back rook indirectly controls $e6$. Now the black king faces a vital choice. Which way should he run? Dr Lasker pointed out that the black king should always go to the "short side of the pawn"...

There is a very important general principle here. Think of the board as cut into two by the file of White's pawn. Then there is a "long side" consisting of the a, b, c, d files, and a "short side" consisting of the $f$, g, h files.

As we shall see in a moment, Black is going to have to defend by checking from the side with his rook. As always in rook endings, the rook requires some space in which to operate.

Therefore Black's king goes to the short side leaving the rook the long side for its checks.

2 ... $f8!$
3 $a8+$ $g7$
4 $e8$
If 4 $d6 $f7!$
4 ... $a1!$
Threatening flank checks.
5 $d8$
Or 5 $d7 $a7+ 6 $c6
Actually, with the rook operating on the long side 6 ... \texttt{Ha7} is not forced. 6 ... \texttt{He2} 7 \texttt{Ee7} \texttt{Ha2} would still be good enough (cf. diag 5). But of course 6 ... \texttt{Ha1} is best.

As we shall see later, Black could have just got away with sending his king to the long side, i.e. from diag 2: 1 ... \texttt{He1} 2 \texttt{Ed6} \texttt{Ed8(?)} 3 \texttt{Ha8+} \texttt{Ec7} 4 \texttt{Ee8} \texttt{Ah1=} see diag 7 by Horwitz and Kling.

Diag 2 is rather difficult. We included it here since it arises naturally in the context of the Philidor position and is moreover fundamental in its own right. If the reader were to find it confusing, then he might find it less so if it is seen in the context of the following positions, diags 3-7.

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\textbf{Lucena}

English-speaking chess players always refer to this and similar positions as the “Lucena position” and it is spurious ly supposed to have been included by him in his manual in 1497! Actually it was first published by Salvio in 1634 and he attributed it to a certain Scipione Genovino.

No matter! In everyday chess parlance this is certainly the Lucena position and it, together with diag 1 - the Philidor position - form the fundamental theory of rook and pawn against rook.

After:

\begin{equation}
\text{1} \texttt{Eg4+} \texttt{Fh7}
\end{equation}

Or 1 ... \texttt{Ef6} 2 \texttt{Eg8}. White now has two different winning methods:

\textbf{A.}

He can bring his rook to d8:

\begin{align*}
2 & \texttt{Ed1} \\
3 & \texttt{Ha8} \\
4 & \texttt{Ef6} 4 \texttt{Fh8} \texttt{Ah2} 5 \\
\texttt{Ha6+} & (\text{not } 5 \texttt{Ee2??} \texttt{Ah8 mate})
\end{align*}

Or 3 ... \texttt{Ef6} 4 \texttt{Fh8} \texttt{Ah2} 5 \\
\texttt{Ha6+} (not 5 \texttt{Ee2??} \texttt{Ah8 mate})

\begin{align*}
4 & \texttt{Ed8} \texttt{Ee1} \\
5 & \texttt{Gd7} \texttt{Ed1+} \\
6 & \texttt{Ee6} etc.
\end{align*}

\textbf{B.}

He can “build a bridge”:

\begin{align*}
2 & \texttt{Ed6} 2 \texttt{Ed4} etc.
\end{align*}

---

\textbf{Diag 3b}

We should note here that method A only works because the rook has got room to get to d8.

In diag 3a only method B will work:

\begin{align*}
1 & \texttt{Ed1+} \texttt{Ee7} \\
2 & \texttt{Ed4} etc.
\end{align*}
Rook v Rook

Flank Checks...
A rook needs sufficient room - checking distance - in order to operate effectively.

A.
1 ... a8+ 2 d47 a7+ 3 d66 a6+ 4 d65 a5+ 5 c66 a6+ 6 b7 e6=

B.
Diagram 4a
Here the rook has insufficient room.
1 ... b8+
If 1 ... a2 2 a1+ wins easily as in diag 3.
2 d77 b7+ 3 d66 b8 3 ... b66+ 4 c7 e6 5 d7 wins.
4 c7 a8
Black seems to be safe since if 5 d7? a7+ transposes into diag 4. But White plays:
5 c1!

White is threatening to win at once with 1 a1+ after which he would quickly reach the "Lucena Position" (cf diag 3).

Black to move is able to draw precisely because his rook is on the vital a-file
/+=-
1 ... a7+
2 c77

Not 2 e8 f6; nor 2 d6 f8.

Now Black must choose a square on the a-file. In fact any move will draw except for 2 ... a6?? e.g.

And wins easily since if 5 ... e8 or 5 ... h8 6 d7 etc.
For the ending of queen vs rook which would arise after 5 axa6 e8 see diag QR2.

C.
Diagram 4b
The black king is misplaced and White therefore wins despite the good position of the black rook.
1 ... a8+ 2 d77 a7+
White even has two ways to win!
a) 3 d66 a6+ 4 e5 a8 (or 4 ... e6 5 f8+ shows the problem of the king on g8) 5 c6! g7 6 a1 b8 7 c7 and wins;
b) 3 e6 a6+ 4 e5 a5+ 5 f6 a6+ 6 g5 a5+ 7 g6 a8 8 h6 and wins.

The second method, B, is somewhat better since Black cannot even reach queen v rook.

2 ... a1
Now White has several tries
A.
3 e8+ f6 4 c7 e6! (5a)
White can make no progress since if 5 d8 a8+ or 5 f8 f1+ 6 e8 a1.
Note that if the black rook were on a6 then 5 f8 would have won - that's why 2 ... a6?? would have been a gross blunder.

B.

 toute alternative a d'enlever la ouvreur de possibilité...
 de nouveau avec la rook!...
Rook v Rook

Black is threatening to start flank checks with 5 ... Aa6+ - note the power of the a-file. Hence White has nothing better than:

5 Ae7 Af6=

C. Le Récent

3 Ab7 (or 3 Ac7)

This does not threaten anything so Black can simply pass with, e.g.

3 ... Aa2

4 Aa8+

4 Ae8+ Af6 5 e7 Aa8+ is the same as this column. Or 4 Aa6+ Af6 5 Aa7+ Aa6 in B above. Finally if 4 Aa7+ Aa8 5 e7 Af6 also leads to the column.

In contrast to diag 5, here White controls the a-file. This enables him to win but only with some difficulty. It turns out that Black to move would be zugzwang!

A. 1 ... Ac8

Here the rook is too close to White's king.

2 Aa1 Ac7+

3 Ad6 and

4 e7 etc.

B.

D. 3 Ad6 (Sc)

This is White's most cunning move. If Black now passes with 3 ... Aa2? then there comes 4 Ae8! and if 4 ... Af6 5 e7+ or 4 ... Aa8+ 5 Ad8 and 6 e7; in both cases White reaches the Lucena position.

The only defence is:

3 ... Aa8!

Preventing 4 Ae8:

4 Aa1

If 4 Ad7 Af6 (not 4 ... Aa7+? 5 Ae8! wins), or 4 Ad8 Aa7+

4 ... Aa7+

5 Ad7 Aa1=

Diag 5 can often arise from more complex rook endings and is thus rather important.

It is fiddly, since White has several tries, but it is drawn - the vital a-file provides Black with sufficient resources.

In contrast to diag 5, here White controls the a-file. This enables him to win but only with some difficulty. It turns out that Black to move would be zugzwang!

A. 1 ... Aa8

Here the rook is too close to White's king.

2 Aa1 Aa7+

3 Ad6 and

4 e7 etc.

B.

C. 1 ... Ag8

2 Af6 Af8+
1 ... \textit{tg}6 in diag 6, \textit{R} Horwitz and Kling

Although the black king is on the \textit{long} side of the pawn (cf diag 2) he can still draw with exact defence.

1 ... \textit{yh}1!

As we shall see, White threatened to win with 2 \textit{gh}f7 so passing with 1 ... \textit{ge}2? would have lost.

2 \textit{gh}f8

Or 2 \textit{gh}f7 \textit{gh}b7+ 3 \textit{gg}6 \textit{yh}1=.

2 ... \textit{yg}1!

The only move, returning the rook to its former post. If, for example, 2 ... \textit{gh}h6+? 3 \textit{gg}e7 \textit{yh}7+ 4 \textit{gf}7 \textit{yh}1 5 \textit{eh}6 would win.

3 \textit{ge}8

Or 3 \textit{gg}f6 \textit{gh}d7.

3 ... \textit{yg}h1=.

White to move:

1 \textit{ff}f7! \textit{yh}1

If 1 ... \textit{gg}d7 2 \textit{eh}6+; or 1 ... \textit{yh}h1+ 2 \textit{ge}7 \textit{hh}1 3 \textit{gg}f8.

2 \textit{gg}8

Not 2 \textit{eh}6? \textit{gh}h7+ 3 \textit{gg}6 \textit{yh}h1.

2 ... \textit{gh}h7+

3 \textit{gg}7 \textit{gh}8

White has also got another winning method - though this does allow queen \textit{v} rook, viz:

2 \textit{gh}a1 \textit{bb}7+ 3 \textit{gg}d8 (instead of 3 \textit{gg}d6) 3 ... \textit{gh}f6 (6b) 4 \textit{eh}7! \textit{gg}b8+ 5 \textit{gg}c7 \textit{ge}6 6 \textit{gg}d6 \textit{bb}8 7 \textit{gh}f1+ \textit{gg}h7 8 \textit{gg}c7 \textit{aa}8 9 \textit{hh}1! and wins (cf diag 4b).

Now what about diag 6 with White to move?

If 1 \textit{ha}1? \textit{bb}7+ 2 \textit{gg}d6 \textit{bb}6+ 3 \textit{gg}d7 \textit{bb}7+ 4 \textit{gg}d8 \textit{gg}h8+ 5 \textit{gg}c7 \textit{bb}2 6 \textit{gh}f1 \textit{ha}2! and draws as in diag 5.

But instead White can use zugzwang:

1 \textit{gd}6+ \textit{gg}6

1 ... \textit{gg}6 2 \textit{ha}1! as in D above, or 1 ... \textit{gh}f8 2 \textit{gg}d7 \textit{gg}e8 (2 ... \textit{gg}g7 3 \textit{gg}e7!) 3 \textit{ha}1 etc.

2 \textit{gg}d7!

This is mutual zugzwang, i.e. White to move could only draw.

2 ... \textit{gg}g7

3 \textit{gg}e7!

White has managed to "lose a move" by triangulation (cf the section on pawn endings) and so it is Black to move. As we saw above he is in zugzwang and must lose.

Horwitz and Kling

Although the black king is on the long side of the pawn (cf diag 2) he can still draw with exact defence.

1 ... \textit{yh}1!

As we shall see, White threatened to win with 2 \textit{gh}f7 so passing with 1 ... \textit{ge}2? would have lost.

2 \textit{gh}f8

Or 2 \textit{gh}f7 \textit{gh}b7+ 3 \textit{gg}6 \textit{hh}1=.

2 ... \textit{yg}1!

The only move, returning the rook to its former post. If,
4 $e7!

Now that $e6$ is assured, the king returns to $e7$. Not 4 $e6$?
4 $d6$ 5 $e7$ $d7$ 6 $g1$ $h7+$ 7 $f8$ $h8+$!

5 $e6$ $c7$

Black had no way of improving his position.

6 $g1$

There are also other winning moves. The black rook is simply not effective on the short side.

6 ... $h7+$
7 $f8$ $h8+$
8 $e7$ $h2$
9 $d1$!

And White soon reaches the Lucena position.

---

**Kopaev**

Here Black’s king is worse than in diagram 7 and he loses even with the move:

1 ... $h1$
2 $g7$ $h6+$
3 $f5$ $h5+$
4 $f6$ $h6+$
5 $g6$ (8a)

B.

5 ... $h7$
6 $e7+$ $c7$
6 ... $d5$ 7 $e6$ $h7+$ 8 $g8$ $h8+$ 9 $g7$ wins.

With the rook on $g6$ 8 ... $d6$ fails to 9 $e7+$.
9 $f7$ $d6/\ldots d8$
9 ... $h7+$ 10 $g7$ $h8$ 11 $g8$ etc.
10 $e7+$ $d7$
11 $h6!$ and wins

---

**Stalemate Defence**

If Black defends passively then he loses quickly: 1 ... $h8$? 2 $a7$ $e8$ 3 $g7+$ $f8$ 4 $h7$ $g8$ 5 $f7+$ $f8$ 6 $h8+$.

Instead he can use stalemate to save himself:

1 ... $g7+$
2 $f5$ $g2$
And draws easily.
Here, despite the fact that his rook is passive, Black is perfectly safe. In the absence of the "i-file" White can do absolutely nothing, e.g.

1. \[\text{g7+} \, \text{h8}\]
   But not 1 ... \[\text{f8?}\] 2 \[\text{h7!}\]

2. \[\text{h7+} \, \text{g8=}\]

White again has a g-pawn but here that is actually a help. Of course Black would draw if he had time for 1 ... \[\text{g8}\] and 2 ... \[\text{f8}\] but unfortunately he doesn't.

1. \[\text{g1}\]

Trying to defend as in the Horwitz and Kling position (diag 7). Of course if 1 ... \[\text{g8}\]
2 \[\text{b8+} \, \text{f8}\] 3 \[\text{x f8+} \, \text{xf8}\] 4 \[\text{h7}\] and wins.

2. \[\text{b8+} \, \text{e7}\]

3. \[\text{g8!}\]

The Black king is on the long side - almost the only side of the pawn. Since flank checks are totally impracticable, White wins trivially:

3. \[\cdots \, \text{g2}\]

4. \[\text{h7} \, \text{f7}\]

5. \[\text{g6+} \, \text{e7}\]

6. \[\text{g8} \, \text{h2+}\]

7. \[\text{g8} \, \text{f6}\]

8. \[\text{g7} \, \text{e7}\]

And we have the old favourite, the Lucena position (cf diag 3b).

---

Frontal Defence and the "Combined Method"

Black's king is cut off from the pawn. Flank checks are quite useless here since the black king is on the long side.

But with the pawn only on the fourth rank there is an additional defensive resource - pressure from the rook in front of the pawn.

White to play:

The black king is misplaced on e7 - as we shall see e6 would be much better. White to play is able to win by a technical procedure discovered by Grigoriev, which is named the "Combined Method".

In Step 1 White advances his king as far as possible: this turns out to be two squares diagonally in front of the pawn.

1. \[\text{b4!}\]

Not 1 c5 \[\text{d8=}\]; or 1 ... \[\text{h4}\]
2 \[\text{b3} \, \text{g4}\] 3 \[\text{c6} \, \text{g6=}\].

1. \[\cdots \, \text{b8+}\]

If 1 ... \[\text{d8}\] 2 \[\text{x d8} \, \text{x d8}\] 3 \[\text{b5!}\] wins.

2. \[\text{a5} \, \text{e8}\]

2 ... \[\text{a8+}\] 3 \[\text{b6} \, \text{h8+}\] 4 \[\text{e7}\] etc.

3. \[\text{b5} \, \text{b8+}\]

4. \[\text{a6}\]

Step 1 is completed.

4. \[\cdots \, \text{e8}\]

Step 2 now consists of routing the enemy since his king is on such an inactive square.

5 \[\text{d4!} \, \text{e6}\]

Now we can see why e7 was bad square for the black king - it is too far away from e5.

6 \[\text{b7} \, \text{c5}\]

If 6 ... \[\text{e5}\] 7 \[\text{e5+}\].

---
Black to play:
With Black to play there are even two good defences:

A.
1 ... \( \text{d} \text{d}8 \)
2 \( \text{x} \text{x}d8 \) \( \text{x} \text{x}d8 \)
3 \( \text{b} \text{b}4 \) \( \text{c} \text{c}8!= \)

B.
1 ... \( \text{e} \text{e}6 \)

Although this is less forcing it is important because it also draws.

2 \( \text{b} \text{b}4 \)

We should also note that frontal defence only works when the pawn is on the fourth rank or further back.

White to move wins easily in diag 13 with:

1 \( \text{b} \text{b}5 \) \( \text{b} \text{b}8+ \)
2 \( \text{a} \text{a}6 \) \( \text{c} \text{c}8 \)
3 \( \text{b} \text{b}6 \) \( \text{b} \text{b}8+ \)
4 \( \text{c} \text{c}7 \) etc.

Diag 13a
The black rook has insufficient checking distance.

Black to move draws with:

1 ... \( \text{d} \text{d}8! \)
2 \( \text{x} \text{x}d8 \) \( \text{x} \text{x}d8 \)
3 \( \text{b} \text{b}5 \) \( \text{c} \text{c}7= \)

4 \( \text{e} \text{e}6! \) etc.
Cheron 1926

Black’s king is on the short side of the pawn. This means that the “Combined Method” per se does not work, e.g. 1 \( \text{e}4 \text{e}8+ 2 \text{f}5 \text{d}8 3 \text{e}5 \text{e}8+ 4 \text{f}6 \text{d}8 5 \text{d}1 \text{b}6 6 \text{e}7 \text{d}5 7 \text{e}6 \text{h}5 8 \text{c}1 \text{h}6+.

But the black king, whilst well placed from one point of view, is on the rook’s file. And this means that White can use mating threats.

First, let’s examine what happens with the black king on other squares.

Diag 14a

1 \( \text{d}5! \text{xd}5+ \\
2 \text{c}4 and wins

Of course if Black didn’t play 1 \( \text{xd}5+, then he would lose checking distance (cf diag 13).

Diag 14b

1 \( \text{e}4 \text{e}8+ 2 \text{f}5 \text{d}8 3 \text{e}5 \text{e}8+ 4 \text{d}6 \text{d}8+ 5 \text{c}6! and wins.

Diag 14c

1 \( \text{e}4 \text{e}8+ 2 \text{f}5 \text{d}8 3 \text{e}5 \text{e}8+ 4 \text{d}6 \text{d}8+ 5 \text{c}6! and wins.
The black rook is doing nothing on a4 and must be regrouped immediately to deliver frontal checks:

A.

The correct defence is therefore:

1 ... a8!
2 h4
If 2 g5 a8=, or 2 f5 f8 3 xf8 xf8 4 h4 g8=.
Note that if the white rook were on f4 protecting the pawn then he would win with 2 h4 h8+ 3 g5! g8+ 4 h6. Here however it is drawn.

2 ... h8+
3 g3 f8=

B.

In the game, however, Black lost an invaluable tempo with:

1 ... e6?
2 h4 a8
If 2 ... a7 not 3 g5? f7= but 3 h5!.
3 g5
Black's rook now has insufficient checking distance. Since he also lacks time to contest the f-file he is lost.

1 ... h8+
2 g4 e7
Of course 4 g8 5 h5 h8+ 6 g6 g8+ 7 h6 is hopeless (cf diag 13).
5 g6 f8
6 f5! h8
If 6 ... xf5 7 xf5 e8 8 e6; or 6 ... f6 7 g5.
7 g5 and wins.

The Combined and Zugzwang Method

The extremely difficult position in diag 16 was first analysed by Grigoriev. Believing, it now appears mistakenly, that the simple combined method was insufficient he was forced to employ the extra weapon of zugzwang.

First let's see what happens with the black king on other squares.

Diagram 16a

1 c3 c8+
2 d4 b8
2 ... d8+ 3 c5 c8+ 4 d6 b8 5 b1 e4 6 b4 d3 7 b5 c2 8 c7! wins.
3 b1!
Not 3 c4 c8+ 4 d5 b8 5 b1 (5 c4!) 5 ... e3! 6 b4 d3 7 b5 c2=. However, 3 f1+ g5 4 c3 would also be good.
3 ... f5

Diagram 16b

1 c3 c8+
2 d4 b8
3 c4 c8+
4 d5 b8
4 ... d8+ 5 c6 c8+ 6 d6 b8 7 b1 e4 8 b4 d3 9 b5 c2 10 c7! as in diag 16a above (note to 2 ... b8).
5 b1
Transposing into diag 16a.

Diagram 16c

1 e3 f6 2 c3 will transpose into the main line (see below). With the king still further back on f8, 1 e4 is also possible.

Diagram 16d

With the king on f3 or further up (i.e. on f2 or f1).
Rook v Rook

1 \text{e}6 \text{f}4
2 \text{g}3 \text{f}5
2 ... \text{h}8+ 3 \text{b}4 \text{f}5 4 \text{c}6 \text{e}5 \text{c}4 and 6 \text{b}4.
3 \text{a}6 \text{e}5
4 \text{b}4 \text{d}5
5 \text{a}4 \text{c}4
6 \text{c}6+ and wins

Returning to

Diagram 16

1 \text{e}4
If 1 \text{c}3 \text{c}8+ 2 \text{d}4 \text{b}8!
3 \text{c}4 \text{c}8+ 4 \text{d}5 \text{b}8.
Now White can try 5 \text{b}1 or 5 \text{e}3. Grigoriev thought that both lead to a draw - hence his solution. Later analysis has shown that in fact both should win. However, Grigoriev's solution is very pleasing, and in any case one solution is quite sufficient.

2 \text{e}3 \text{f}6
2 ... \text{f}4 3 \text{e}1 \text{f}5 is diag 16b or 3 ... \text{f}3 is diag 16f. For 2 ... \text{h}8 3 \text{b}4 \text{f}4! 4 \text{e}1 \text{h}3 see diag 16c.

3 \text{c}3
Not 3 \text{e}1 \text{b}8 4 \text{b}4? (4 \text{e}3) 4 ... \text{h}3! see diag 16f.

3 ... \text{e}8+
4 \text{d}4 \text{b}8
5 \text{c}5 \text{c}8+
6 \text{d}6 \text{b}8
7 \text{f}3+ \text{g}5
8 \text{c}5! (16e)
8 ... \text{f}4 9 \text{b}4 9 \text{c}6 \text{b}8!.
8 ... \text{e}8+
9 \text{g}4 \text{d}3! \text{c}8+ 10 \text{b}6 \text{b}8+ 11 \text{c}7 \text{b}4 12 \text{a}6 \text{f}4 (12 ... \text{b}8 13 \text{d}4+) 14 \text{b}4 \text{e}5 15 \text{h}4) 13 \text{c}5 \text{b}8 14 \text{b}4 \text{c}8+ 15 \text{d}5 \text{d}8+ 16 \text{c}4 \text{c}8+ 17 \text{b}3

\text{e}4 (17 ... \text{b}8 18 \text{d}5, or 17 ... \text{e}5 18 \text{b}5) 18 \text{d}6 \text{e}5 19 \text{a}6 and wins.

9 \text{d}4 \text{b}8
10 \text{c}3 \text{e}8+
11 \text{b}2 \text{b}8

The black king is now cut off an extra file - cf diag 16 and White therefore wins straightforwardly.

12 \text{f}1! \text{g}6
13 \text{e}3 \text{c}8+
14 \text{d}4 \text{b}8
15 \text{c}4 \text{c}8+
16 \text{d}5 \text{b}8
17 \text{b}1 \text{f}7
18 \text{b}4 \text{e}7
19 \text{c}6 etc

Diagram 16f

This position can arise from the main line - note to 2 ... \text{f}6.

White to play
1 \text{c}2!
Not 1 \text{b}5? \text{h}5.

1 ... \text{f}5
1 ... \text{g}3 2 \text{b}5 \text{g}5 3 \text{b}6 \text{c}5+ 4 \text{d}3 \text{b}5 5 \text{e}6 wins.
2 \text{b}5 \text{f}6
2 ... \text{g}3 3 \text{b}6 \text{g}7 4 \text{c}3 \text{b}7 5 \text{b}1 \text{c}6 6 \text{c}4 \text{d}7 7 \text{b}5 \text{c}8 8 \text{a}6 \text{d}7 9 \text{h}1 \text{d}8 10 \text{a}7 wins.
3 \text{b}6 \text{f}7
If 3 ... \text{h}8 4 \text{c}3 \text{b}8 5 \text{b}1 \text{e}6 6 \text{c}4 \text{d}7 7 \text{b}5 \text{c}8 8 \text{e}1+! \text{b}7 9 \text{c}7+ \text{a}8 10 \text{a}7+ mate!; or 3 ... \text{h}7 4 \text{c}3 \text{b}7 5 \text{b}1 (see last note).

4 \text{b}1!
4 \text{b}7? would only draw.
4 ... \text{h}8
5 \text{c}3 \text{e}6
6 \text{b}4 \text{d}7
7 \text{e}1! \text{e}8
8 \text{c}5! etc.

cf diag 15, variation B.
Rook v Rook

**Diagram 16f**

Black to play.

With an extra tempo, Black can draw:

1 ... $\text{f5!}$
2 $\text{b5}$

Or 2 $\text{c2} \text{f6} 3 \text{b5} \text{h5} 4 \text{b1} \text{e6} 5 \text{b6} \text{h8}$.+

W/B

2 ... $\text{d3!}$

The only move - 2 ... $\text{f6}$ loses.

3 $\text{c2} \text{d5}$
4 $\text{b1} \text{e5}+$
5 $\text{d3} \text{e5}$
6 $\text{b6} \text{c8}$

**Diagram 17a**

Rook's Pawns

Rook's pawns are usually weaker than other pawns since:

a) Their king can easily get hemmed in on the rook's file (cf diag 17);

b) Whilst they provide the usual protection from checks from behind, these pawns cannot help in the case of flank checks cf diag 21.

In contrast to the Lucena position, diag 3, here White can do nothing since his king is hemmed in on the a-file,

e.g.

1 $\text{h2} \text{c7}$
2 $\text{h8} \text{b2}$
3 $\text{b8} \text{c2}$

Diagram 17b

Here White gets in 1 $\text{c8!}$ and, as we shall see under diag 18, this wins.

Black to play would draw easily with 1 ... $\text{d7}$.

1 $\text{h2} \text{d7}$
2 $\text{h8} \text{c7}$

**Diagram 17c**

Délit par la Tour blanche va en la 8ème case déplace la Tour noire de n'importe où qu'elle puisse faire l'effet, et ne pas être retirée. Si Roi noir en e7, la pièce n'importe où.
Here the black king is sufficiently far from the action for White to win.

1 \( \text{h}2 \) \( \text{\underline{c}}2 \)

1 \( \text{c}2 \) would amount to the same thing.

1 ... \( \text{e}7 \)

2 \( \text{h}8 \) \( \text{d}6 \)

A little better than 2 ... \( \text{d}7 \)

- see the note to 5 \( \text{c}8 \).

3 \( \text{b}8 \) \( \text{a}1 \)

4 \( \text{b}7 \) \( \text{b}1+ \)

5 \( \text{c}8 \)

If 5 \( \text{a}6 \) \( \text{a}1+ \) 6 \( \text{b}6 \) \( \text{b}1+ \) 7 \( \text{d}5 \) \( \text{a}1+ \) and the king must escape via c8. But if Black had played 2 ... \( \text{d}7 \) then 7 \( \text{c}5! \) would have won easily.

White can gain a decisive tempo with:

1 \( \text{d}8 \) \( \text{e}7 \)

2 \( \text{b}8! \) \( \text{a}1 \)

3 \( \text{b}7 \) \( \text{b}1+ \)

4 \( \text{a}8 \) \( \text{a}1 \)

5 \( \text{a}7 \)

Also 5 \( \text{b}6 \) \( \text{d}7 \) 6 \( \text{b}7 \) etc.

5 ... \( \text{d}6 \)

6 \( \text{b}7 \)

Transposing into diag 18 (of course Black to play draws easily with 1 ... \( \text{e}7 \) - leading to diag 17b).

White to move wins with a typical combination:

1 \( \text{h}8! \) \( \text{x}a7 \)

2 \( \text{h}7+ \)

Black to move can defend with the single move:

1 ... \( \text{g}7! \)

Or some checks and then ... \( \text{g}7 \).

He must avoid 1 ... \( \text{g}3 \) 3rd rank" which, whilst preventing the skewer, allows an immediate check, i.e. if 1 ... \( \text{e}6/\text{f}6/\text{g}6? \) 2 \( \text{e}8+ \) 3 \( \text{f}8/\text{g}8+ \) wins.

After 1 ... \( \text{g}7! \) White can make no progress. Black waits for the enemy king to reach b6 and then checks it away, returning at once with his rook to the a-file, e.g.

2 \( \text{f}3 \) 3 ... 6 \( \text{b}6 \) \( \text{b}1+ \) 7 \( \text{c}7 \) \( \text{a}1 \) 8 \( \text{b}7 \) \( \text{b}1+ \) 9 \( \text{c}6 \) \( \text{a}1= \).

Diagram 20a

Here Black is defenceless. The e-file is "mined" and the king has nowhere to hide.

If 1 ... \( \text{f}7 \) or 1 ... \( \text{d}7 \) then 2 \( \text{h}8! \); and if 1 ... \( \text{d}6 \) or 1 ...
White plans to bring his king to the queenside freeing his rook. Since the pawn is only on a6 this will work against passive defence. Dr Tarrasch rather naturally considered the position won but later the analysis revealed a better defence.

First here is Tarrasch's solution:

1 ... $\text{f7}$
2 $\text{f3}$
But not 2 a7?? $\text{g7}$!.
2 ... $\text{a4}$

As we saw in diag 20, the king cannot cross the e-file - if 2 ... $\text{e7}$ a7! wins.

3 $\text{e3}$ $\text{g7}$
4 $\text{d3}$ $\text{f7}$
5 $\text{e3}$ $\text{g7}$
6 $\text{b3}$ $\text{a1}$
7 $\text{b4}$ $\text{f7}$
8 $\text{b5}$

Now White threatens to free his rook.

8 ... $\text{b1}$+
9 $\text{c6}$ $\text{c1}$+
10 $\text{b6}$ $\text{b1}$+
11 $\text{a7}$ $\text{e7}$
12 $\text{b8}$

And wins as in diag 19, viz:

12 ... $\text{a1}$
13 $\text{b7}$ $\text{b1}$+
14 $\text{a8}$ $\text{a1}$
15 a7 $\text{d6}$
16 $\text{b7}$ etc.

But the Soviet analysts Rauzer and Rabinovich noted that the rook's pawn does not defend against the flank check.

Hence:

1 ... $\text{a5}$!
2 $\text{f3}$ $\text{f5}$+
3 $\text{e4}$ $\text{f6}$

Now White cannot free his rook:

4 $\text{d5}$ $\text{h7}$
5 $\text{c5}$ $\text{g6}$
6 $\text{b5}$

Or 6 a7 $\text{a6}$!.

6 ... $\text{a4}$
7 $\text{b4}$ $\text{g6}$=

Diag 21 has been analysed with Black to move for various positions of the white king, e.g.

Diagram 21a

1 ... $\text{a5}$!
1 ... $\text{f1}$+ loses immediately to 2 $\text{e5}$ $\text{f6}$ 3 $\text{g8}$+; but 1 ... $\text{a1}$ is also sufficient to draw:

a) 2 $\text{b8}$ $\text{a1}$ 3 $\text{b6}$ $\text{a5}$! (3 $\text{f7}$ 4 $\text{e5}$ $\text{e7}$ 5 $\text{b7}$+ and 6 a7) 4 $\text{e4}$ $\text{f7}$ 5 $\text{d4}$ $\text{e7}$ 6 $\text{c4}$ $\text{d7}$ 7 $\text{b4}$ $\text{a1}$;

b) 2 $\text{a7}$+ $\text{g6}$! is the only move for reasons similar to those in the note to 3 ... $\text{g6}$! below.

2 $\text{e4}$ $\text{b5}$
3 $\text{a7}$+ $\text{g6}$!

This is the only square. The king must remain as near as possible to the $\text{g}$ file. But at
the same time he must threaten to set up the draw with ... \texttt{Ab6}; and this is not possible with the king on \texttt{f6} in view of a later \texttt{Ah7}.

Thus if 3 ... \texttt{Af6}? 4 \texttt{Ad4} \texttt{Ab6} (or 4 ... \texttt{Aa5} 5 \texttt{Aa8}) 5 \texttt{Ac5} \texttt{Ae6} 6 \texttt{Ah7+}; or 3 ... \texttt{Ah6}? 4 \texttt{Ah7} \texttt{Aa5} 5 \texttt{Ag6} 6 \texttt{Ad4} \texttt{Af6} 7 \texttt{Ac4} \texttt{Ae6} 8 \texttt{Ab4} \texttt{Aa1} 9 \texttt{Ac5} wins simply.

4 \texttt{Ab7} \texttt{Aa5}
5 \texttt{a7} \texttt{Af6}
6 \texttt{Ah7} \texttt{Ag6}!

Not 6 ... \texttt{Ae6}? 7 \texttt{Ah6+!} \texttt{Ad7} 8 \texttt{Ah8!+}.

7 \texttt{Ab7} \texttt{Af6}=

Diagram 21b

If 1 ... \texttt{Aa5} 2 \texttt{Ab3} \texttt{Ab5+} 3

\texttt{Aa4} \texttt{Ab6} 4 \texttt{Aa5}! wins.

Or 1 ... \texttt{Hf6} 2 \texttt{Ah7+!} \texttt{Af6} 3 \texttt{Ah7} \texttt{Ae6} 4 \texttt{Aa7} \texttt{Aa1} 5 \texttt{Ab2} \texttt{Aa5} 6 \texttt{Ab3} etc.

Or 1 ... \texttt{Hh1} 2 \texttt{Ah7+!} \texttt{Af6} 3 \texttt{Ab3} \texttt{Hh8} (3 ... \texttt{Ae6} 4 \texttt{a7}) 4 \texttt{Ah7} \texttt{Ae6} 5 \texttt{a7} and wins.

Rather than get involved in a huge amount of detail in this complex ending, here is a diagram which summarises the information which the analysts have discovered.

Diagram 21c

Black to play draws if the white king is in the zone - otherwise he loses.

Diagram 22a

White to move wins with:

1 \texttt{Af6!} (not 1 \texttt{Af7?} \texttt{Af5=}) 1 ... \texttt{Af4} 2 \texttt{Ae6} \texttt{Ae4} 3 \texttt{Ad6} \texttt{Ad4} 4 \texttt{Ac6} \texttt{Ac4} (4 ... \texttt{Ac1+} is still hopeless) 5 \texttt{Ac8!}.

But Black can draw with:

1 ... \texttt{Ag5!}

viz: 2 \texttt{Af7} \texttt{Af5} 3 \texttt{Ae7} \texttt{Ae5} 4 \texttt{Ad7} \texttt{Ad5} 5 \texttt{Ac7} \texttt{Ac5} 6 \texttt{Ac8} (or 6 \texttt{Ab7} \texttt{Ab1+}) 6 ... \texttt{Axg7} 7 \texttt{Bb8+} \texttt{Bb6=}.
White to move would win easily by bringing his king to b6:
1... Rd4! Rd7+ 2 Rc5 Rd7 3 Rc6 etc.

Black to play must decide which way to move his king.

A. 1... Rd6+?
  2 Rd4 Rd6
  2... Rd7 3 Rb5 Rd7 5 Rb6.
  3 Rc5 Rd5
  4... Rc6.

This is zugzwang, viz: if 4... Rc6 5 Rc6, or 4... Rd4 5 Rb6, or 4... Rc6+ 5 Rd7 Rb6+ 6 Rc7.

Thus 1... Rd6+? loses.

Driven back onto the e-file, which is generally a bad file to be on, he fell into zugzwang.

B. 1... f6+
  2 d4 f7!

Black sets up his defence on the safer f-file: If 2... Rd7 3 Rc5 wins as in A; or 2... Rd7+ 3 Rc5 is hopeless.
  3 Rc5

If 3 Rc5 f5 4 Rd6 f6+ and 5... Rh7 draws. There is no zugzwang since the f-file is far enough away from the pawn.
  3... Rh5
  4 Rd6 Rh6!
  5 Rc6 Rh5
  6 Rc5 Rh4!
  7 Rh6 Rh6+
  8 Rh7 Rh6+
  9 Rc6 Rh5=

White cannot make any progress since it is impossible simultaneously to threaten Rb6 and Rd6. Thus there is no zugzwang since the f-file is sufficiently far from the pawn.

Euwe - Alekhine
World Championship 1935
This is a very difficult position which arose in the 1935 World Championship Match.
White has two plausible continuations: A. 1 Re3 and B. 1 Rc8+.

A. 1 Re3

This is the move which Euwe actually chose.
  1... Rh2?
  1... a3! leads to a win after 2 Rc8+ Rb2 3 Rd2 (or 3 Rd3 Rb1 4 Rc8+ Rb2 5 Rh8 Rc2) 3... Rc1+ 4 Rc1 Rh2! 5 Rc8+ Rb6 6 Rc8 Rh4! etc.
  2 Rc8+

This is also a mistake. 2 Rc8! (Romanovsky) draws: 2... Rc2 (if 2... Rh4 White checks the black king to the a-file since if he interposes ... Rb4/... Rc4 White can take) 3 Rc8+ Rb2 4 Rd2 Rb1+ 5 Rd1 Rb2 (5... Rh2 6 Ra8+!!) 6 Rc4! a3 7 Rc3 and draws since if 7... a2?? 8 Rc1 mate.
  2... Rb2
  3 Rb8+ Rc1
  4 Rc8+

Or 4 Rc8 a3!.
  4... Rc1
  5 Rb8+ Rb2
  6 Rb8+ Rb2
  7 Ra8 Rb3+
  8 d4 a3
  9 Rh8 Rc3+
  0-1
Rook v Rook

If he brings the king towards the rook, i.e. 1 ... b4 2 b5 c5 3 c8+ b6 4 b8+ c7, then 5 bbl draws.

2 h8

If 2 d8+ c1 3 e8+ b1 4 b8+ b2 5 a8 b4 wins.

In this sequence it would be better to break off the checks and resume observation of the a-pawn; but this also seems to lose, e.g. 2 d8+ c1 3 a8 a3 4 e4 e2+ 5 f3 h2 6 g3 a2 7 f3 a1 8 e3 c2! (24a).

Now if 9 d4 d1+ 10 c4 d3 and wins.

Or if White starts checking he may reach a lost position like diag 23 variation A, e.g. 9 e8+ b3 10 b8+ c4 11 e8+ b5 12 b8+ c6 (12 ... a6! is even simpler) 13 e8+ b7 14 c2 a2 15 e2 e6 16 e4 c5 17 e3 c4 18 e4 c3 zugzwang and wins.

2 a2?

The idea of this move is that if White starts checking then he won't have bbl at the end, i.e. if 3 d8+ c3 4 e8+ b4 5 b8+ c5 6 e8+ b6 7 b8+ c7 would now win. But instead White plays:

3 e4! a3

If f3 ... c3 4 c8+ draws; or if 3 ... b1 4 d4 is also sufficient.

4 d4! (24b) This seems to us to be sufficient to draw viz:

i) 4 ... a2??
5 h2+ c2
6 d3

And White wins!

Diagram 24c

This extremely difficult position comes from diag 41b. Until I consulted John Nunn's database, I believed that there was only a single path to victory.
A.

1 \( \text{d4} \)

I had believed that this led to a draw.

1 ... \( \text{c6}! \)

If 1 ... \( \text{c7} \) 2 \( \text{e5} \) \( \text{h6} \) 3 \( \text{f4} \) \( \text{c6} \) 4 \( \text{a5} \) \( \text{d7} \) 5 \( \text{g5} \) is simple.

2 \( \text{e5} \)

2 ... \( \text{e7} \) 3 \( \text{g6} \) \( \text{d6}!\).

2 ... \( \text{h6}! \)

3 ... \( \text{g5}!! \)

This is what I'd missed. If 3 \( \text{e4} \) \( \text{c7} \) 4 \( \text{f4} \) \( \text{d6} \) 5 \( \text{a5} \) \( \text{e7}+\).

3 ... \( \text{b7} \)

4 \( \text{e4} \) \( \text{b6} \)

5 \( \text{f5} \) \( \text{c6} \)

6 \( \text{f4} \) \( \text{d7} \)

7 \( \text{g5} \) \( \text{h8} \)

8 \( \text{h6} \)

Not 8 \( \text{f7+?} \) \( \text{e6} \) 9 \( \text{g7} \) \( \text{a8} \) 10 \( \text{h6} \) \( \text{a1} \) 11 \( \text{g6} \) \( \text{g1+} \).

8 ... \( \text{e7} \)

8 ... \( \text{e6} \) 9 \( \text{f6}+\) \( \text{e7} \) 10 \( \text{a6} \) is no better.

9 ... \( \text{a5} \) and wins

For example: 9 ... \( \text{g8+} \) 10 \( \text{h5+} \) \( \text{g1} \) 11 \( \text{h7} \) \( \text{f7} \) 12 \( \text{a7+} \) \( \text{e6} \) 13 \( \text{h6} \) etc.

B.

1 \( \text{d6!} \)

If the rook started on d5 then this would indeed be the unique winning move.

1 ... \( \text{a1} \)

If 1 ... \( \text{a5+?} \) 2 \( \text{b6} \); or 1 ... \( \text{a7} \) 2 \( \text{b6} \) \( \text{b7}+ \) 3 \( \text{c6} \) \( \text{c7}+ \) 4 \( \text{d5} \) \( \text{h7} \) 5 \( \text{h6} \) \( \text{c6} \) 6 \( \text{a6} \) \( \text{h8} \) (6 ... \( \text{b7} \) 7 \( \text{g6} \)) 7 \( \text{g5} \) \( \text{d7} \) 8 \( \text{a7}+ \) \( \text{c7} \) 9 \( \text{h7} \) and wins.

2 ... \( \text{f6}! \)

The database confirms that this is the only winning move.

If 2 \( \text{h6?} \) \( \text{c7} \); or 2 \( \text{c6} \) \( \text{c8} \) 3 \( \text{h6} \) \( \text{h1} \) 4 \( \text{d5} \) \( \text{h5}+ \) 5 \( \text{e4} \) \( \text{c7} \) 6 \( \text{a6} \) \( \text{b7}! \) (6 ... \( \text{d7?} \) 7 \( \text{h7}! \) 7 \( \text{g6} \) \( \text{c7} \) 8 \( \text{f4} \) \( \text{d7} \) 9 \( \text{g4} \) \( \text{h1} \) 10 \( \text{g5} \) \( \text{e7} \); or finally, if 2 \( \text{g6} \) \( \text{c8}! \) 3 \( \text{d6} \) \( \text{a5}?! - \) that is why the rook must go to f6 rather than g6.

2 ... \( \text{h1} \)

If 2 ... \( \text{c7} \) 3 \( \text{f7+} \) \( \text{d8} \) 4 \( \text{h6} \) \( \text{e8} \) 5 \( \text{h7} \); or 2 ... \( \text{c8} \) 3 \( \text{d6} \) \( \text{a5} \) 4 \( \text{h6} \).

3 \( \text{h6} \) \( \text{c8} \)

Or 3 ... \( \text{c7} \) 4 \( \text{f7+} \) \( \text{d8} \) 5 \( \text{h7} \) \( \text{e8} \) 6 \( \text{g7} \) and 7 \( \text{g8+} \).

4 \( \text{f6} \)

And since his king has been shouldered off, Black loses.

Diagram 24d

Here the result depends on the move.

Black to move wins easily, viz:

1 ... \( \text{g3} \) 2 \( \text{e5} \) \( \text{f3} \) 3 \( \text{d5} \) \( \text{e3} \) 4 \( \text{c5} \) \( \text{d3} \) 5 \( \text{b5} \) \( \text{a8} \) 6 \( \text{b4} \) \( \text{c2} \) and wins.

With White to move the position is more interesting:

1 \( \text{c5} \) \( \text{g3} \)

2 \( \text{d5} \) \( \text{f3} \)

3 \( \text{c5} \) \( \text{e3} \)

4 \( \text{b5} \) \( \text{a8} \)

5 \( \text{c4}! \)

Not 5 \( \text{b4?} \) \( \text{d3} \) 6 \( \text{b3} \) \( \text{b8+} \) and if 7 \( \text{xa2/7} \) \( \text{a3} \) \( \text{c2}! \) wins or 7 \( \text{a4} \) \( \text{c3}! \).

5 ... \( \text{d2} \) (24e)

6 \( \text{b3} \) \( \text{b8+} \)

7 \( \text{c4!} \)

But not 7 \( \text{xa2} \) \( \text{c2}! \); or 7 \( \text{a4} \) \( \text{c3}! \) as above.

7 ... \( \text{b2} \)

Or 7 ... \( \text{a8} \) 8 \( \text{b3=} \).

8 ... \( \text{h1} \) \( \text{e3} \)

If 8 ... \( \text{c2} \) 9 \( \text{a1} \), or 8 ... \( \text{c2} \) 9 \( \text{c3} \) \( \text{h1} \) 10 \( \text{h2}+ \).

9 ... \( \text{a1} \)

Threatening 10 \( \text{c3} \).

9 ... \( \text{d2} \)

10 ... \( \text{h1}+ \)
Rook v Rook

Rook and Two Pawns v Rook

This will generally be a win unless there is a good reason why not. However, there are quite a number of exceptional positions. First we shall look at connected pawns.

Connected Pawns

These should easily win unless:

a) There is a blockade or
b) The attacking king is cut off from the pawns.

Even if a), b) or both apply the position may well be won.

White is threatening to win almost automatically by advancing his queenside formation up the board, i.e. 1 d5 2 c4 3 E6 4 d6 5 e5 6 E7 7 d7 8 c6 9 E8. Black can interfere with this plan but White nevertheless wins easily:

1 ... Ec2
2 d5Ed3
3 c4Ed4

4 Ec6 Ed5

Now White threatens to win by bringing his king to either C5 or f7, e.g. 5 Eg3 - f3 - ... - 11 Ec5. Black cannot really interfere with this since he must play ... Ed8 - d7 - d8 in order to prevent d6.

He can decide to allow d6 but that is also rather hopeless, e.g.

5 Ed4 Ed8
6 Ee6
7 Ec7 Ed7
8 Ed8
9 Ed7 Ed6

Else White plays 10 c6.

10 Ed5 Ed6
11 Ed7 and wins.

Ornstein - Spiridonov

Albena 1976

Black has a blockade but White is able to break it with the help of his king.

1 Ed5 Eg1

If 1 ... Ea4 2 Ed8! gets the rook to a much more active position since if 2 ... Exg5 3 f7. Once the rook gets active White will win easily, e.g. 2 ... Eg4 3 Eg8+ Ef7 4 Eg7+ Ef8 5 Ef3 Ea4 6 Eb7 Ea6 (else 7 g6) 7 Eg4 etc.

2 Ed4 Ec1

White is trying to get his king to the pawns so he must go round the rook. Black is trying to prevent this.

3 Ec5 Ed1+
4 Ec5 Ed7
5 Ed5!

Avoiding the trap: 5 Ec7?

Exe7 6 fxe7 Ef7 7 Ed6 Eg8+! Ec6.

5 Ed7 Ed6
6 Ed6 Ed7
7 Ed7 Ed7
8 Ed6 Ed6
9 Ed7 Ed7
10 f7 1-0

245
Here White has rook and knight's pawns which tend to be harder to win than other pawn pairs. The reason is that there is no natural shelter from flank checks, i.e. if 1 h4? a2+ the king cannot shelter on "h4" beside the h-pawn.

This position should be an easy win if White arranges to advance his pieces in close formation, always taking care to keep a good square free for his king.

Through neglecting this principle, Zukertort came very close to drawing this won position.

As before, better was 4 f5, e.g. 4 ... b3 5 f3 b1 6 g3 g1+ 7 h4 a1 8 b3 a6 9 b4 c6 10 g5 and 11 g4 h4 etc. (assuming the black rook stays on its third rank).

5 h5+

But not 5 g5?? h5 and the perfect blockade is sufficient to draw, e.g. 6 e4 a3 7 f4 b3 8 f3 b4 9 f8 xh4=.

If 7 ... a5 not 8 g3? g5= but 8 f6+! g5 9 a6+ f4 10 h6 and wins (see next note).
27 $f5 \underline{a}8 (27b)

Now White must avoid stalemate after 28 h7+ $h8 29 $g5?? (29 $e5!) 29 ... $a5+ 30 $h6 $h5+!, but he can easily win by either:

a) 28 $d7 $b8 29 $e6 $b6+ (29 ... $a8 30 $e7 and 31 $d8+, or 29 ... $f8 30 $e7 etc) 30 $d6 $b8 31 $e7 $b7+ 32 $d7 $b8 33 $d8+ or;
b) 28 $e5 (also 28 h7+ and 29 $e5!) 28 ... $h8 29 $g5 followed by h7 and $h6.

More Blockades

White can do absolutely nothing here, for example: 1 $c3 $h5 2 $c5+ $xc5 3 $xc5; or 1 $g8 $f3+ and 2 $xb4 draws easily; or 1 $g4 $f3+ 2 $c2 $h3 3 $d4 $g3 4 $d3 $g4=.

Diagram 28a

However, if we move the position one file to the left White wins trivially:

1 $d3 $h5
2 $d5+ $xd5
3 $xd5
and if 3 ... $xb5 4 $d4 or 3 ... $xb5 4 $d4.

Horwitz and Kling

Here Black must be much more careful than in diag 28. But with correct play it is still drawn.

1 $e4 $h6
2 $e8! $h4+
3 $d5 $h7!

Of course not 3 ... $xb5? 4 a7. And 3 ... $b4? fails to 4 $b8+ $a7 5 $c5! (not 5 $b7+ $a8 since Black can then sacrifice his rook to force stalemate) 5 ... $b1 6 $b7+

Diagram 29a

Obviously if we move diag 29 up a rank then White wins trivially.

1 $g8! etc.

Diagram 29a
Rook v Rook

The white king hopes to break the blockade. But it just holds.

1 $\text{Q}e8$ $\text{Ag7}$
2 $\text{Fd7}$ $\text{Ag8}+$
3 $\text{Fd8}$ $\text{Ag7}$
4 $\text{Qb8}$

If 4 $\text{Fd6}+$ $\text{Qxb5}$ 5 $\text{Gb8}$ $\text{Ag8}+$=
4 ... $\text{Hh7}$

Now if 5 a7 $\text{Qb7}+$, or 5 $\text{Qe8}$ $\text{Ag7}$ 6 $\text{Qe6}+$ $\text{Qxb5}$ 7 a7 $\text{Ag8}+$=
Therefore White plays:

5 $\text{Ed6}+$ $\text{Qc5}$!
But not 5 ... $\text{Qxb5}$ 6 a7 $\text{Qh8}+$ 7 $\text{Qc7}$ $\text{Qh7}+$ 8 $\text{Fd7}$ etc.
6 b6

If 6 $\text{Qe6}$ $\text{Qxb5}$ 7 a7 $\text{Qh8}+$=

since the white rook is too far from its king. (We can note, by the way, the similarity of this position to variation arising from diag 24b.)

Or 6 a7 $\text{Qxd6}$ 7 a8$\text{Wh}$ (7 b6 $\text{Qc5}$) 7 ... $\text{Qh8}+$ 8 $\text{Qb7}$ $\text{Ax}a8$
9 $\text{Qxa8}$ $\text{Qc5}$=

Finally if 6 $\text{Qd8}$ $\text{Qb6}$! repeating.

6 ... $\text{Qxd6}$
7 $\text{Qa8}$
Or 7 a7 $\text{Qc5}$ 8 a8$\text{Wh}$=
7 ... $\text{Qh8}+$!
8 $\text{Qa7}$ $\text{Qc6}$
9 b7 $\text{Qc7}$
10 b8$\text{Wh}+$ $\text{Qxb8}$
Stalemate

Or 3 $\text{Qf3}$ $\text{Qc3}+$ 4 $\text{Qe2}$ $\text{Qc4}$=
3 ... $\text{Qc5}$=
4 $\text{Qf6}$ $\text{Qc6}$+
5 $\text{Qf7}$ $\text{Qc7}$+
6 $\text{Qe6}$ $\text{Qc4}$=

White cannot free his rook since if 7 $\text{Ag8}$ $\text{Qh7}!$. The black rook keeps observing the pawns and checks the white king if it strays to the f-file.

Diagram 31a

Here the black rook lacks checking distance and so he loses.

1 ... $\text{Qd3}$+
Rook v Rook

Disrupting Black's defensive plan.

5 ... \texttt{h}6 \texttt{g}5
And White soon unravels, for example: 6 ... \texttt{h}4+ 7 \texttt{g}4 \texttt{g}3+ 9 \texttt{f}3; or 6 ... \texttt{g}4 7 \texttt{f}6+ \texttt{g}7 8 \texttt{f}4 \texttt{f}5+ 9 \texttt{e}4 \texttt{e}3 10 \texttt{f}5 \texttt{g}6 11 \texttt{e}5 etc.

Flank checks fail as in diag 31a. Here Black can also try checking from behind but that fails too:

1 ... \texttt{g}1+
2 \texttt{f}5 \texttt{f}1+
3 \texttt{e}6 \texttt{h}1
4 \texttt{f}7!
And wins since if 4 ... \texttt{h}5 5 \texttt{g}7+ \texttt{h}8 6 \texttt{g}8+ \texttt{h}7 7 \texttt{g}6+ \texttt{h}6 8 \texttt{h}8+ etc.

Kasparian 1946
It is really rather remarkable that this position is drawn. The reason is that in contrast to diag 31b, here the black king is not on the edge of the board. The ending of rook and pawn against rook which results, therefore, turns out to be drawn.

Here, checking from the side would be silly since the king could go to \texttt{h}5.

2 \texttt{e}3
The only way to make progress. If, for example, 2 \texttt{g}3 \texttt{f}1 3 \texttt{g}2 \texttt{f}4 4 \texttt{g}3 \texttt{f}1 5 \texttt{g}4 \texttt{g}1+ 6 \texttt{f}4 \texttt{f}1+ 7 \texttt{e}3 \texttt{g}1 8 \texttt{g}6+ \texttt{f}7 9 \texttt{f}2 \texttt{g}4 etc.

White can free his rook only by advancing the king to d7.

2 ... \texttt{g}2
3 \texttt{g}6+ \texttt{f}7
4 \texttt{f}3 \texttt{g}1!
5 \texttt{e}4 \texttt{g}2
This remarkable position was also discovered by Kasparian. It looks as though White should win easily but there is a snag.

If 1 \( \texttt{b2} \texttt{h3} \) 2 \( \texttt{c2} \texttt{g3} \) 3 \( \texttt{d2} \texttt{h3} \) 4 \( \texttt{e2} \texttt{g3} \) 5 \( \texttt{f2} \texttt{h3} \) (33a), White wants to free his rook. But if 6 \( \texttt{g2} \texttt{a3} \) 7 \( \texttt{b7} \texttt{a5} \) forces his rook back since if 8 \( \texttt{h6} \texttt{g5+} \).

Or 6 \( \texttt{g2} \texttt{a3} \) 7 \( \texttt{h2} \texttt{b3} \) 8 \( \texttt{a7} \texttt{b5} \) 9 \( \texttt{h6} \texttt{h5+} \).

Finally if 6 \( \texttt{h6} \texttt{h5} \) 7 \( \texttt{f3} \texttt{g3} \) 8 \( \texttt{h7} \texttt{g7+} \) 9 \( \texttt{f4} \texttt{f5+} \) etc. with stalemate or perpetual check.

The white king is misplaced on the \( g- \) or \( h- \) file since the pawns are then loose.

Black to move in diag 33a, however, would be in zugzwang for if 1 ... \( \texttt{a3} \) (numbering from the diagram) 2 \( \texttt{b7} \texttt{a5} \) (or 2 ... \( \texttt{h3} \) 3 \( \texttt{b5} \texttt{f8} \) see the main line) 3 \( \texttt{h6} \) wins easily; or 1 ... \( \texttt{f8} \) 2 \( \texttt{g2} \texttt{a3} \) 3 \( \texttt{f7} \texttt{g8} \) 4 \( \texttt{h6} \); or 1 ... \( \texttt{h4} \) 2 \( \texttt{g3} \) etc.

White cannot lose a move in diag 33a since if 1 \( \texttt{f1} \texttt{f3} \) ! (1 ... \( \texttt{g3} \) 2 \( \texttt{e2} \) 2 \( \texttt{e2} \) (2 \( \texttt{e1} \texttt{e3}+); 2 \( \texttt{g1}/\texttt{g2} \texttt{a3} \) 2 \( \texttt{g3} \) 3 \( \texttt{f2} \texttt{h3} \) etc.

Working from the fact that diag 33a is zugzwang Kasparian found the following solution to diag 33.

1 \( \texttt{a2}!! \)

Not 1 \( \texttt{b2} \texttt{h3} \) as above; nor 1 \( \texttt{bl} \texttt{b3}+! \) 2 \( \texttt{c2} \) (2 \( \texttt{c1} \texttt{c3}+ \)) 2 ... \( \texttt{g3} \) !.

Now Black has two reasonable defences:

A. Passive Defence

1 ... \( \texttt{h3} \)
2 \( \texttt{b2} \texttt{g3} \)

B. Active Defence

1 \( \texttt{a2} \texttt{c3} \)
2 \( \texttt{b7} \texttt{h3} \)

If 2 ... \( \texttt{g3} \) 3 \( \texttt{b2} \texttt{g5} \) 4 \( \texttt{h7} \texttt{g3} \) 5 \( \texttt{c2} \) "White has the co-ordination" (cf various pawn endings, e.g. diag P49). Black is now in zugzwang and will reach diag 33a on the move.

3 \( \texttt{b5} \texttt{g7} \) (33b)

He must prevent 4 ... \( \texttt{h6} \) wedging the king between the pawns.

4 ... \( \texttt{h4} \)

If 4 ... \( \texttt{g8} \) 5 \( \texttt{b2} \texttt{e3} \) 6 \( \texttt{c2} \) (but not 6 \( \texttt{h6} \) \( \texttt{h3} \) 7 \( \texttt{h7} \texttt{g7} \) 6 ... \( \texttt{a3} \) 7 \( \texttt{d2} \texttt{b3} \) 8 \( \texttt{e2} \texttt{c3} \) 9 \( \texttt{f2} \texttt{b3} \) 10 \( \texttt{d5} \texttt{b6} \) (10 ... \( \texttt{g7} \) 11 \( \texttt{d7} \); 10 ... \( \texttt{h3} \) 11 \( \texttt{g2} \) 11 \( \texttt{f3} \texttt{g7} \) 12 \( \texttt{d7+} \) wins. Or if 4 ... \( \texttt{h6} \) 5 \( \texttt{g7} \); or 4 ... \( \texttt{c3} \) 5 \( \texttt{h6} \) !.

5 \( \texttt{b3} \texttt{h1} \)
6 \( \texttt{c4} \texttt{c1}+ \)
7 \( \texttt{d5} \texttt{d1}+ \)
8 \( \texttt{c6} \texttt{c1}+ \)
9 \( \texttt{d6} \texttt{d1}+ \)
10 \( \texttt{d5} \texttt{a1} \)
11 \( \texttt{e7} \texttt{a6} \)

11 ... \( \texttt{e1}+ \) 12 \( \texttt{d8}! \texttt{h6} \) 13 \( \texttt{d7} \) \( \texttt{xh5} \) 14 \( \texttt{g7} \texttt{g1} \) 15 \( \texttt{e8} \)
Isolated Pawns

Rook and two isolated pawns should usually win against a rook, but there are some exceptional positions. By far the most important class of these is:

"Rook, RP+BP vs Rook"

Although many positions are theoretically drawn, the defender has to play extremely accurately in order to attain this result.

Before examining correct defence we should first look at various positions which the defender must avoid:

Belavenets

The black king is cut off on the back rank. This almost always leads to a loss.

White is threatening to win immediately with, e.g. 1 h7+ g8 2 a8+ f8 3 f7 etc.

Black to play must therefore start checking:

1 ... g1+ 2 f5 f1+ 3 e6 e1+ 4 d6 d1+

Or 4 ... h1 5 a8+ f7 6 h7 xh7 7 a7+ etc.

5 e7 e1+ 6 g8 f1

If 6 ... f8 7 g7 followed by h7 and g8+.

7 h7+ h8 8 e7

But not 8 f7? xf7! 9 xf7 stalemate.

8 ... e1+ 9 a8+!

Now if 8 ... xf6 9 a8+!, or 8 ... xh7 9 f7 g7 10 e8 etc.

9 f7!

But not 9 f8? e8+ 10 f7 f8+ and Black forces a draw.

9 ... bl 10 a8+ xh7 11 f8 g6 12 f7 and wins

White threatens 1 f6 reaching diag 34, so Black must start:

1 ... g1+

2 f6

Now there are two main defensive ideas:

A. To keep the rook flexible with 2 ... bl

B. To attack the h-pawn with 2 ... h1.

A third idea, observation of the f-pawn with 2 ... f1, leads to diag 36b, viz: 3 a7+ h8 4 e7! g8 5 e8+ h7

etc.

etc.

12 d7 b6 13 d8+ g8 14 e7 (33c) 14 ...

Or 14 ... f8 15 f7+ g8 16 e7 a6 17 f6 a7+ 18 e5 b5+ 19 f6 and wins.

start checking:

1 ... g1+ 2 f5 f1+ 3 e6 e1+ 4 d6 d1+

Or 4 ... h1 5 a8+ f7 6 h7 xh7 7 a7+ etc.

5 e7 e1+ 6 g8 f1

If 6 ... f8 7 g7 followed by h7 and g8+.

7 h7+ h8 8 e7

But not 8 f7? xf7! 9 xf7 stalemate.

8 ... e1+ 9 a8+!

Now if 8 ... xf6 9 a8+!, or 8 ... xh7 9 f7 g7 10 e8 etc.

9 f7!

But not 9 f8? e8+ 10 f7 f8+ and Black forces a draw.

9 ... bl 10 a8+ xh7 11 f8 g6 12 f7 and wins

White threatens 1 f6 reaching diag 34, so Black must start:

1 ... g1+

2 f6

Now there are two main defensive ideas:

A. To keep the rook flexible with 2 ... bl

B. To attack the h-pawn with 2 ... h1.

A third idea, observation of the f-pawn with 2 ... f1, leads to diag 36b, viz: 3 a7+ h8 4 e7! g8 5 e8+ h7

etc.

etc.

12 d7 b6 13 d8+ g8 14 e7 (33c) 14 ...

Or 14 ... f8 15 f7+ g8 16 e7 a6 17 f6 a7+ 18 e5 b5+ 19 f6 and wins.

start checking:

1 ... g1+ 2 f5 f1+ 3 e6 e1+ 4 d6 d1+

Or 4 ... h1 5 a8+ f7 6 h7 xh7 7 a7+ etc.

5 e7 e1+ 6 g8 f1

If 6 ... f8 7 g7 followed by h7 and g8+.

7 h7+ h8 8 e7

But not 8 f7? xf7! 9 xf7 stalemate.

8 ... e1+ 9 a8+!

Now if 8 ... xf6 9 a8+!, or 8 ... xh7 9 f7 g7 10 e8 etc.

9 f7!

But not 9 f8? e8+ 10 f7 f8+ and Black forces a draw.

9 ... bl 10 a8+ xh7 11 f8 g6 12 f7 and wins

White threatens 1 f6 reaching diag 34, so Black must start:

1 ... g1+

2 f6

Now there are two main defensive ideas:

A. To keep the rook flexible with 2 ... bl

B. To attack the h-pawn with 2 ... h1.

A third idea, observation of the f-pawn with 2 ... f1, leads to diag 36b, viz: 3 a7+ h8 4 e7! g8 5 e8+ h7

etc.

etc.

12 d7 b6 13 d8+ g8 14 e7 (33c) 14 ...

Or 14 ... f8 15 f7+ g8 16 e7 a6 17 f6 a7+ 18 e5 b5+ 19 f6 and wins.
Rook v Rook

Although Black's king is better here than in previous examples, White's monarch is also very effective. On f7 it is well placed to support the f-pawn; and as we shall see White is therefore winning.

In order to understand diag 36 we should first look at diag 36a.

Maizelis 1939
The position is very similar to diag 5c. Actually it is slightly better for Black since his rook has "an extra file".

White is threatening to reach the Lucena position with 1 ♗f8! and if 1 ... ♗g6 2 f7+.

Black to play can defend with the only move 1 ... ♔a8.

For White's various winning attempts, all of which lead to a draw see (by analogy) diag 5.

Returning to diag 36, White is threatening 1 f6. Thus if,
Rook v Rook

Defensible Positions

"Black's" defence consists essentially in preventing the various lost positions which we have already examined.

Maizelis 1939

White is threatening 1 \( \text{H}e7+ \). If 1 ... \( \text{H}a7? \) 2 \( \text{H}e5 \) and 3 \( \text{f}6 \) wins easily, so: 

\[ \begin{align*}
1 & \ldots \quad \text{H}g1+ \\
2 & \quad \text{H}e6
\end{align*} \]

Now if 2 ... \( \text{H}xh6 \) 3 \( \text{H}e7+ \) \( \text{H}h7 \) 4 \( \text{f}6 \) and wins; or 2 ... \( \text{H}a1 \) 3 \( \text{f}7 \) in diag 36.

So Black must play: 

\[ \begin{align*}
2 & \ldots \quad \text{H}f1!
\end{align*} \]

Now White can try: 

A. 

3 \( \text{H}e8 \)

If 3 \( \text{H}e7+ \) or 3 \( \text{H}e5 \) \( \text{H}xh6! \). 

3 \( \text{H}e3 \) would be met as in the main line with 3 ... \( \text{H}a1! \). 

3 ... \( \text{H}a1! \)

Preparing for the flank checks. If 3 ... \( \text{H}f2? \) 4 \( \text{H}e6 \) \( \text{H}a2 \) 5 \( \text{f}6 \) \( \text{H}a6+ \) 6 \( \text{f}5 \) etc.

B. 

3 \( \text{H}e5 \) \( \text{H}a1 \)

Also 3 ... \( \text{H}e1+ \) 4 \( \text{H}d6 \) \( \text{H}f1! = \).

4 \( \text{H}d6 \) \( \text{H}a5 \)

5 \( \text{f}6 \) \( \text{H}g6 \)

5 ... \( \text{H}xh6 \) was also sufficient.

4 \( \text{H}g7+ \) \( \text{H}h8 \)

10 \( \text{H}x6 \) stalemate

This finish (from 3 ... \( \text{H}a2 \)) occurred in Bondarevsky - Keres, Leningrad-Moscow 1939.
As we shall see in the next examples (diags 39, 39a) "Black's" correct defensive plan is to put his rook on or near a1, once White has advanced his h-pawn.

Here Black is lost through adopting this plan too early, thus allowing White to run the h-pawn and support it from behind with his rook:

1 ... \(\text{a8}\)

He could also play 1 ... \(\text{f6}\) 2 h4 \(\text{h5}\).

2 h4 \(\text{a1}\)!

The losing move! Correct was 2 ... \(\text{h8}\) 3 \(\text{g5+}\) \(\text{f6}\) 4 \(\text{g4}\) \(\text{a8}\) 5 h5 and only now 5 ... \(\text{a1}\)! when 6 \(\text{g6+}\) \(\text{f7}\) 7 \(\text{f4}\) is very similar to diag 39 variation A.

3 h5 \(\text{a6}\)

This is forced for if 3 ... \(\text{h1}\) 4 \(\text{h4}\); or 3 ... \(\text{g1+}\) 4 \(\text{h2}\) \(\text{f1}\) 5 \(\text{h6}\).

4 \(\text{h4}\) \(\text{h6}\)

5 \(\text{f4+!}\) \(\text{g5}\)

6 \(\text{g4+}\) \(\text{f5}\)

Of course if 6 ... \(\text{xf5}\) 7 \(\text{f4}\) and 8 \(\text{xf6}\) wins, or 6 ... \(\text{f6}\) 7 \(\text{g6+}\).

7 \(\text{h4}\) \(\text{h8}\)

If 7 ... \(\text{a6}\) 8 \(\text{g5+}\) \(\text{f4}\) 9 \(\text{g6}\) \(\text{a1}\) 10 \(\text{f6+}\) \(\text{e5}\) 11 \(\text{f8}\) \(\text{h1+}\) 12 \(\text{g5}\) \(\text{g1+}\) 13 \(\text{h6}\) and White wins easily by playing \(\text{f8}\), \(\text{h7}\) and then \(\text{f4}\) - g4 freeing the king.

8 \(\text{g5+ (38a)}\)

8 ... \(\text{f6}\)

If 8 ... \(\text{f4}\) 9 \(\text{g7}\) \(\text{f5!}\) (9 ... \(\text{xf3}\) 10 \(\text{g5}\) is simple) 10 \(\text{g6}\) (zugzwang) 10 ... \(\text{a8}\) (10 ... \(\text{h7}\) 11 \(\text{g8}\)) 11 \(\text{g5+}\) \(\text{f6}\) 12 \(\text{h6}\) \(\text{a1}\) 13 \(\text{g3}\) \(\text{a4+}\) 14 \(\text{g4}\) \(\text{a1}\) 15 \(\text{g3}\) and wins.

9 \(\text{g4}\) \(\text{f7}\)

10 \(\text{f5+!}\)

Disrupting Black's defence.

11 \(\text{g7}\)

12 \(\text{g6}\) \(\text{h7+}\)

The king finally reaches the h-file, but meanwhile White's pieces have become very active - and the black rook is three moves from g1 where it can disturb White.

13 \(\text{g6}\) \(\text{a8}\) \(\text{g5}\)

14 \(\text{f4}\) \(\text{a1}\)

15 \(\text{g6}\) \(\text{h6}\)

But not 15 \(\text{f5?}\) \(\text{g1+}\) (see diag 39 variation B).

15 ... \(\text{g1+}\)

16 \(\text{f6}\)

This position is winning since the pawn on h5 controls g6. Black is quite unable to organise a reasonable defence.

16 ... \(\text{f1}\)

Or 16 ... \(\text{h1}\) 17 \(\text{f5}\) \(\text{h5}\) 18 \(\text{e7+}\) \(\text{h6}\) 19 \(\text{e8}\) \(\text{h7}\) 20 \(\text{e6}\) wins.

17 \(\text{f5}\) \(\text{f2}\)

18 \(\text{e5}\) \(\text{h2}\) 19 \(\text{e7+}\) \(\text{h6}\) 20 \(\text{e8}\) \(\text{h7}\) 21 \(\text{e6}\) \(\text{e2+}\) 22 \(\text{f7}\) \(\text{a2}\) 23 \(\text{f6}\) \(\text{a6}\) 24 \(\text{e7}\) \(\text{a7+}\) 25 \(\text{f8}\) \(\text{a6}\) (note that the h-pawn prevents 25 ... \(\text{g6}\) 26 \(\text{f7}\) \(\text{a7}\) 27 \(\text{e8}\) \(\text{a1}\) 28 \(\text{e7}\) 1-0.)
**Rook v Rook**

*Gligoric - Smyslov*

*Moscow 1947*

Diag 39 is the normal defensive position. Black keeps his rook on a1 so as to be able to check on the fifth rank or the g-file as required.

1 ... Rh5!? He can simply pass with 1 ... Rhc1 and if 2 Kg5 Rh1+ 3 Kf5 Rhb1 etc. as in Gligoric - Smyslov.

2 Kg6+

Now both obvious retreats draw.

A.

2 ... Qf7

This is what Smyslov played:

3 Kg5

Another idea is 3 Kh4 (Kopaev) (39a). White now threatens to cut the enemy king decisively with 4 Kg3, i.e. if 3 ... Ha5? 4 Kg3 Ha1 (4 ... Hb6 5 Kg5 Hg7 6 Ha3) 5 h6 Hhl+ 6 Kg5? Ha1 7 f5 Hbl 8 Kg4! Ha1 9 Hh4 Hgl+ 10 Qf4 Hf1+ 11 Qg4 Hg1+ 12 Kg3 Hg8 13 h7 and wins.

Black lost here since his king was stranded on f7. Instead after 3 Kh4 Hbl is just in time, e.g. 4 Kg5 Hgl+ 5 Kgf5 Hh1 6 Kg5 Hg1+ 7 Kh6 Hfl 8 Kg7+ Hf1! 9 Kg8 Kh7 10 Kg4 Hhl=; after 11 Kg5 Kg7 12 f5 the black king isn't cut off in contrast to the line above.

3 ... Hbl

4 Kg5

If 4 h6 Ha1! 5 Hh5 (5 Kg5 Ha5+! 5 h7 Hgl+! 6 Kf5 Hhl 7 Ha5 Hg7=) 5 ... Kg8 6 f5 Kg7 and the black king is very good against the h6-pawn, e.g. if 7 f6 Ha4+ 8 Kg5 Ha5+ 9 Kg6 Ha6+!.

B.

2 ... Kh7

Perhaps this is even easier: Black doesn't have to worry about diag 39a.

3 f5

The only way to make progress. It doesn't help to have the black king cut off on the h-file, so e.g. 3 Kh4 and 4 Kg3 would be ridiculous here.

3 ... Hbl

4 Kg5

If 4 f6 Ha6! 5 Kg4 Ha6 6 f7 (6 Kg7+ Kh8 7 Kg5 Kxf6!) 6 ... Ha4+ 7 Kg4 Kg4+!.

4 ... Kg1+

5 Kg6 Ha1

6 Kg2

If 6 Kg6 Ha6+ 7 Kg5 Ha5+ 8 Kg4 Ha1! 9 Kg6 Hg7=.

Or 6 Kg7+ Kh6 7 Kg7 Ha6+ 8 Kg6 Ha7! as in the main line.

6 ... Kg6

7 Kg2 Ha6+!

And not 7 ... Kxf5? 8 Kg2+ Kg4 9 Kg6 wins.

8 Kg6 Ha7=

Black is threatening 9 ... Kxf5 and if 9 Kg7 e8/e1 9 ... Ha6+ 10 Kg7 Kg5=.

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Summary

This ending is usually defensible. "White" will have to sacrifice his h-pawn to win with the f-pawn. But the ending of rook and pawn against rook with the defending king on the short side will be drawn.

"Black" usually loses if:

a) His king is cut off on the back rank (diags 34, 35);

b) He allows the enemy king to safely reach f7 (see diag 36);

c) He allows the h-pawn to run with his king cut off on the f-file (cf diags 38, 39a).

The correct drawing plan is:

a) To wait, with the rook able to go to h8, until White advances his forces (Diag 38; 2 ... ♖h8!);  
b) As soon as White advances his men and is thus unable to put his rook behind the h-pawn. Black should switch his rook to the a1 corner. We are now talking about a position like diag 39.

c) The rook will now be based on a1. Its function is to harry the white king, preventing it from establishing itself on dangerous squares, e.g. g5.

The black king sits on g7, Black answers rook to the seventh checks with ... ♖h6 and ♖g6+ with either ... ♖f7 or ... ♖h7. The latter is perhaps simpler (cf diag 39, variation B).

d) In order to make progress, White must either
d1) Play f5. This is not dangerous with the black king on f7. If it is on h7, Black still defends easily as in diag 37, variation B.

d2) Try h6+. In this case the black king must go to h7 and he can then defend as in diag 37, taking care not to allow the white king to reach f7 i.e. diag 36.

Problems with Rook's Pawns

White's rook is passively placed in front of the a-pawn. Black keeps it there permanently with:

1 ... ♖c4!  
Now he can defend precisely as in diag 21. The extra pawn is almost irrelevant, e.g.

2 a5 ♖c5  
3 a6 ♖c6  
4 ♖f4 ♖h7  
5 ♖e5 ♖g7  
6 ♖d5 ♖f6  
7 ♖c5 ♖h7  
8 h5

Of course if 8 ♖b5 ♖f5+! driving the king away from the a-pawn.

9 h6+ ♖h7!  
But not 9 ... ♖xh6? 10 a7 ♖a6 11 ♖h8+; nor 9 ... ♖xh6? 10 ♖b5 ♖h5+ 11 ♖b6 ♖h6+ 12 ♖b7 and wins.

10 ♖b5 ♖f5+  
11 ♖c4 ♖f6=

The position is dead since White simply cannot free his rook.

Diagram 40a

Now White can win since his king will find shelter on h5, viz:

1 ... ♖c4  
2 ♖h4 ♖d4  
3 ♖h5 ♖d5+  
4 g5 and wins
Gothenburg v Stockholm corr.

Black played:
1 ... \texttt{a4!}

Now White can free his king only at the cost of the h-pawn.
2 \texttt{f3+ g6} 3 \texttt{f2}

The only way to make progress.

3 \texttt{g3+! f7} 4 \texttt{g5 a4}
5 \texttt{g4 e6}
6 \texttt{e2 f6!} 7 \texttt{d3 f7}
8 \texttt{b3 g7} 9 \texttt{b4 d6!=}

Diagram 41a

Kopaev 1958

Now White's rook can defend both pawns whilst he activates the king. He is therefore able to win.

1 ... \texttt{a4}
2 \texttt{f3+ g6}

If 2 ... \texttt{e6} White wins by pushing the h-pawn.

3 \texttt{f2 e4}

Trying to cut off the king from the a-pawn.

4 \texttt{g3+! f5} 5 \texttt{g4 e6}
6 \texttt{a4 b6} 7 \texttt{g3 b3+} 8 \texttt{h4 a3}
9 \texttt{a5! f6} 10 \texttt{g5 e1} 11 \texttt{h5 a3} 12 \texttt{h4 a4}
13 \texttt{a6!}

Again he uses the skewer as after 8 ... \texttt{a3}. Black had to allow this since if his king were on f7 White would play 13 \texttt{f5+!}.

Diagram 41b

If the black king were on a7 then the position would be completely drawn. But here White is able to free his rook.

1 ... \texttt{f5+} 2 \texttt{b4 e5}

Not 2 ... \texttt{f4+} 3 \texttt{b5 f5+} 4 \texttt{a6}, nor 2 ... \texttt{b7} 3 \texttt{b6+} and 4 \texttt{b5} or 4 \texttt{h6}.

3 \texttt{a6 b8}

3 ... \texttt{e4+?} 4 \texttt{c3 e5} 5 \texttt{a7 b7} (or 5 ... \texttt{a5} 6 \texttt{h8}) 6 \texttt{a6}. 4 \texttt{b6+ a7} 5 \texttt{b5 e6!}

If 5 ... \texttt{e1} 6 \texttt{f5 xa6} 7 \texttt{c5 b7} 8 \texttt{d6} and White wins since the black king is completely shut out; or 5 ... \texttt{e4+?} 6 \texttt{a5 e6} 7 \texttt{b7+ b8} 8 \texttt{b6 e5+} 9 \texttt{b5} etc. (Note that if Black had played 2 ... \texttt{d5} instead of 2 ... \texttt{e5} then 5 ... \texttt{d1} here would still be hopeless after 6 \texttt{f5 xa6} 7 \texttt{c5 b7} 8 \texttt{d5} and wins.)

6 \texttt{g5 d6 (41c)}

For 6 ... \texttt{xa6?} see diag 41b, variation A.

A.

Thus with Black to move (numbering from diag 41c)

i) 1 ... \texttt{xa6}

This fails miserably to

2 \texttt{a5!}

Whilst it is important
generically that 2 h6 also wins when Black cannot reply 2 ... a5, viz. 2 ... a6 3 b5! h1 (if 3 ... b7 4 g7+ c8 5 h6 etc; or 3 ... b1+ 4 c6 b2 5 d7 4 h6 b7 5 g7+ c8 6 h7 etc.

ii)

1 ... a8
2 a5! c6
2 ... a7 3 c4 b6 4 a7!
3 b5 h6
Or 3 c1 4 b6.
4 c4 a7
5 d4 etc.

iii)

1 ... b8
2 c5
Zugzwang.
2 ... a7
If 2 ... c8 3 g6+ h5+ 4 b6; or 2 ... x6 3 g6! as in Ai.
3 d5 x6
4 e5 b7
5 f5 c7
6 g6 a5+ d7
7 g4 d7
8 h6
and wins by a tempo.

B.

With White to play, simplistic play fails since Black ends up a vital tempo ahead of Ai. iii, for example:

i)

1 c5 b8
2 d5! x6
If 2 ... a7 3 d4 x6 4 e4 b6 5 f4 c6 6 a5 d7 7 g5 and wins cf diag 24c; or 2 ... e6? 3 d6; or 2 ... c7 3 a7 x6 (3 ... b7 4 d4) 4 g5 b7 5 g7+ a8 6 g8+! x7 7 g7+ b8 8 g6 see var Ai.

And White can now win with:

3 d6 a1
4 f6!
While 3 d4 f6 4 e5 h6 5 e5 also wins; for both lines see diag 24c.

A.

8 a8
This is what Fischer actually played.

8 ... e4+
9 @e3 g5
10 Aa1 Ag6
11 Ab1 Ae5

Black plans to advance his king and therefore defends his g-pawn to prepare this.

12 Ad4
If 12 Aa1 xf5 13 Axf1+ Ag4
14 Ad4 Aa5 15 Axe4 Ag3
and the g-pawn can’t be stopped.

12 ...
13 Af1

Black threatened 13 ... e3, and if 13 Aa3 Aa5 etc. as above.

13 ...
14 Aa5!
14 Axe4
14 Axe4? Aa5+; 14 Af1+ Ab5 and 15 Af4.

Dvoretsky - Filipowicz
Polanica Zdroj 1973

White’s g-pawn is too far advanced. Since his king cannot go to g5 he must play with the e-pawn. This makes the win much harder, but not impossible.

1 ... Aa5+
2 Aa5 Aa5
3 Af6+!

In the game, Dvoretsky played 3 g6+? Ag7 4 Ad5 Aa1+ 5 Ag6 Ag1! 6 Aa7+ (if
6 Od7 Aa1 7 Ag6 Aa2 8 e5
Aa1 9 Ae8 Aal+) 6 Odg6 7 e5 Aa1?
7 ... Aa1! 8 Od6
Agf5 9 Agf7+ Ag6 10 e6 Aal+
see diag 5) 8 Ag7 Agb6 and
White won as in diag 6, viz.
9 e6 Ab8 10 Aa1 Ab7+ 11 Ag8
Ab8+ 12 Ag7 Ab2 13 Aa1!
Aa2+ 14 Od7 Ad2+ 15 Aa8
1-0.

3 ...
4 Ag7

A.
7 Af2? Ag6
8 Ad2
White now threatens 9 Ae7, e.g.
8 ... Aa7+? 9 Ag7 Ag5
10 Af7+ Ag5 11 e6 Ag6 12
Ag2+ Agf5 13 Agf7 wins.

Black can defend by preventing this with either 8 ... Aa7 or
8 ... Aa5, e.g.

8 ...
9 Ad1 Aa7!
10 Ad2 Aa7
11 Ad8 Aa7+
12 Ad6 Aa7
13 Ad8 Aa6+
14 Ae7 Agx5
15 e6 Ag6!

And the position is a theoretical draw (cf diag 5).

B.
7 Af5 Aa5+

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Alternatively:

a) If 7 ... \(f6+\) 8 \(c7\) \(a1\) then White can win with either 10 \(e6\) or move simply 10 \(d6+\);

b) or if 7 ... \(d1+\) 8 \(c6\) \(a1\) 9 \(e6\) \(a6+\) 10 \(b7\) \(d6\) 11 \(c7\) \(a6\) 12 \(e7\) \(a7+\) 13 \(f6\) \(a8\) (15 ... \(a6+\) 16 \(b7\)) 16 \(g6\) \(f7\) 17 \(e5\) \(e8\) 18 \(d5\) wins easily - White soon forces \(g6\) or if 18 ... \(a5+\) 19 \(e4\) \(e5+\) 20 \(e7\) \(e7\) 21 \(b6\) \(e8\) 22 \(d6\)!

c) or 7 ... \(g1\) 8 \(d6\) \(xg5\) 9 \(f1\) \(h5\) and wins.

8 \(d6\)

8 \(e4\) also wins: 8 ... \(a1\) (8 ... \(a4+\) 9 \(f5\) \(a1\) 10 \(d6\) \(g6\) \(f7\) 10 \(e6+\) \(e7\) 11 \(b6\) and the white king soon reaches \(g6\).

8 ... \(a6+\)

9 \(c7\) \(a7+\)

Or if 9 ... \(a5\) 10 \(e6\) \(xg5\) (10 ... \(a6\) see b) above) 11

\(f7+!\) \(g8\) (or 11 ... \(g6\) 12 \(f8!)\) 12 \(f1\) \(a5\) 13 \(e7\) and White wins easily because of the bad position of Black’s king on \(g8\) - see diag 4c.

10 \(b6\) \(a1\)

11 \(e6\) \(c7\)

12 \(f7+!\) \(g6\)

Here Minev gives 13 \(d7?\)

\(e1 14 \(c6\) \(f5!\), but White plays instead:

13 \(d7!\) \(c8\)

13 ... \(e1 14 \(e7!\) \(xg5\) (or 14 ...

\(f7\) 15 \(g6+\) \(e8\) 16 \(g7\) \(g1\)

17 \(d8+\)) 15 \(c7\) (possible with the rook on \(d7\)) 15 ...

\(f6\) 16 \(d8\).

14 \(d5!\)

But not 14 \(e7?\) \(e8\) 15 \(c6\)

\(xg5\) 16 \(d6\) \(f6\) 17 \(a7\)

\(f7=\).

14 ...

15 \(e5\) \(g8\)

16 \(e7+\) \(e8\)

17 \(g6?\) \(c1\)

18 \(g5!\) and wins.

\(g6!\) wins.

3 \(f6\) \(f7+\)

4 \(g5\) \(g7+\)

And White played on for a few moves, but of course it is quite drawn.

5 \(g6\) \(a7\)

6 \(f6+\) \(g7\)

7 \(d6\) \(e7\)

8 \(b8\) \(a7\)

9 \(e8\)

Threatening 10 \(e7+!\).

9 ...

10 \(h8\) \(g7\)

11 \(h6\) \(f8\)

Or 11 ... \(d7\) 12 \(f6+\) \(g8\) 13

\(g6\) \(g7+!\) - but not 13 ...

\(a7??\) 14 \(f7!+\).

12 \(f6\) \(a1!\)

The extra pawn is now almost irrelevant.

13 \(h8+\) \(f7\)

Rook v Rook

Doubled Pawns

Suetin - Kholmov

Kiev 1954

This position is drawn, but Black must be much more careful than in the Philidor position, diag 1.

1 \(d7+\)

A.

1 ... \(f8\)

This is what Kholmov played.

2 \(d6\) \(a7!\)

The only move. If 2 ... \(a1\)

\(f6\) \(g8\) 4 \(d8+\) \(h7\) 5

\(e7\) \(a7+\) (or 5 ... \(e1+\) 6

\(f7\) \(e4\) 7 \(f6\) \(xf4\) 8 \(d6\)

wins) 6 \(d7\) \(a8\) 7 \(f6\) \(g6\) 8

\(f7\) \(g7\) 9 \(f5\).

Or 2 ... \(a4\) 3 \(f6\) \(g8\) (3 ...

\(e8\) 4 \(e6+\) \(f8\) 5 \(a6!\)) 4

\(f7+!\) \(g8\) (or 11 ... \(g6\) 12

\(f8!)\) 12 \(f1\) \(a5\) 13 \(e7\) and

White wins easily because of the bad position of Black’s king on \(g8\) - see diag 4c.

10 \(b6\) \(a1\)

11 \(e6\) \(c7\)

12 \(f7+!\) \(g6\)

Here Minev gives 13 \(d7?\)

\(e1 14 \(c6\) \(f5!\), but White plays instead:

13 \(d7!\) \(c8\)

13 ... \(e1 14 \(e7!\) \(xg5\) (or 14 ...

\(f7\) 15 \(g6+\) \(e8\) 16 \(g7\) \(g1\)

17 \(d8+\)) 15 \(c7\) (possible with the rook on \(d7\)) 15 ...

\(f6\) 16 \(d8\).

14 \(d5!\)

But not 14 \(e7?\) \(e8\) 15 \(c6\)

\(xg5\) 16 \(d6\) \(f6\) 17 \(a7\)

\(f7=\).

14 ...

15 \(e5\) \(g8\)

16 \(e7+\) \(e8\)

17 \(g6?\) \(c1\)

18 \(g5!\) and wins.

\(g6!\) wins.

3 \(f6\) \(f7+\)

4 \(g5\) \(g7+\)

And White played on for a few moves, but of course it is quite drawn.

5 \(g6\) \(a7\)

6 \(f6+\) \(g7\)

7 \(d6\) \(e7\)

8 \(b8\) \(a7\)

9 \(e8\)

Threatening 10 \(e7+!\).

9 ...

10 \(h8\) \(g7\)

11 \(h6\) \(f8\)

Or 11 ... \(d7\) 12 \(f6+\) \(g8\) 13

\(g6\) \(g7+!\) - but not 13 ...

\(a7??\) 14 \(f7!+\).

12 \(f6\) \(a1!\)

The extra pawn is now almost irrelevant.

13 \(h8+\) \(f7\)
Rook v Rook

Black can also play:
1... d7+ e7
2... d6 e4!

This attack on the black pawn is a typical defensive manoeuvre.

B.

1. ... d7+ e7
2. ... d6 e4!

White cannot win by the normal method of building a bridge (cf diag 3 - the Lucena position) since the b6 pawn obstructs his king. But there is a way:
1. ... d2+ e7
2. ... d6!!

The only way to win. If 2

Duras 1902

Fighting material equality tends to lead to a draw there are many positions in which one side has sufficient positional advantage to force a win.

Lasker 1890

White's pawn is supported by his king but Black's is essentially alone. White cannot win immediately since if he brings his king into the open Black will check it away from the pawn. But there is a way:
1. ... b7 a7
2. ... a7 a2
3. ... h5+ a4
4. ... b6

Threatening c/cxh2 again.

Lasker 1890

White's pawn is supported by his king but Black's is essentially alone. White cannot win immediately since if he brings his king into the open Black will check it away from the pawn. But there is a way:
1. ... b7 a7
2. ... a7 a2
3. ... h5+ a4
4. ... b6

Threatening c/cxh2 again.

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Keres

This is Keres' excellent elaboration of Lasker's theme. Actually there is even some introductory play. Initial position: \( \text{Rb7, } \text{Ba6, e6, h6 v } \text{g8, } \text{Bh8, a5, e7: } \text{1 c8! a4 2 d7 a3 3 } \text{fxe7 a2 4 } \text{Bxa7! Bh8 5 h7 } \text{Bxh7 reaching diag 47.} \)

1 \( \text{Bxe8+ } \text{Bf6} \)

The king should go forward.

If 1 ... \( \text{Bg8/h8} \) 2 e7 \( \text{Bg7} \) 3 \( \text{Bxa3} \) and 4 \( \text{B}+, 5 \text{B} 2\text{nd rank wins more easily.} \)

2 e7 \( \text{Bh5} \)

If 2 ... \( \text{Bg7} \) 3 \( \text{Bxa3 Bb1} \) 4 \( \text{Bxa2 Bb8+ 5 } \text{Bd7 White wins since the black rook is only on the b-file.} \)

Or 2 ... \( \text{Bh6} \) 3 \( \text{Bxa3 Bg5} \) 4 \( \text{Bg3+ } \text{Bf4 5 } \text{Bf2 } \text{Bf3} \) (or 5 ... \( \text{Bh3} \) 6 \( \text{Bb2} \) 6 \( \text{Bb2} \) 7 \( \text{Bd2 } \text{Bf3} \) 8 \( \text{Bd7} \) 9 \( \text{Bb2} \) 10 \( \text{Bf7} \) \( \text{Bc1+ 11 } \text{Bb7} \) and wins easily since he queens with check.

3 \( \text{Bxa3 } \text{Bh4!} \)

If 3 ... \( \text{Bg5} \) 4 \( \text{Bg3+} \) and 5 \( \text{Bf2} \) as above; and if 3 ... \( \text{Bf4} \) 4 \( \text{Bf7} \) at once - see the main line.

Bukic - Muller

Varna 1975

Although Black must obviously lose his pawn, correct defence would still hold the draw.

1 \( \text{Bb7} \)

If 1 ... \( \text{Bxf6? } \text{Bxa6+ 2 } \text{g5 } \text{Bf8 would be a simple draw.} \)

1 ... \( \text{Bxa6?} \)

This already loses. 1 ... \( \text{Bf8!} \) was correct, trying to get the king to the short side of the white f-pawn, e.g. 2 \( \text{Bb6} \) (if 2 \( \text{Bf7+ } \text{Bg8} \) does not help White at all) 2 ... \( \text{Bf4+ 3 } \text{fxf6 } \text{Bg8 4 } \text{Bb8+ } \text{Bh7 5 } \text{Bf7 } \text{Bc4= cf diag 5 etc.} \)

2 \( \text{Bxe6!} \)

Now the black king will be driven away from the pawns to the long side.

2 ... \( \text{Bc6} \)

3 \( \text{Bc6} \)

4 \( \text{Bc6} \)

5 \( \text{Bf7+ } \text{Bd7} \)

6 \( \text{Bf1 } \text{Bf7} \)

7 \( \text{Bd7+ } \text{Bf8} \)

8 \( \text{Bh7 1-0} \)

There's no defence to the threat of 9 \( \text{Bd7+} \) and 10 \( \text{Bd6.} \)
Even very strong players can make mistakes in these apparently simple positions.

1. ... $\text{Kh3}$
2. $\text{Ke1} \text{Kh8}$?

2. ... $\text{Kh6}$! drew easily since even if 3 $\text{Kc5} \text{hxh5}=$ or if 3 $\text{Kb7} \text{Kf4}=$.

3 $\text{Kc7}+$!

In the game, Gligoric played 3 $\text{Kxb5} \text{h5}+4 \text{Kc6} \text{Kh8}+5 \text{b3} \text{Ke8} 6 \text{Kxe8} \text{Kxe8} 7 \text{Ke4} \text{Kb8}!=$, but this move should win.

3. ... $\text{d8}$

Or 3 ... $\text{d6} 4 \text{Ke6}+ \text{d7} 5 \text{Kxb5} \text{h5+} 6 \text{Kb6} \text{h8} 7 \text{Kb7+ Ke8} 8 \text{Ke6} \text{Ke8}+ 9 \text{Kf7} and wins.

4 $\text{Kf2}$
5. $\text{Ke4}$!

Or 4 ... $g3 5 \text{f7}+$.

6. $\text{d8}+ $
7. $\text{Ke8}+$
8. $\text{Kf7}+

1-0

"Artificial Shelter"

Kotov - Eliskases
Stockholm 1952

Were it not for the g-pawn, Black would draw easily. But he is quite lost, since that pawn gives the white king shelter.

1. ... $\text{Kf2}$
2. $\text{Ke6}+ $
3. $\text{Kf5}$
4. $\text{Kg6}+ $

Or 4 ... $g3 5 \text{f7}+$.

5. $\text{f7}+$
6. $\text{d8}+$
7. $\text{Ke8}+$
8. $\text{Kg4}?$

This natural looking move, which Bogoljubow actually played, leads to a loss.

4. $\text{b7} f5$

Or 4 ... $\text{b8} 5 \text{c7} \text{xb7}+$

6 $\text{xb7} f5 7 \text{c6} and wins.

A.

3. ... $\text{g4}?$

Putting it where it belongs - behind the passed pawn 1 $\text{f1}=$? would merely give Black a vital tempo.
Rook v Rook

9 ♦f8 ♦g3
10 ♦e3 1-0

B.
3 ... ♦e4!
This way he will impede the white king on its return journey.

4 b7
Or 4 ♦e1+ ♦f4 5 ♦f1+ ♦e5 6 b7 ♦f5 7 ♦c7 ♦f8 8 b8 ♦ ♦xb8 9 ♦xb8 ♦f4 10 ♦c7 ♦e4 11 ♦d6 ♦f3=.

We should note here that White can never force a queen. If in the last line he played ♦d1 - d8, Black would reply ... ♦f7+ and ... ♦xb7

N

Gilg - Tartakower
Semmering 1929
Here Black is able to "cheat" by preventing his opponent from racing at all.

1 ... ♦g1!
But not 1 ... ♦e1? 2 ♦xel ♦xe1 3 ♦h7 ♦f2 4 ♦h6 ♦f3 5 ♦h8 ♦f4 6 ♦h7 and draws by a tempo.

2 ♦a2 ♦f3
Now if 3 ♦xe2, Black having an extra tempo would win, viz: 3 ... ♦xe2 4 ♦h7 ♦f3 5 ♦h6 ♦f4 6 ♦h8 ♦f5 7 ♦h7 ♦g6 8 ♦g8 ♦al 9 ♦h8+ ♦f6 etc. (cf diag RP13).

3 ♦a3+ ♦f4
4 ♦a4+ ♦e3!
5 ♦a3+ If 5 ♦e4 el! the black king is once again too close.

G

Korchnoi - Kasparov
London 1983
This very difficult position played a crucial role in the Candidates semi-final match.

1 ♦d2 ♦g4
1 ... ♦d4 to blockade the d-pawn is too slow, viz: 2 ♦e6 ♦g4 3 ♦g2 ♦h4 4 ♦e5=.

2 ♦d4!
Not 2 ♦e7? ♦d4! 3 ♦e6 ♦f4! shoulder off the white king and winning easily.

2 ... ♦f5!
Black's first aim must be to attack the white d-pawn - if he simply ran his own pawn then it would be a simple draw. Black therefore tries to exclude the white king from the struggle, prior to attacking the d-pawn.

If 2 ... ♦f3? 3 ♦e7 ♦d5 (or 3 ... ♦g6 4 d5 etc.) 4 ♦e6

0-1

264
draws easily.

2 ... \( \texttt{g}f4 \) is a possible compromise move. But after 3 \( \texttt{g}e7 \texttt{g}6 4 \texttt{f}g2! \texttt{f}e4 5 \texttt{f}f7 \texttt{g}4 6 \texttt{f}f6 \texttt{f}f3 7 \texttt{x}g3+! leads to a draw (see variation Aii below).

In this variation, instead of 4 \texttt{f}g2, 4 d5 is also just possible - see Ai below.

3 \texttt{f}e7 (53a)

A.

i) 4 d5? \texttt{g}2

However if the black king were on \texttt{f}4, Black would have to try to win another way:

4 ... \texttt{f}e5
5 d6

If 5 \texttt{f}f7 \texttt{f}f6+ 6 \texttt{f}e7 \texttt{f}f2 7 \texttt{d}d1 \texttt{g}2 8 d6 \texttt{f}f1 wins.

5 ... \texttt{f}g7+
6 \texttt{f}f8
6 \texttt{f}e8? \texttt{f}e6 7 \texttt{f}f8 \texttt{g}2!
6 ... \texttt{f}d7
7 \texttt{f}d3!
7 \texttt{f}g2? \texttt{f}f4 8 \texttt{d}d2 \texttt{f}e3 9 \texttt{g}g2 \texttt{f}f3 10 \texttt{d}d2 \texttt{g}2 and wins.

7 ... \texttt{f}f4
8 \texttt{f}e8 \texttt{g}2
9 \texttt{d}d4+!

A good illustration of the power of disruptive checks in rook endings in particular. 9 \texttt{x}d7? \texttt{g}1\texttt{w} and now, e.g. 10 \texttt{d}d5 would give White excellent drawing chances but this move actually forces a draw.

9 ... \texttt{f}f5

If the king goes to the e-file then ... \texttt{g}g-file will draw, e.g. 9 ... \texttt{f}e3 10 \texttt{f}g4=.

Black could also try to run his king to \texttt{h}2 but then White draws with a skewer, e.g. 9 ...

\texttt{g}g5 10 \texttt{d}d5+ \texttt{h}4 11 \texttt{d}d4+ \texttt{h}3 12 \texttt{d}d1 \texttt{x}d6 13 \texttt{x}d6 \texttt{g}1\texttt{w} 14 \texttt{h}6+ and 15 \texttt{g}g6+=

10 \texttt{d}d5+ \texttt{f}f6
10 ... \texttt{e}e6 11 \texttt{g}g5 and if 11 ...

... \texttt{h}h7?? 12 \texttt{g}g6+.

11 \texttt{d}d1 \texttt{g}g7
Or 11 ...

... \texttt{h}h7 12 \texttt{g}g1 \texttt{e}e6 13 \texttt{f}f8=.

12 \texttt{g}g1!
Not 12 \texttt{f}f8? \texttt{h}h7 and wins; nor 12 d7?? \texttt{g}g8 mate!

12 ... \texttt{f}f6
13 \texttt{f}f8 \texttt{g}g3
14 d7! \texttt{x}d7
15 \texttt{f}f7=

ii) 4 \texttt{g}g2! \texttt{f}e4
Or 4 ... \texttt{g}g7+ 5 \texttt{f}f8 \texttt{g}g4 6 \texttt{f}f7 \texttt{f}e4 7 \texttt{f}f6 transposes to the text.

5 \texttt{f}f7 \texttt{g}g4
6 \texttt{f}f6 \texttt{f}f3
Or 6 ...

... \texttt{x}d4 7 \texttt{f}f5.

7 \texttt{f}xg3+!
And White just draws, e.g. 7 ...

... \texttt{x}g3 8 d5 \texttt{f}e4 9 d6 \texttt{d}d3 10 \texttt{f}e7 (or indeed 10 \texttt{f}e6) 10 ...

... \texttt{d}d5 11 d7=.

B.

3 ... \texttt{d}d5

This is what Kasparov actually played.

4 \texttt{d}d3!!

Luring the black king to a bad square. Not 4 \texttt{d}d1 \texttt{f}e4 5 \texttt{g}g1 \texttt{f}f3 6 \texttt{d}d1 \texttt{g}2 7 \texttt{f}e6 \texttt{x}d4!.

4 ... \texttt{f}f4
5 \texttt{e}e6 \texttt{g}g5! (53b)

With the black king on the fifth rank, 5 ... \texttt{g}2 6 \texttt{d}d1 \texttt{x}d4 fails to 7 \texttt{d}d4 check.

i) 6 d5?
The losing move which Korchnoi actually played:

\texttt{g}g5 10 \texttt{d}d5+ \texttt{h}4 11 \texttt{d}d4+ \texttt{h}3 12 \texttt{d}d1 \texttt{x}d6 13 \texttt{x}d6 \texttt{g}1\texttt{w} 14 \texttt{h}6+ and 15 \texttt{g}g6+=

10 \texttt{d}d5+ \texttt{f}f6
10 ... \texttt{e}e6 11 \texttt{g}g5 and if 11 ...

... \texttt{h}h7?? 12 \texttt{g}g6+.

11 \texttt{d}d1 \texttt{g}g7
Or 11 ...

... \texttt{h}h7 12 \texttt{g}g1 \texttt{e}e6 13 \texttt{f}f8=.

12 \texttt{g}g1!
Not 12 \texttt{f}f8? \texttt{h}h7 and wins; nor 12 d7?? \texttt{g}g8 mate!

12 ... \texttt{f}f6
13 \texttt{f}f8 \texttt{g}g3
14 d7! \texttt{x}d7
15 \texttt{f}f7=

\texttt{g}g5 10 \texttt{d}d5+ \texttt{h}4 11 \texttt{d}d4+ \texttt{h}3 12 \texttt{d}d1 \texttt{x}d6 13 \texttt{x}d6 \texttt{g}1\texttt{w} 14 \texttt{h}6+ and 15 \texttt{g}g6+=

10 \texttt{d}d5+ \texttt{f}f6
10 ... \texttt{e}e6 11 \texttt{g}g5 and if 11 ...

... \texttt{h}h7?? 12 \texttt{g}g6+.

11 \texttt{d}d1 \texttt{g}g7
Or 11 ...

... \texttt{h}h7 12 \texttt{g}g1 \texttt{e}e6 13 \texttt{f}f8=.

12 \texttt{g}g1!
Not 12 \texttt{f}f8? \texttt{h}h7 and wins; nor 12 d7?? \texttt{g}g8 mate!

12 ... \texttt{f}f6
13 \texttt{f}f8 \texttt{g}g3
14 d7! \texttt{x}d7
15 \texttt{f}f7=

\texttt{g}g5 10 \texttt{d}d5+ \texttt{h}4 11 \texttt{d}d4+ \texttt{h}3 12 \texttt{d}d1 \texttt{x}d6 13 \texttt{x}d6 \texttt{g}1\texttt{w} 14 \texttt{h}6+ and 15 \texttt{g}g6+=

10 \texttt{d}d5+ \texttt{f}f6
10 ... \texttt{e}e6 11 \texttt{g}g5 and if 11 ...

... \texttt{h}h7?? 12 \texttt{g}g6+.

11 \texttt{d}d1 \texttt{g}g7
Or 11 ...

... \texttt{h}h7 12 \texttt{g}g1 \texttt{e}e6 13 \texttt{f}f8=.

12 \texttt{g}g1!
Not 12 \texttt{f}f8? \texttt{h}h7 and wins; nor 12 d7?? \texttt{g}g8 mate!

12 ... \texttt{f}f6
13 \texttt{f}f8 \texttt{g}g3
14 d7! \texttt{x}d7
15 \texttt{f}f7=

\texttt{g}g5 10 \texttt{d}d5+ \texttt{h}4 11 \texttt{d}d4+ \texttt{h}3 12 \texttt{d}d1 \texttt{x}d6 13 \texttt{x}d6 \texttt{g}1\texttt{w} 14 \texttt{h}6+ and 15 \texttt{g}g6+=

10 \texttt{d}d5+ \texttt{f}f6
10 ... \texttt{e}e6 11 \texttt{g}g5 and if 11 ...

... \texttt{h}h7?? 12 \texttt{g}g6+.

11 \texttt{d}d1 \texttt{g}g7
Or 11 ...

... \texttt{h}h7 12 \texttt{g}g1 \texttt{e}e6 13 \texttt{f}f8=.

12 \texttt{g}g1!
Rook v Rook

\[
\text{6 ... } \text{g6+!}
\]

But not 6 ... g2? 7 d4+!
\[
\text{g}e3 \text{8 d1 and draws.}
\]

7 \text{e7}

Or 7 \text{f7} g2 8 d1 d6 etc.
\[
7 \ldots \text{g2}
\]

8 d1 e5

9 d6 e6+

10 d7 \text{xd6+}

11 \text{xd6} g1w

and Black soon won.

\[
\text{7 f7}
\]

\text{g2}

8 d1 \text{d6}

9 d5 e5

10 d6! xd6=

\text{a6+! leads to a win.}

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.

2 a7+ f8

3 e5 b6

He must prevent 4 g6.

4 a8+ f7

If 4 ... e7 5 f6+ gxf6 6 g6

b1 7 g7 b1+ 8 g6 g1+ 9 h7 b1+ 10 g8 f5 11 a7+ e6 12 f8 and wins.

5 g6+ e7

6 g8 f6

7 f8+ e5

8 f6!!

8 g5 b1! would only be a draw.
With the king badly cut off, White should win quite easily

1... g6

2 h3 h4

3 f4?! By threatening 5 b8 he forces the black king to retreat.

4... e7

5 f5! g4

Black has to wait since if 5... e6? 6 b5.

6 c3 h4

7 b3?

This is a mistake since White needs b3 for his king and if he makes too many pawn moves White risks some pawn endings being drawn. After 7 b3? I can see no win for White!

The correct plan was 7 d4!

\[ \text{h3+ 8 b4 h5 9 b3 g5} \]

(\text{or 9... h3+ 10 a4}) 10 b4! g6 11 a4 d7 12 b5 c7 13 a6+ as in L. A. Schneider - Romanishin, Buenos Aires Ol 1978, but with flanks reversed.

\[ \text{If 3 f6 c6+; or 3 h6 c6+ 4 h7 f6!=.} \]

3... c5!

Although this is the only move, it draws relatively simply:

2 b7+ f8!

But not 2... e6 3 f5+ exf6 4 e7+ d6 5 xf7 and wins.

3 f5

If 3 f6 c6+; or 3 h6 c6+ 4 h7 f6!=.

3... c5!

4 f6 e1

5 xf7+ g8!

Of course it must go to the short side.

1... c1!

2 b7+ f8

3 f5

If 3 f6 c6+; or 3 h6 c6+ 4 h7 f6!=.
Now if he forces events immediately White will only draw.

4 $\text{Rb}8+$ $\text{Ke}7$
Not 4 ... $\text{Kg}7$ 5 $f6+$ $\text{Kh}7$ 6 $e6$ and wins.
5 $f6+$? $\text{Kd}7$!
6 $\text{Rb}7+$ $\text{Ke}8$!
But not 6 ... $\text{Kd}7$ 7 $\text{Kc}7+$ $\text{Nd}5$ 8 $\text{Ke}8$ and the threat of $9$ $e6$ is decisive.
7 $\text{Rb}8+$ $\text{Kd}7$
8 $\text{Kf}8$ $\text{Kg}1+$
9 $\text{Ke}6$
Or if 9 $\text{Kf}4$ $\text{Kf}1+$ 10 $\text{Kg}3$
$\text{Kg}6$=
9 ... $\text{Ke}6$
10 $\text{Kf}8+$ $\text{Kf}5$
11 $\text{Ke}7$ $\text{Kg}2$
12 $\text{Kg}8$
This position arose with colours reversed in a clock simultaneous game Karpov - King.
Black played 12 ... $\text{Kh}2+$ and lost quickly. Instead, correct is:
12 ... $\text{Ka}2$
13 $\text{Kg}7$
White cannot improve on this - if 13 $\text{Kg}8$ $\text{Ke}2$!
13 ... $\text{Kxe}5$
14 $\text{Kxf}7$
If 14 $\text{Kf}8+$ $\text{Kf}5$ 15 $\text{Kh}1$ $\text{Ka}7$
16 $\text{Kc}7$ $\text{Kf}6$; or 14 $\text{Kf}8$ $\text{Kf}5$; 15 $\text{Kxf}7$ $\text{Kg}2$+!$=
14 ... $\text{Kf}5$
15 $\text{Kf}8$ $\text{Kg}7$
16 $\text{Kg}8$ $\text{Kf}6$
17 $\text{Kf}7$ $\text{Kb}7$=
This drawing variation is quite significant. If White contrived, in a position like diag 56, to advance his f-pawn to f6 early on then we might well transpose into it eventu-
ally.

ii) Instead in diag 56a, White should quietly “pass”:

4 $\text{Kh}2$
This is zugzwang!

4 ... $\text{Rg}2$
a) If 4 ... $\text{Ke}8$ 5 $\text{Kf}6$ $\text{Kh}6+$
6 $\text{Kg}7$ $\text{Kf}5$ 7 $\text{Kxf}7$ $\text{Kg}5+$ 8 $\text{Kh}6$ wins;
b) 4 ... $\text{Kf}8$ 5 $\text{Ka}8+$ $\text{Kg}7$ (or
5 ... $\text{Kh}7$ 6 $\text{Kf}6$ etc.) 6 $f6+$
$\text{Kh}7$ 7 $e6$ and wins;
c) 4 ... $\text{Kg}7$ 5 $f6$ (but not 5
$e6??$ $f6+$) 5 ... $\text{Ke}8$ 6 $e6$!
d) Finally if the rook moves from the h-file then 5 $\text{Kf}6$
will win at once.

5 $\text{Ka}8+$ $\text{Kd}7$
6 $f6+$ $\text{Kd}7$
7 $\text{Kf}8$ $\text{Kg}2+$
If 7 ... $\text{Kf}6$ 8 $\text{Kg}8$ $\text{Kd}5$ 9
$e6$; or 7 ... $\text{Kh}7$ 8 $\text{Kg}4$ $\text{Ke}6$ (8
... $\text{Kc}7$ 9 $\text{Ke}8$ $\text{Kd}7$ 10 $\text{Ke}7+$
and 11 $e6$) 9 $\text{Ke}8+$ $\text{Kd}5$ 10
$\text{g}5$ $\text{Kh}1$ 11 $e6$ and wins.
8 $\text{Kf}4$!
With the rook a rank further away as in variation Bi,
this achieved nothing, but here it wins since Black cannot afford to give another
check.

8 ... $\text{Ke}6$
Or 8 ... $\text{Kf}2+$ 9 $\text{Ke}3$ and 10
$\text{Kxf}7+$ etc.

9 $\text{Ke}8+$ $\text{Kd}5$
10 $\text{Kd}8+$
Only not 10 $e6$? $\text{Kxe}6$ 11 $f7$
$\text{Kf}2+$ etc.

10 ... $\text{Kc}6$
Or 10 ... $\text{Ke}6$ 11 $\text{Kd}6$ mate!
11 $\text{Kf}8$ and wins
Wedberg - Speelman
Gothenburg 1982

This position is drawn. Black has only got two real winning tries and both fail after the natural:

1...Rh2!

A.
To play the king to e3 and then exchange rooks.

White can allow this since the resulting pawn ending is drawn, e.g. 1...Qe4 2 Qc2 Qe3 3 Qb2 Qd3 4 Qa2 Qd2+ (4...f3+ 5 Qg3 does not help Black) 5 Qxd2 Qxd2 6 Qf3 Qd3 7 h4! gxh4 8 Qxf4=

B.
To play ...Qh4 (this must be prevented but that is not too difficult): 1...Qg6 2 Qc2 Qh5 3 Qc8! (forced: if he allowed 3...Qh4 he would be lost) 3...Qa2+ 4 Qf3! Qa3+ (or 4...Qh2 5 Qh8+ Qg6 6 Qg8+ Qf6 7 Qh8=) 5 Qg2 Qg3+ 6 Qh2. Now Black can try but there's really nothing much to do, e.g. 6...Qe3 7 Qg2 Qg6 8 Qf8 Qe2+ 9 Qf3 Qh2 10 Qh8 Qg7 11 Qh5 Qf6 12 Qh8 Qh1 13 Qg2 Qd1 14 Qf8+ Qg7 15 Qf5 Qd2+ 16 Qf3 Qd3+ 17 Qg2 Qg6 ½-½ (Smyslov - Keres, 1949).

However my opponent, who was extremely tired, blundered with:

1.Qe8? Qg3+ 2 Qh2 Qe3 (57a)

This position is lost since Black has gained a vital tempo to advance his king.

A.

3.Qf8+
This was played in the game.
4...Qe4
4. Qg8

Or 4 Qe8+ Qf3 5 Qg8 Ne2+ and:

a) 6 Qg1 Qg2+ 7 Qf1 (7 Qh1 g4!) 7...Qh2 8 Qg1 Qxh3 9 Qxg5 Qg3+!

b) 6 Qh1 Qe3 7 Qe8+ Qf2 8 Qg8 f3 9 Qh2 (9 Qxg5 Ne1+ transposes to the game) 9...Qe3+ 10 Qg3 Qg2+ mate!

4...Qe2+
5 Qg1 Qe3!
6 Qxg5 Ne1+
7 Qh2 f3
8 Ne5+ Qd2

Not 8...Qf2? 9 Qa5= (cf diag 5 etc).

9 Qf5 Qe2
10 Ne5+ Qf1 (57b)
11 Qa5

If 11 Qf5 f2 12 Qg3 Ne3+ 13 Qg4 (or 13 Qh2 Qe1 14 Qg2 Ne2) 13...Qg2 14 h4 Qg3+! wins.

Or 11 Qd5 (to control the d-file but it is too near the black king) 11...Qf2 12 Qd2 Qe6 13 Qa2 (or 13 Qg3 Ne3+ 14 Qg4 Qg1! as in the game) 13...Qel 14 Qg3 f1w 15 Qa1+ Qe2 16 Qxf1 Qxf1 17 h4 (or 17 Qg4 Qg2 etc) 17...Qe4! and wins (cf diag RP10).

11...Qf2
12 Qa2 Qd1!
The only move to win.
13 Qg3 Qd3+
14 Qg4 Qe1!

But not 14...Qg1? 15 Qa1+ Qf1 16 Qxf1+ Qxf1 17 h4 and White draws by a tempo. Now however White must take at once - if 15 Qa1+ Qd1; and so Black wins by a tempo (cf diag RP5-14).
Rook v Rook

B. 1... h4?! 
2... h5! 
3... g4! 
4... h4! 
5... h3! 
6... h2 Black wins easily, e.g. 7... g5 8... h5 etc.
7... g5?! (57c) 
Black must preserve the pawn to provide shelter for his king and avoid stalemate.
8... f4! 
9... f5 10... g5 11... g3 12... f2+! etc.

Smyslov and Levenfish analysis by Minev

With his pawns further back it is easier for White to manoeuvre his king to h5. Moreover, the black king is badly cut off on the back rank.

1. a3
2. h7
3. a6
4. h5
5. g4
6. h4
7. h6

White to play wins since he can get his king safely to h5

1... g4! (57c) 
If 1... g6+ 2... h4! h6 (or 2... g8 3 g4 and 4... h5 etc) 
3... h5 g8 4... h5 g7 5 f5 g7 6 g4 g7 7... h6 8... h5!

But not 7 f5? g5! when White cannot evict the rook.
7... a6
8... f5
And there is no defence to the threat of g7 - e6; or if 8... f8 9... h7.

B. Black to play seems just able to draw:
1... e3
If 1... g8 2... e7 a3 3... g4 transposes to the main line; or if 3 g4... g3! 4... h6 g7 seems to draw - but not 3... a4 4... e4 a6 5... e6 etc.
2... e4
2... g4 2 g4, cutting the king's path to h5, simplifies the defence considerably: 2... a6 3... h7 b6 4... e5... g6! 5 g5 h5 6 f5 g5! 7... g2... g6!
2... g8
3... f5
If 3... h4... f3 stops both pawns from advancing but 4... e7! (zugzwang) 4... f1 (not 4... a3? 5 g4, nor 4... f8 5... h7; and 4... h8 is also bad: 5... g4 a3 6 f5 a5 - or 6... g8 7... h4! - 7 f6! and White wins - see the note after diag 38a) 5... g4 (or 5... h5 f3!) 5... f2 6... e6... h7! 7... f5 g2 just holds.
3... a5!
4... e7

W/B +/-
Rook v Rook

If 4 f6 g5+! 5 f4 g6 6 f5 g×g3=.

Or if 4 d7 b5 5 f4 b4+! 6 e5 b3! 7 g4 (7 e6 e3+ as in the main line) 7 ... b4 8 d4 (if 8 g5 h×g5 9 f6 g4 10 e6 b8! just draws - cf diag 50 - here Black's a vital tempo up) 8 ... b7 9 e6 g×g7= cf diag 57, variation A.

4 ... b5

5 f4 (58a)

Now White is threatening 6 f6. If Black remains passive with 5 ... a5? he will lose: 6 f6 b5 (if 6 ... g5 7 g4 anyway) 7 g4 e5 8 a7 (zugzwang) 8 ... b5 (if 8 ... f8 9 h7, or 8 ... h8 9 a8+ and 10 f7; or 8 ... g6 9 f5) 9 g7+ h8 (9 ... f8 10 h7 etc.) 10 g5! h×g5+ 11 g4 and we have diag 57c with colours reversed.

Although the e-pawn looks a little dangerous, Black is able to defend successfully. Note that his king is on the short side of the e-pawn, e.g.

1 b5

Or 1 a6+ g7 2 e5 f5 3

Instead Black can now play:

5 ... b4+!

6 e5 b3!

7 f4

If 7 e6 e3+! 8 f6 xg3=; but not 7 e6 xg3? 8 e8+ h7 9 f6 and wins (see diag 57b but with colours reversed).

Or if 7 g4 b4 8 e6 e4+!.

7 ... b4+!

8 e4 b5!

Much the simplest. If 8 ... b7? 9 f6 f7 10 f5 h5! 11 e5 (11 e7+ xe7 12 xe7 h4!=) 11 ... a7 12 g5 h4! 13 g×h4 a1 then the ending of rook, f- and h-pawn against rook appears to be drawn since the f-pawn is too far advanced; but that would be a ludicrous way to defend in practice.

Kotov - Pachman

Venice 1950

Black avoided diag 60 since it seems hopeless. But there is a nice resource

1 ... c6!!

If 1 ... f5? 2 f7+ e6 3 f6+ is indeed the end.

2 xg6+

If 2 e4 c4+ 3 e3 f5

4 f7+ g4 5 f6 a4=.

Or 2 g4 d5 3 f7 (3 f5 a4+) 3 ... a6 4 f6 xf6 5 gxf6 e6 6 g5 f7=.

2 ... f5

3 xxc6 stalemate

White could try 3 h6/g7/g8. But 3 ... c3+ and 4 ... xf4 draws easily in all cases.

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Rook and Connected Passed Pawns v Rook and Pawn

Although connected passed pawns are immeasurably more valuable than a single one, the player with material disadvantage can sometimes draw if his pawn is far advanced – or, in some circumstances, even win!

In diagram 61 Black has to make the big decision of where to put his rook.

A.

1 ... h2?
2 a4 a2

This loses since he cannot effectively impede the advance of the white pawns, e.g.

3 a6 a7
4 g5 g7
5 e4 e7
6 f4 f7
7 f5 e2+
8 f3 b2
9 a7+ f8
10 a4 c2
11 f6 and wins

B.

1 ... a1!

This is effective since the rook maintains the ability to "go sniping" at the right moment.

2 a4
3 a5
If 3 c2 f6 4 g5+ a6 5

Diagram 61a

If however we move White’s forces up a rank, then Black is lost, viz.

1 ... a1
2 f5 a2
3 a5 a8
4 a7+ a8
5 a6

And the threat of mate gives White a priceless tempo.

5 ... e8
6 f5 etc

Maroczy - Tarrasch
San Sebastian 1911

Here we are involved in a pure race. Black will win the white rook for his h-pawn and then try to get his king back in time to draw. This, rather, is what ought to happen. But Maroczy blundered with:

1 c6?
1 ... h2! was correct, winning by a tempo: 1 ... xh2 2 a6 g3 3 b5 f4 4 b6 e5 5 b7 a6 6 a7 d6 7 b8+ xh8 8 xh8 etc.

1 ... a1+!
2 a6

Now if 2 b5 h1 3 xh1

xh1 Black with an extra tempo can hold the draw.

2 ... c4!

Threatening to interpose
Rook v Rook

with 3 ... \texttt{Nh}4.
\begin{align*}
3 & \texttt{N}xh2 \texttt{N}xb4+ \\
4 & \texttt{Q}c5 \texttt{Q}a4!
\end{align*}

In contrast to diag 61, here the black rook is totally ineffective. The reason is simple: as long as White leaves his g-pawn on the second rank it will provide perfect shelter for his king. And if the black rook moves then \texttt{Nxa2} will defend the g-pawn.

Therefore White wins automatically e.g.
\begin{align*}
1 & \texttt{h}4 \texttt{g}6 \\
2 & \texttt{Q}a6+ \texttt{g}7 \\
3 & \texttt{Q}g5 \texttt{Q}g1=
\end{align*}
cf diag 61 variation B.

But White’s shelter could equally well be on the h-file:

Diagram 63b

Of course if neither of White’s pawns were on the second rank then it would be drawn.
\begin{align*}
1 & \texttt{h}4 \texttt{g}6 \\
2 & \texttt{Q}a6+ \texttt{g}7 \\
3 & \texttt{Q}g5 \texttt{Q}g1=
\end{align*}

\begin{align*}
\text{Reshevsky - Alekhine} \quad & \text{AVRO 1938} \\
\text{The black rook is much better here than in the previous diagram. It both exerts pressure along the seventh rank, thus slowing down White’s advance; and threatens to build a bridge on the a-file gaining, the vital tempo with a flank check.} \\
\text{These possibilities are sufficient for Black to achieve a draw:} \\
1 & \texttt{g}4 \texttt{c}6! \\
\text{But not 1 ... \texttt{e}6? 2 \texttt{g}3} \\
\texttt{f}6 3 \texttt{h}3\texttt{g}6 4 \texttt{h}4 \texttt{h}2 5 \\
\texttt{a}6+ \texttt{g}7 6 \texttt{g}5 \texttt{h}7 7 \texttt{g}4 \texttt{g}4 \\
\text{intending 8 \texttt{h}4, 9 \texttt{h}5 etc.} \\
\text{With his rook on the seventh rank Black has no way of opposing the slow advance of White’s kingside in a close phalanx. Therefore he must seek counterplay:} \\
2 & \texttt{g}3
\end{align*}
Or 2 g5 b5=.

2  ... b6
3  a8  b5
4  h3

White's advance is of necessity extremely slow. If 4 g5 b3+ and the king cannot cross the fourth rank, i.e. if 5 f4?? b4+ and 6 a4.

4  ... b4
5  f4(?)

5 h4 gives Black slightly more trouble. But with the white king blocking his own pawns, Black actually has time to promote the a-pawn, e.g. 5 ... b3 6 g5 b1 7 g6

Kostic - Reti
Gothenburg 1920

Although Black's pawns are extremely menacing, the powerful b-pawn ought to have saved the day:

1  ... g5? !

If 1 ... h3 2 xf4 ad1+ 3 f1 xf1+ 4 xf1 h2 5 b7 g2+ 6 e2 g1 7 b8+=.

Or 1 ... f3 2 b3+ e4 (2 ... e2 3 g2) 3 b4+ f5 4 b7 f3 5 f4+=.

Or 1 ... f5 2 b7 f3 3 f4+= as above.

2  b7?

Allowing 2 ... f3 after which Black is winning. 2 b5+ or 2 b3 would have drawn.

1  ... f3
2  ... b1

With the black king on g5 3 f4+ is of course impossible.

3  ... g2+
4  f1 h2
5  b5+

Or 5 g1 (5 e1 h1+ x b1) 5 f2+ and 6 h1+.

5  ... g4
6  e1 e2+
7  d1 g2
0-1

White can only give one more check: 8 b4+ h3, end.

Matanovic - Velimirovic
Skopje 1975

Obviously any attempt to queen the b-pawn by advancing the king would be much too slow. So White is forced to defend with his king in front of the black pawns. Normally this would lose rather easily but here, due to a minor miracle, White succeeded in holding the draw - and indeed the position does appear to be drawn.

1  d2 f3
2  e1 e4
3  h7+ e3

If 3 ... e3 4 f7 f3 5 f3+ f4 6 f7 will hold. We should note that if Black advances his f-pawn then the king's most convenient refuge on f4 will be on a square where White can queen b8.
with check. Therefore, on general grounds it ought to be better to advance the pawns the other way round.

4 \text{Nh3+} \text{Ke4}
5 \text{Nh7} \text{Nd8 (66a)}

If 5 ... \text{Ng8} 6 \text{f1l}! (not 6 \text{Ke2? f3+ and queens by force; nor 6 Ke7+ f3 7 Nh7 Ng8; nor when if 6 ... f3 7 Ke7+ Cd4 8 Cd7+ Cc5) 9 Ke7 (or 9 f7 e2+ 10 f2! Ke8 11 Cc1) ... e2+ 10 Cc2=.

6 Cc4!!
The only move, pinning the f-pawn.

If 6 Cc6? Cg8 7 Cf1 f3 8 Ce6+ Cd4 9 Cd6+ Cc5 10 Cb6 Cb8 and Black wins by playing ... Cf5 to stop b8=, being check and then activating his king, e.g. 11 Cb4 Cf5 12 Cf1 Cg8 13 Cb5+ Cc6 14 Cb6+ Cd7 15 Cg1 f2+ etc.

6 ... Cg8
7 Cf1 Cd3
8 Cc4!

Only not 8 Cxf4? e2+ 9 Cc2 Cg1!!.

We have returned to diag 66a. As demonstrated, Black has no good way to proceed.

We should note that White was only able to draw because he had a "b-pawn" which controlled the whole queenside!

Diagram 66b
Black wins very easily with:

1 ... Cc8!!

After which White has no conceivable defence.

If the pawn were instead on the a-file then with the king on e4 exposed to a8= check, White would be alright. But in that case, Black ought to have arranged to play f3 instead of ... e3 when the extra possibility of ... Cc8 at the right moment must win.

“R + 2 v R + 1” Isolated Pawns

If White can win the black f-pawn then he will win automatically by advancing his own. On f6, Black will face a hopeless choice (cf diag 20):

a) He can play 1 ... Cxf6 allowing 2 Cxf8+;
b) He can play 1 ... Cxf7 allowing 2 Cb8 Cxa7 3 Cc7+;
c) He can play 1 ... Cc7 allowing 2 f7 and 3 f8=.

Therefore the position turns on whether White can win the black pawn. This he is easily able to do using zugzwang:

The king easily advances past the black rook, e.g.

1 Cc1 Cc7
2 Cc6 Cg7

Of course if 10 Cb6 Cb1+.

10 ... Ca5

11 Cc6+

11 Cc7 would win a little faster.

This is a position of zugzwang - obviously Black to move would lose more quickly. With the precise pawn structure White is able to “lose a move”.

12 Cc6 Cc7
Rook v Rook

Diagram 67b

Here White cannot win the black pawn and so it's drawn, i.e. he reaches e6 with the black king on g7 and the rook somewhere, e.g. a1.

Now if

1 ... a2?
2 a8! a6+
3 a6 x a7
4 a7+ x d7
5 x d7 h6
6 e7! And wins, as noted above by simply advancing the f-pawn.

Diagram 67c

Despite the fact that Black has no pawns this is completely drawn:

1 g5 a3
2 g6 a2!
(Of course not 2 ... x g6??
3 a g8+.) And White can do nothing.

This would equally apply if we moved the g-pawn to the h-file:
1 h5 a3
2 h6+ h7=

Levenfish - Botvinnik

Leningrad 1937

In diag 67 and its offshoots the white "a-pawn" was already on the seventh rank. This meant that the plan of supporting the pawn with the king was completely doomed. And so White had to play on the kingside.

Here, in contrast, the b-pawn is far back. White is therefore able to undertake the active plan of sacrificing his kingside to queen the b-pawn. With the white pieces already active this led to a win.
Rook v Rook

\[ \text{Alatortsev - Chekhover} \]

Tbilisi 1937

Although White's pawn is far advanced, Black has counterplay against the f2-pawn. White can win the black rook for his passed pawn; but he must act with great care in order to win the rook in a position where his king is sufficiently near the kingside.

1. a7 \text{#e8}
2. \text{a2} \text{#a2}
3. \text{c4} \text{#g2}
4. \text{c5+! a7x?}

But not 4 \text{b5? #a7?} 5 \text{#xa7 #xf2 6 #c4 #e2! 7 #a2+ #e3! 8 #a3+ #e2 9 #d4 #f2 10 #a2+ #e1 11 #e3 f1=} cf diag RNL.

4. \text{#c8+}
5. \text{#f1 5 #b6 #e8 transposes to the main line. Now with the white king one tempo nearer the kingside 4 ... #xa7 fails by a tempo.}
6. \text{#b6 #e8 (70a)}

White now faces a problem.

If 6 a8w? #xa8 7 #xa8 #xf2 is drawn, or 6 #b7 #e7+ 7 #b6 #e8! White would like to play 6 #c2 so as to threaten 7 #b7 #e7+ 8 #b8!, but then Black has 6 ... #e6+! 7 #b7 (or 7 #c2 #e8 8 #b7 #e2! 7 ... #e2!! 8 #xe2 #xe2 9 a8w (not check) 9 ... #elw; or 8 a8w #xc2 is also clearly drawn.

Given that 6 #c2 is not yet feasible White finds another move:

6. \text{#c6!!}

This is zugzwang!

6. ... #f1

If 6 ... #a8 7 #b7, or 6 ... #e6+ 7 #d7! winning at once in each case. Or 6 ... #h8 7 #b7 #h7+ 8 #b6 #h8 (8 ... #h6+ 9 #c5 #h8 10 a8w! wins with the king on c5) 9 #c2 #e8 10 #c7 transposes back to the main line.
Rook v Rook

Now with the black king on the eighth rank if 9 ... \( \text{f6} \) +
10 \( \text{b7} \) \( \text{e2} \) 11 \( \text{c1} \) +! wins, so:

9  ... \( \text{g2} \)
10  ... \( \text{c7} \)!

Another zugzwang.

10  ... \( \text{e7} \) +

If 10 ... \( \text{g} \) moves 11 \( \text{b7} \) wins; or 10 ... \( \text{f8} \) 11 \( \text{b7} \); or

10 ... \( \text{h8} \) still 11 \( \text{b7} \) \( \text{h7} \) +
12 \( \text{b8} \) wins.

Or 11 ... \( \text{f6} \) 12 \( \text{xh2} \) \( \text{fxe2} \) 13 \( \text{a8} \) \( \text{c} \) check and wins (cf diag Q2).

12 \( \text{c8} \) \( \text{xc8} \) +
13 \( \text{gxc8} \) \( \text{xf2} \)
14 \( \text{a8} \)

And Black soon resigned.

Yukhtman - Chistiakov
USSR 1956

This position is easily won. Black can use zugzwang to force his king across the fifth rank without losing his h-pawn.

1  ... \( \text{e6} \)!
2  ... \( \text{h6} \)

If 2 \( \text{e1} + \) \( \text{f6} \) 3 \( \text{f1} + \) \( \text{e5} \)
4 \( \text{a1} \) \( \text{f5} \), or 2 \( \text{g5} \) \( \text{e5} \), or 2 \( \text{g6} \) \( \text{a5} \)! winning easily in all cases.

2  ... \( \text{f5} \)?

This was the game continuation, but 2 ... \( \text{f6} \)! 3 \( \text{h5} \) \( \text{f5} \) zugzwang would win on the spot.

3 \( \text{h5} \) \( \text{f4} \)?
3  ... \( \text{f6} \)! 4 \( \text{f1} + \) (4 \( \text{h6} \) \( \text{a5} \) 4 ... \( \text{e5} \) 5 \( \text{a1} \) \( \text{f5} \)!
4  ... \( \text{f4} \)!

And even now Black can still win with:

4  ... \( \text{a5} \)!

The game staggered on 4 ...
5 \( \text{f3} + ?? \) 5 \( \text{g5} \) \( \text{g3} \) 6 \( \text{f5} \)
6 \( \text{h2} \) \( \text{h3} \) 7 \( \text{e5} \) \( \text{g3} \) 8 \( \text{d5} \) \( \text{f3} \)
9 \( \text{e5} \) \( \text{e3} \) 10 \( \text{b5} \) \( \text{a8} \) 11
12 \( \text{e4} \) \( \text{d2} \) 12 \( \text{b3} \) \( \text{a8} \) +
13 \( \text{g3} \)?? (13 \( \text{c4} \) \( \text{h2} \) 14
\( \text{h1} \) +) 13 ... \( \text{c2} \) 0-1. Rook endings are difficult!

5 \( \text{f1} + \) \( \text{e3} \)
6 \( \text{a1} \) \( \text{f3} \)!
7 \( \text{f1} + \) \( \text{g2} \)
8 \( \text{a1} \) \( \text{a4} + \)
9 \( \text{g5} \) \( \text{h3} \)

And Black, a tempo ahead of the note above, wins easily, viz. 10 \( \text{f5} \) \( \text{g3} \) 11 \( \text{e5} \) \( \text{f3} \)
12 \( \text{d5} \) \( \text{e3} \) 13 \( \text{c5} \) \( \text{d3} \) 14
\( \text{a5} \) \( \text{a8} \) 15 \( \text{b4} \) \( \text{c2} \) etc. (See also diag 24d).

Petrosian - Karpov
USSR Ch 1976

This position is very intimately bound up with the theory of rook, f- and h-pawn against rook (cf diags 34 - 39a).

By sacrificing the c-pawn at the right moment Karpov just succeeded in drawing.

1  ... \( \text{h4} \)

If 1 \( \text{f7} \) \( \text{f1} \) 2 \( \text{f6} \) \( \text{a1} \) 3
\( \text{xc3} \) (or 3 \( \text{e7} \) \( \text{c2} \) 3 ... \( \text{a7} + \) and Black draws since the white rook can’t interpose on the c-file, i.e. if 4 \( \text{e6} \) \( \text{a6} + \)
5 \( \text{e7} \) \( \text{a7} + \) 6 \( \text{d6} \) \( \text{a6} + \) 7
\( \text{c6} \) \( \text{xc6} + ! \) 8 \( \text{xc6} \) \( \text{g6} = \).

Note how Black first lured the f-pawn to f6 before activating his rook.

1  ... \( \text{c2} \)!

Much the safest but I suspect that 1 ... \( \text{c2} \) would also just hold, viz: if 2 \( \text{h5} \) \( \text{a1} \) 3
\( \text{xc2} \) \( \text{h6} \) threatens to start checking and if, e.g. 4 \( \text{e2} \) \( \text{a6} + ! \) 5 \( \text{e6} \) \( \text{a7} = \) (see diag 39a variation B after 8 ... \( \text{a7} \)).
Rook v Rook

2 h5 c1
3 f7 c2
4 f6 c1
5 g7 c2

Now that the f-pawn has advanced to f6 it is far more vulnerable to the black king and so c2 is both necessary and possible.

6 f7 h6
7 c5 h7
8 c6 h6
9 f8 h7!
10 c7+ (72a)

If 10 f7 a! 11 xc2 a8+ since again he cannot interpose on the c-file.

10 ...

But not 10 ...

h8! 11 f7

h7 (11 ... a! 12 g8!) 12 h6

xh6 13 g8 g1+ 14 h8

f1 15 c6+ h5 16 g7

g1+ 17 h7 f1 18 c5+

h4 19 g6 g1+ 20 h6

f1 21 c4+ h3 22 g6

g1+ 23 h5 f1 24 c3+.

This is an old Lasker manoeuvre (cf diags 46, 47).

11 f7 a1!
12 xc2

If 12 e7 e1+ 13 f6

f1+ 14 g6 g1+ 15 h6,

Black has an exquisite draw:
15 ...

f1+! 16 xc1 g6+!

forcing stalemate.

12 ...
13 e7 a7+

And Karpov drew easily though he had to take a modicum of care:

14 f6 a6+
15 g5 a5+
16 g4 a4+
17 g3 a3+
18 a2 a7
19 f2 f8
20 f5

Or 20 f6 a5 21 h6 h5=.

20 ...

a6!

Only not 20 ...

a7? 21 h6

xf7 22 h7.

21 g3 h6

Capablanca - Spielmann
Berlin 1938

Here Black draws much more easily than in the previous position. The main reason for this is the position of Black's pawn. Since it is on the h-file when White takes it, his rook will never be able to interpose against flank checks.

1 g6+ h7
2 f6 g7

But not 2 ...

g1? 3 h6+

g7 4 xh2 xg5 5 f2! and wins (cf diags 43, 43a).

3 f2 g6
4 g2 h7

4 ...
a1 would also draw:
5 xh2 a6+ 6 d5 a5+ 7 d6 a6+ 8 c7 xg5=, but Black has no reason to force events.

5 e7 g7
6 e6 g6

But not now 6 ...

a1? 7

xh2 a7+ 8 g8 a8+ 9
c7 a7+ 10 b6 e7 11
e2 and wins.

7 f2 g7

Or 7 ...

a1 transposing to the game with the king on g6.

This is playable.

8 d2 g6
9 e7 a1!
10 xh2 a7+
11 e8

The best try: otherwise it will have to go to the b-file to stop the checks.

11 ...
12 e2 f5!
13 g6 xe6=

------------------------------------------------------

Capablanca - Spielmann
Berlin 1938

Here Black draws much more easily than in the previous position. The main reason for this is the position of Black's pawn. Since it is on the h-file when White takes it, his rook will never be able to interpose against flank checks.

1 g6+ h7
2 f6 g7

But not 2 ...

g1? 3 h6+

g7 4 xh2 xg5 5 f2! and wins (cf diags 43, 43a).

3 f2 g6
4 g2 h7

4 ...
a1 would also draw: 5

xh2 a6+ 6 d5 a5+ 7
d6 a6+ 8 c7 xg5=, but Black has no reason to force events.

5 e7 g7
6 e6 g6

But not now 6 ...

a1? 7

xh2 a7+ 8 g8 a8+ 9
c7 a7+ 10 b6 e7 11
e2 and wins.

7 f2 g7

Or 7 ...

a1 transposing to the game with the king on g6.

This is playable.

8 d2 g6
9 e7 a1!
10 xh2 a7+
11 e8

The best try: otherwise it will have to go to the b-file to stop the checks.

11 ...
12 e2 f5!
13 g6 xe6=

------------------------------------------------------
More Pawns - “Theoretical Positions”

“Theoretical positions” with a larger number of pawns generally fall into two types.

a) All the pawns on one side of the board - “White” has an extra pawn or two;
b) There are an equal number of pawns on one side of the board - “White” has an extra passed pawn on the other side.

Diagram 74a

Now the plan of h3 and g4 does not exist, but White still wins without fuss e.g.

1 f3

Now he has to play to obtain h- and g-pawns which involves a little more care. Of course 1 g3 is also good.

Diagram 74a

This is a very simple technical win. White’s plan, which is unstoppable, is to create two connected passed pawns, e.g.

White threatened 3 g4.

1 ... e5 a6
2 h3 a4

If 4 ... e5 f5 h4! (threatening 6 h6) 5 ... b5 6 h6 e4 7 g6 b8 8 g5 h8 9 f3+ and White wins easily.

3 d5 b4
4 d6+ g7

Or 6 ... b4 7 e5 g6 8 g4 etc.

5 e6 a4
6 f3 a3+

If 7 ... a2 8 g5 is simplest; or 7 ... a4+ 8 g5 a5+ 9 h4.

8 g4! and wins

Note that White won with absolutely no “mess” whatsoever.

Diagram 74a

And with the rook on d5 ready to interpose, White wins easily. But not 4 a5+ g6 5 g4? hxg4+ 6 fxg4 b3+ (5 e5 b3! 6 g2! a3 etc).

4 ... a6

If 4 ... f6 5 d5+ g6 6 g2 and 7 g4; or 4 ... e5 5 d8 f6 6 g8 and wins.

5 d5+ g6
6 g4 hxg4+

If 6 ... a3 7 e5e5+ 8 g2 etc.

7 fxg4

Or 8 ... b3 9 f5 -f3 etc.

9 f3 a3+
10 e4 a4+
11 d4 a6
12 e5 etc.

cf diags 27-31.

Perhaps White has some even easier way to win diagram 74a but we can see already how a weakening of White’s pawn structure complicates the win.
Now White has no viable pawn break since if 1 g4 hxg4+ 2 hxg4 we get the notorious $h$+ $h$.

It would appear that this position is drawn - certainly if there is a win it is extremely difficult, e.g.

A.

1. $d5 $a3+
2. $g2 $a2+
3. $h3 $g6
4. f5+ $f6
5. $d6+

Or 5 $d8 $a5.

5. ... $g7?

Now 5 ... $xf5? 6 $h6 wins.

6. $d7+

Or 6 f6+ $g6=.

6. ... $h6!

Again the only move. If 6 ... $f6 7 $h7; or 6 ... $g8 7 $f6 and $g7+ - $g5 or 6 ... $h8 7 $f6 (threatening 8 $d8+, 9 $f7) 7 ... $f2 8 $d5!.

But now White has no way of exchanging the f- for Black's h-pawn and so the position is drawn.

B.

1. $e4 $e6+!
2. $d5 $a6

2 ... $e1 is also good.

3. $e3 $a5+

And now:

a) 4 $c6 $a6+ 5 $h5 $a1
6 $c6+ $g7! 7 $c5 (7 $f5 $f1)
7 ... $h6 8 $f5 $a3 9 $c6 (9 $f6 $f3 10 $c6 $h7!) 9 ... $xg3 10 $d6 $g6 11 $e6 $e3+ 12 $e5 $a3 13 $f6+ $g6! 14 $g5+ $h6 15 $d5 $g6=(cf diag 5) etc;

b) 4 $d4 $a4+ 5 $c4 (or 5 $e3 $a6) 5 ... $a3 $c6+ $f7 7 $c3 $a4+ 8 $d5 (8 $e3 $a6! 9 $d3 $f6!) 8 ... $a5+ 9 $d6 $a6+ 10 $c6 $a3 11 $e5 $xg3?? (or simply 11 ... $a5+) 12 $c7+ $g8! 13 $f5 $g4 14 $e6 $e4+! 15 $f6 $xh6 16 $g7+ $f8 17 $d7 (or $e7) 17 ... $g8 18 $d8+$h7 19 $e7 $e4+ 20 $f7 $a4 21 $f6 $a7+ 22 $e6 $a6+ 23 $d6 $a1 24 $d7+$g6= (cf diag 5 - note that here Black has an extra file to check on).

Black to move should simply wait with 1 ... $b6 and if 2 $a3 $g6 is now possible.

With the white rook on d3 he must avoid:

1. ...
2. $d5 $a3+

If 2 ... $a4 3 $d6+$f7/g7/h7 4 $f5 or 3 ... $f5 4 $h6 wins.

Or 2 ... $b6 3 $e4!.

3. $e4

Now White has a tempo since if 3 ... $xg3 4 $g5+.

3. ...

If 3 ... $f6 4 $g3! followed by $f5, $f4 - $f3 - $g2 - $h3 and White finally wins the h-pawn whilst defending his g-pawn.

Or 3 ... $a4+ 4 $e5 $a3 5 $f5+ is clearly no worse for White than the main line.

4. $d3 $a4+
5. $e5 $a5+
6. $e6 $a6+

Or 6 ... $g6 7 $d5 $a6+ 8 $e5 etc.

7. $d6 $a3
8. $f5 $x $xg3

8 ... $g7 9 $f6+$g6 10 $e7 $a7+ 11 $d7 $xg7+ 12 $xg7 $f7 13 $c6+$e6 14 $f7 $xh7 15 $d7+$f6 16 $d6 $f5 17 $e7 $g4 18 $f6 $xg3 19 $g5 and wins.

Blancs gagnent par rotation d'opposant
Somewhat paradoxically, this is a rather easy win. The reason is that White's rook can now operate on the eighth rank.

A. White to move:
1. \( \text{He8!} \text{ Ha4} \)
   If 1 ... \( \text{Hb5} \) 2 \( \text{Hg8}+ \text{ f6} \) (or 2 ... \( \text{Hh5} \) 3 \( \text{Hh8}+ \text{ g5} \) 4 \( \text{f4}+! \))
   3 \( \text{Hg4} \) \( \text{Hh5} \) and with the rook so passive, White wins easily: 4 \( \text{Hg1} \) \( \text{f5} \) 5 \( \text{Hf2} \) \( \text{Hh8} \) 6 \( \text{He3} \) \( \text{He8}+ \) (White threatened 7 \( \text{f4} \)) 7 \( \text{He4} \) \( \text{Hg8} \) 7 ... \( \text{Hh8} \) 8 \( \text{f4} \) \( \text{Ha8} \) 9 \( \text{He5}+ \text{ g6} \) 10 \( \text{Hg5}+ \text{ He6} \) 11 \( \text{Hf3} \) \( \text{Ha2} \) 12 \( \text{Hg8} \) \( \text{Ha3}+ \) 13 \( \text{Hf2} \) \( \text{Ha2}+ \) 14 \( \text{Hgl} \) and wins 15 \( \text{Hf4}+! \) \( \text{He5} \) 9 \( \text{Hg4} \) \( \text{Hh8} \) 10 \( \text{f4}+ \text{ f5} \) 11 \( \text{f3} \) and wins.
   2. \( \text{He5}+ \text{ f6} \)
   Or 2 ... \( \text{Hf4} \) 3 \( \text{Hh5} \) \( \text{He3} \) 4 \( \text{Hg5} \) \( \text{Hh8} \) 5 \( \text{Ha8} \) 6 \( \text{Hg4} \) \( \text{Hh8} \) 6 \( \text{Hg1} \) \( \text{Hh5} \) 7 \( \text{He4}+ \text{ Hd3} \) 8 \( \text{Hf2} \) \( \text{Hh8} \) 9 \( \text{Ha4} \) \( \text{Hh7} \) 10 \( \text{f4} \) \( \text{Hf7} \) 11 \( \text{f3} \) etc.
   3. \( \text{He4} \) \( \text{xe4} \)
   4. \( \text{fxe4} \) \( \text{He5} \)
   5. \( \text{g4}! \) \( \text{Hf4} \)
   If 5 ... \( \text{hxg3}+ \) 6 \( \text{Hxg3} \) \( \text{xe4} \)

B. Black to move:
1. \( \ldots \) \( \text{Ha8} \)
2. \( \ldots \) \( \text{Gg1} \) \( \text{Hb8} \)
3. \( \ldots \) \( \text{Hf2} \) \( \text{Hb2}+ \)
4. \( \ldots \) \( \text{He2} \) \( \text{Hb8} \)
5. \( \ldots \) \( \text{He5}+ \text{ g6} \)
6. \( \ldots \) \( \text{Hf4} \) 6 \( \text{Hh5} \) \( \text{Hb2}+ \)
   5 \( \ldots \) \( \text{Hf4} \) 6 \( \text{Hb1} \) \( \text{Hg5} \) \( \text{Hg5} \) + \( \text{wins} \).
7. \( \ldots \) \( \text{Hf4} \) \( \text{Hb2} \) \( \text{Gg5} \) \( \text{Hf4} \) \( \text{Hb8} \) \( \text{if} \) 6 ... \( \text{Hh5} \) still \( \text{f4} \).
8. \( \ldots \) \( \text{Hf4} \) \( \text{Hg5} \)
9. \( \ldots \) \( \text{Hf3} \) and wins
Speelman 1984
If White can get his king out then he will win fairly easily (see diag 77a). This isn't surprising since diag 75 is only just drawn.

1 ... g7
1 ... f3 2 d7+ g8 (2 ... f6 3 h7 e5 4 xh6 f4 5 a6) 3 dl g7 4 g1 practically transposes. But not e.g. 1 ... b3? 2 f6+! f7 3 d7+ xf6 (or 3 ... g8 4 d8+!) 4 h7 and wins easily.
2 d1
3 g1 f6
4 g3 a1
5 e3 h1+
6 g3 g5
If 6 ... g1+ 7 f3 g5 8 e7? transposes; or 7 ... f1+ 8 g2 f4 9 e6+ g5 10 g6+ h4 11 f6 a4 12 f3 and wins.
7 e7! g1+
8 f3 xg4!
9 g7+ xh5
10 f6
This is why the rook went to e7 and not e8.
10 ... g6
If 10 ... a4 11 f7 White wins comfortably, viz. 11 ... a3+ 12 e4 a4+ 13 d5 a5+ 14 c6 a6+ 15 b7 f6 16 c7 h4 17 d7 etc.
11 f7 xg7
12 f8
And White is winning. The best move must be:
12 ... g6
Now Black is threatening 13 ... h7 with a known draw (cf diag QR15). But the white king crosses the g-file with:
13 g4! h7+
14 h4
with a theoretical win (cf diag QR16).

Diagram 77a
1 d6 a4+
2 e5
Since the black king gets cut off on the back rank, White can simply play with the f- and h-pawns. Not 2 g3 g7 (2 ... a3+? 3 h4 g7 4 f6+ wins) 3 f6+? h7 4 d7+ xf6 5 h7 a6!! 6 xh6+ g5=.
2 ... xg4
Obviously Black cannot do better than this.
3 f6+ e7
3 ... g7 4 g6+ xg6 5 hxg6 but not 5 fxg6?? (cf diag 19a).
4 xh6
And White wins fairly easily (cf diags 34, 35 and 38a). For example:
4 ... g1
If 4 ... f7 5 f6+ e7 6 a6 etc. or 4 ... h4 5 h7+ f8 6 f6 g8 7 g7+ h8 8 a7 h1 9 f7! h7 (9 ... xh5 10 g6!) 10 f6 xh5 11 f8+ wins.
5 h7+ f8
6 f6 g8
7 d7 h1
Or 7 ... h1 8 d8+ h7 9 e6 etc.
8 h6
And we have a winning position similar to diag 35.
This ending is normally drawn unless there is a good reason why not.

Although Black's king is cut off on the back rank in diag 78, with the move he draws quite easily. White to play however, can force the win.

### A.

**White to play:**

1. \( g5 \) \( a3 \)
2. \( h6 \) \( xf3 \)
3. \( g7+ \) \( f8 \)
4. \( hxh7 \) \( h3 \)
5. \( gxg6 \) \( hxh4 \)
6. \( g5 \)

and White wins (cf diag 11).

### B.

**Black to play:**

1. \( ... \) \( a5 \)

Cutting off the white king. \( 1 \) ... \( f8+?! \) and \( 1 \) ... \( h6?! \) also seem okay, but this is the most thematic and sensible move.

Note that if the white rook were on \( e7 \) then \( 1 \) ... \( h6? \) would already be very dubious after \( 2 \) \( e5 \) and if \( 2 \) ... \( a5+ \) \( 3 \) \( f6 \) there are no flank checks - with the rook on \( b7 \) if \( 1 \) ... \( h6 \) \( 2 \) \( e5 \) \( a5+ \) \( 3 \) \( f6 \) \( a6+ \) \( 4 \) \( e7 \) should still hold.

2. \( d7 \) \( b5 \)

Now \( 2 \) ... \( h6 \) is an alternative aiming always to answer \( h5 \) with \( ... \) \( g5 \).

3. \( e4 \)

White can also try \( 3 \) \( e7 \) \( a5 \) \( h5 \) \( gxh5 \) \( 5 \) \( g5 \) \( b4+ \) \( 6 \) \( e3 \) \( b3+ \) \( 7 \) \( f2 \) \( h5 \) \( 8 \) \( f4 \) \( b3 \) \( 9 \) \( h6 \) \( a3 \) \( 10 \) \( xh7 \) \( g6 \) \( 11 \) \( h6+ \) \( f5 \) \( 12 \) \( xh7 \) \( xf4 \) \( 13 \) \( g6 \) \( a8=\).

A.

**White to play:**

1. \( g5 \) \( a3 \)
2. \( h6 \) \( xf3 \)
3. \( g7+ \) \( f8 \)
4. \( hxh7 \) \( h3 \)
5. \( gxg6 \) \( hxh4 \)
6. \( g5 \)

Again \( 5 \) \( h5 \) is possible; but even \( 5 \) ... \( gxh5?! \) \( (5 \) ... \( g7 \) \( ) \) \( 6 \) \( xh5 \) is drawn - albeit Black would have to be a little more careful after this capture.

5. \( ... \) \( b7 \)
6. \( c5 \) \( e7+ \)
7. \( d6? \) \( e6 \)
8. \( c7+ \) \( g8 \)

Not \( 8 \) ... \( f6 \) \( g5 \) \( d5 \) \( f5 \) \( 10 \) \( h7 \) mate.

9. \( f4 \) \( e4 \)
10. \( f5 \) \( xg4=\)
**Rook v Rook**

**Suetin - Kholmov**

*Kiev 1954*

Although Black's pawns are doubled they are perfectly good for defensive purposes.

1. h4  h5
2. c5  a5
3. h3  b2
4. g4  b4
5. h5  a4
6. g3  b4
7. f2  a4
8. e3  b4
9. d5  a4
10. d4  a5
11. f4  

11. f4 does not achieve anything since with the king on f4 White cannot oppose rooks on the fifth rank.

11. ...  h5
12. e4  f5+?

Black could also play 12 ... a5 13 d5 a6 14 f5 b6 15 g5 fxg5 16 fxg5 b8!.

13. gxh5  h6
14. d7  a5
15. e7  b6
16. a8  a5
17. d7  a6
18. e5  g7
19. d7+

and Black drew easily (see diag 44 for the continuation).

---

**Gligoric - Euwe**

*Zürich Ct 1953*

This position is a theoretical win. Black has two possible defensive ideas.

A. Passive from behind the pawns.

This is the plan which Euwe actually adopted:

1. ...  f8
2. c6  f8
3. c8+  g7
4. f8!  

This is zugzwang! Black is forced to reduce the distance between his rook and the white king and pawns.

4. ...  f2

If 4 ... h6 5 gxh6+ xh6 6 g8 and White wins by 7 g4 and 8 f6.

Or if 4 ... a1 5 d7 a6 (5 ... f8 6 f6 a6+ 7 d6; or 5 ... e1 6 e7; or 5 ... a5 6 g4 f8 7 d8+ g7 8 f5!)
6 g4 h6 7 f5! g8 8 d8+

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of 15 ... h4 16 \( \text{f}6 \) h3 17 \( \text{g}7+ \) h8 18 \( \text{g}3 \) etc.

B. Flank pressure

1 \( \text{c}6 \) \( \text{a}4 \)

2 \( \text{c}7 \) \( \text{a}8 \)

Remember that having chosen variation A Black would not reach even this relatively favourable position.

4 \( \text{g}4 \) \( \text{a}1+ \)

Or 4 ... \( \text{a}5 \) 5 \( \text{f}3 \) \( \text{a}3+ \) 6 \( \text{e}4 \) \( \text{a}4+ \) 7 \( \text{e}3 \) \( \text{a}3+ \) 8 \( \text{d}4 \) \( \text{a}4+ \) 9 \( \text{e}4 \) \( \text{a}1 \) 10 \( \text{f}5 \)

\( \text{g}1 \) 11 \( \text{d}5 \) \( \text{g}5 \) 12 \( \text{f}6 \) \( \text{g}8 \) 13 \( \text{d}6 \) \( \text{d}8 \) 14 \( \text{a}4 \) and wins.

Here Black has got in ... f6 which is a great boon. The position is drawn, viz.

1 \( \text{b}7 \)

If 1 \( \text{g}5 \) \( \text{f}3 \); or 1 \( \text{f}5+ \) \( \text{g}7 \) 2 \( \text{b}7+ \) \( \text{g}8 \) 3 \( \text{g}3 \) \( \text{a}1 \) 1 \( \text{b}6 \) 2 \( \text{e}4 \) \( \text{a}3+ \) 3 \( \text{f}2 \) \( \text{g}7+ \) is also drawn, e.g. if 4 \( \text{e}5 \) \( \text{f}5+ \) 5 \( \text{f}6 \) \( \text{a}5 \) 6 \( \text{f}6 \) \( \text{f}7+ \)!

1 ... \( \text{h}5! \)

2 \( \text{f}5+ \)

If 2 \( \text{g}5 \) \( \text{f}5+ \) 3 \( \text{b}6+ \) \( \text{g}7 \) 4 \( \text{f}5+! \) (or 4 \( \text{f}5+ \) 5 ... \( \text{g}4+ \) 6 \( \text{f}5+! \)); or 2 \( \text{g}6+ \) \( \text{xh}5 \) 3 \( \text{g}7 \) \( \text{h}6 \) 4 \( \text{g}2 \) \( \text{f}5+! \).

\( \text{g}3 \) \( \text{e}4+ \) or 2 \( \text{g}6+ \) \( \text{xh}5 \), 3 \( \text{g}7 \) \( \text{h}6 \) 4 \( \text{g}2 \) \( \text{f}5+! \).

2 ... \( \text{h}6 \)

3 \( \text{g}xh5 \) \( \text{xh}5 \)

4 \( \text{g}7 \) \( \text{h}6 \)

5 \( \text{g}6 \) \( \text{b}6 \)

6 \( \text{e}4 \) \( \text{a}6 \)

7 \( \text{d}5 \) \( \text{a}3 \)

8 \( \text{e}4 \) \( \text{a}6 \)

9 \( \text{e}5 \) \( \text{a}5+ \)

10 \( \text{e}6 \) \( \text{xh}5+ \)

11 \( \text{f}6 \) \( \text{a}5 \)

12 \( \text{f}6 \) \( \text{f}5+! \) (cf diag 5 etc.

---

**Capablanca - Yates**

**Hastings 1930**

In this position, intermediate between diags 81 and 82, White to play can still win but extreme accuracy is required.

1 \( \text{b}6!! \)

1 \( \text{d}6 \) was better so that if 1 ... \( \text{a}2+ \) 2 \( \text{f}3 \) \( \text{a}3+ \) 3 \( \text{e}4 \) \( \text{a}4+ \) (or 3 ... \( \text{g}3 \) 4 \( \text{f}5 \) \( \text{a}5 \) 5 \( \text{d}7 \) \( \text{a}6 \) 6 \( \text{e}4 \)) 4 \( \text{d}4 \) and the white king does not get boxed in as in variation A.

A.

The game continued:

1 ... \( \text{e}3 \)

2 \( \text{b}4 \) \( \text{c}3 \)

3 \( \text{f}2? \)

This allows 3 ... \( \text{h}5! \) when if 4 \( \text{g}xh5 \) \( \text{h}3 \) or 4 \( \text{g}5 \) \( \text{h}4 \) with counterplay; analysis has shown that this would be enough to draw (cf diag 83b) 3 \( \text{b}8!! \) was correct.

3 ... \( \text{a}3 \)

4 \( \text{b}7 \) \( \text{g}8??! \)

If 4 ... \( \text{g}6 \) 5 \( \text{f}5+ \) \( \text{g}5 \) 6 \( \text{a}7 \) and wins, but Black should start flank checks with 4 ... \( \text{a}2+ \) 5 \( \text{g}3 \) \( \text{a}3+ \) 6 \( \text{h}4 \) \( \text{e}3! \) (see diag 83b) - 6 ...
Rook v Rook

\[ \text{Diagram 83a} \]

Rook is better than 6 ... \( \texttt{f8} \), 7 \( \texttt{b6} \) \( \texttt{f3} \) (or 7 ... \( \texttt{g7} \), 8 \( \texttt{b8} \)), 8 \( \texttt{f5} \) \( \texttt{e3} \) 9 \( \texttt{e6} \) and wins.

\( 5 \) \( \texttt{b8+} \), \( \texttt{g7} \)

\( 6 \) \( \texttt{f5} \)

Now White is clearly winning.

\( 6 \) ... \( \texttt{a2+} \)

\( 7 \) \( \texttt{e3} \)

He could also hide the king on \( h4 \) via 7 \( \texttt{g3} \) \( \texttt{a3} \) 8 \( \texttt{h4} \), since Black cannot keep it boxed in there due to the threat of \( f6+ \), i.e. if 8 ... \( \texttt{e3} \) 9 \( \texttt{e8} \) \( \texttt{e1} \) (White to move would have had \( \texttt{e6} \) in this position) 10 \( \texttt{g3} \) etc.

\( 7 \) ... \( \texttt{a3+} \)

\( 8 \) \( \texttt{e4} \)

\( 9 \) \( \texttt{d5} \)

Or 9 ... \( \texttt{xf4} \) 10 \( \texttt{f6+} \) \( \texttt{h7} \) 11 \( \texttt{g8} \)

\( 12 \) \( \texttt{g8+} \)

13 \( \texttt{xf4} \) \( \texttt{xf4} \)

14 \( \texttt{e4} \) \( \texttt{e1} \)

15 \( \texttt{e5} \)

16 \( \texttt{f8} \)

17 \( \texttt{d6} \)

Another winning plan is to play the king to \( f5 \) and then sacrifice the rook with \( \texttt{xf7+} \).

White now won very easily; the game continued: 17 ... \( \texttt{g6} \) 18 \( \texttt{g8+} \) \( \texttt{h7} \) 19 \( \texttt{g7+} \) \( \texttt{h8} \) 20 \( \texttt{b6} \) \( \texttt{d7} \) 21 \( \texttt{c5} \) \( \texttt{e7}+ \) 22 \( \texttt{d6} \) \( \texttt{a7} \) 23 \( \texttt{e6} \) \( \texttt{a6+} \) 24 \( \texttt{e7} \) \( \texttt{xe6+} \) 25 \( \texttt{xf7} \) \( \texttt{e4} \) 26 \( \texttt{g5} \) \( \texttt{hxg5} \) 27 \( \texttt{g6} \) 1-0.

The important point about this variation is that once White gets in \( f5 \) and his rook gets to the eighth with the black king on \( g7 \), then he is winning.

\[ \text{Diagram 83b} \]

As pointed out in the notes to variation \( A \) , Yates could have defended better. One critical line (note to 4 ... \( \texttt{g8} \) ) leads to this position.

White's plan is to try to get in \( f5 \). In order to do this he will have to either:

a) defend the e-pawn with the rook;

b) through zugzwang persuade the black rook to stop its observation of the e-pawn.

The problem with plan "a" is that at the critical moment Black can plan 1 ... \( \texttt{h5} \). With the black rook on the eighth rank \( 2 \texttt{gxh5} \) won't work. The alternative \( 2 \texttt{g5} \) wins if either:

a1) White can avoid getting his king cut off on the second rank; or

a2) White gets in \( f5 \) before Black can play ... \( \texttt{h4} \).

But as Kopaev has shown, plan "b" can be made to work.

B.

\( 1 \) \( \texttt{b8} \)

\( \texttt{e1} \)

\( 2 \) \( \texttt{a8} \)

If \( 2 \texttt{g3} \) \( \texttt{h5} \)?? (2 ... \( \texttt{g1}+ \) leads to the main line) and:

a) \( 3 \texttt{gxh5} \) \( \texttt{g1}+ \) 4 \( \texttt{f3} \)

\( \texttt{f1}+ \) 5 \( \texttt{g4} \)

\( \texttt{g1}+ \) 6 \( \texttt{f5} \)

\( \texttt{h1} \) 7 \( \texttt{g4} \)

\( \texttt{g1}+ \) 8 \( \texttt{f3} \)

\( \texttt{f1+} \) (but not 8 ... \( \texttt{h1} \) ? 9 \( \texttt{f5} \)

\( \texttt{hxg5} \) 10 \( \texttt{g4} \)

\( \texttt{h1} \) 11 \( \texttt{f6+} \) wins, since if 11 ... \( \texttt{h7} \) 12 \( \texttt{e6} \) or 11 ... \( \texttt{g6} \) 12 \( \texttt{g8+} \)

(9 \( \texttt{e4} \) \( \texttt{e1}+ \) 10 \( \texttt{d5} \) \( \texttt{dl}+ \)

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**Rook v Rook**

**Diagram 83c**

```
Rook

11 ♂c6 ♛f1 12 ♛b4 ♛h1=) 9...
8 ♛e4
9 ♖b7!! (83c)
```

But this really is zugzwang. Not however 9 ♛e8? ♛f1+ 10 ♛g3 (or 10 ♛g3 ♛g1+) 10...

On the e-file.

```
11 ♛e6 ♛f1 12 ♛h1 11 f5 ♛xh5=.
8 ♛f3 ♛e1
9 ♖b7!! (83c)
```

b) 3 g5! ♛e3+ 4 ♛f2 (if 4 ♛h4 ♛e4! forces repetition) 4...

In this position Black is a tempo away from drawing. On the move he would play 5...

```
B

3 g5! ♛e3+ 4 ♛f2 (if 4 ♛h4 ♛e4! forces repetition) 4...
```

With his king cut off on the third rank and unable to advance his pawns.

But White to move could force the win with 5 f5 threatening 6 f6+, 7 ♛g8+, 8 g6; and if 5...

```
B

5 ♂f2 ♛el+
6 ♛d3 ♛e1+ 7 ♛d5 (7 ♛f5 ♛g1 see diag 83c) 7...
```

White ends up with his king cut off on the third rank and unable to advance his pawns.

```
7 ♛d3 ♛d1+ 8 ♛e2 ♛g1! and if 9 f5? ♛xg4 10 f6+ ♛h7= since the white king is
```

Now if 3...

```
B

3 ♛f3 ♛g1+
```

on the e-file.

```
5 ♛d4
```

Alternative:

a) 9 ♛a1 10 e6! (but not 10...

```
5 ♛e4 ♛a2 14 ♛e5 wins easily
cf variation c below.
```

Not however 9 ♛e8? ♛f1+ 10 ♛g3 (also 11 ♛xf7+) 11...

```
B

9 ♛f3 ♛g1+
```

Not however 9 ♛e8? ♛f1+ 10 ♛g3 (also 11 ♛xf7+) 11...

```
B

9 ♛f8
```

```
10 ♛b8+ ♛e7 11 ♛d6+ ♛e8 12 ♛f8 ♛e7 13 ♛h6+ ♛e8 14 ♛e4 ♛f8
```

Black could hold this position if his king could get to e7 but that is impossible:

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
5 ♛f1+!
6 ♛e3
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```

```
B

11 ♛d5 ♛g6+ 12 ♛e5 ♛e6+ 13 ♛d6 etc. as in A; c2) 11...
```

```
B

11 ♛f8 12 ♛b8+ ♛e7 13 ♛f6+ ♛d7 14 ♛f7 ♛e1+ 15 ♛d4 ♛d1+ 16 ♛e3 wins;
```
C.

After Capablanca's 1...\(\text{b6}\) in diag 83, Yates should have started checking:

1...\(\text{b6} \quad \text{a2+}\)
2...\(\text{f3}\)
3...\(\text{g3} \quad \text{a3+}\)
4...\(\text{e4} \quad \text{a4+}\)
5...\(\text{f5} \quad \text{c4+}\) (83d)

This position is very close.

White can try:

i)

5...\(\text{b7} \quad \text{g8}\)
6...\(\text{h3}\)
7...\(\text{e6} \quad \text{fxe6+}\)
8...\(\text{g5}\)

Now Black would like to head for diag 58 variation B, e.g. by 8...\(\text{a5+} \quad 9 \quad \text{exe6} \quad \text{a6+} \quad 10 \quad \text{f5?} \quad \text{f8=}\). But with the white rook already on d7 this appears to be impossible here.

8...\(\text{h5!}\)

If 8...\(\text{a5+} \quad 9 \quad \text{exe6} \quad (9 \quad \text{f6} \quad \text{a4}) \quad 9 \quad \text{a4} \quad (or \quad 9 \quad \text{a6+}\)

10...\(\text{d6} \quad \text{a4} \quad 11 \quad \text{f5} \quad \text{transposes}\)
10...\(\text{f5} \quad \text{f8} \quad 11 \quad \text{d6} \quad \text{g7}\)
12...\(\text{g6+!} \quad \text{h7} \quad 13 \quad \text{e6} \quad \text{g7} \quad 14 \quad \text{f7+} \quad \text{f8} \quad (14 \quad \text{g8} \quad 15 \quad \text{g6}) \quad 15 \quad \text{e4} \quad \text{e6} \quad 16 \quad \text{e6} \quad \text{e7} \quad 17 \quad \text{g6} \quad \text{g7+} \quad 18 \quad \text{h5} \quad \text{and wins.}\)

Or if 8...\(\text{b4} \quad 9 \quad \text{e7}\) and Black simply can't improve on a transposition into the line above.

9...\(\text{g5} \quad \text{h4}\)
10...\(\text{e7}! \quad \text{h3}\)

If 10...\(\text{a6} \quad 11 \quad \text{f6}\) threatens 12...\(\text{e8+}\) and 13...\(\text{g6+}\) and 14...\(\text{h8}\) mate.

11...\(\text{xe6} \quad \text{a7}!\)
12...\(\text{e8+} \quad \text{g7}\)
13...\(\text{f5} \quad \text{h2}\)
14...\(\text{f1} \quad \text{a2}\)
15...\(\text{h1} \quad \text{g2}\)
16...\(\text{e4}\)

And remarkably it seems that Black is just holding, viz:

16...\(\text{g6} \quad 17 \quad \text{h3} \quad \text{a2} \quad 18 \quad \text{g3} \quad \text{fh5} \quad 19 \quad \text{xh2} \quad \text{a3+} \quad 20 \quad \text{h4}\)\(\text{aal}\). Black will always check the white king when it is on the third rank - I can see no other way for White to improve his position here.

ii)

5...\(\text{b7} \quad \text{g8}\)
6...\(\text{h3}\)
If 6...\(\text{g5} \quad \text{hxg5} \quad 7 \quad \text{f3} \quad \text{e5}\)
6...\(\text{g7}\)
7...\(\text{e3} \quad \text{c6}\)
8...\(\text{g4}\)

For if 8...\(\text{e4}\) (intending 9...\(\text{a4}\), 10...\(\text{e4}\)) then 8...\(\text{f6}\)!
8...\(\text{c4+}\)
But not 8...\(\text{f6}\)? 9...\(\text{d5}\)!
9...\(\text{f3} \quad \text{c6}\)
10...\(\text{f5}\)

White's problem is that he cannot improve his rook since if 10 ...\(\text{a3}\) 6! just holding, e.g.
11...\(\text{a7+} \quad \text{f8} \quad 12 \quad \text{e4} \quad \text{exe5} \quad 13 \quad \text{exe5} \quad \text{b6} \quad 14 \quad \text{d7} \quad \text{g6=}\) (cf
However, White could try first 10 g3 a6 11 b3 and if 11 ... f6? 12 b7+ g8 13 exf6 xf6 14 b4! (not 14 f5? h5) 14 ... g7 15 h4 a6 16 h5 a5+ 17 f5 a1 18 b7+ f6 19 b6+ g7 20 g6+! and wins. In any case 10 f5 is interesting since it demonstrates what White must avoid.

10 ... f8!

11 a3 c1

This position is just drawn since White has weakened his position with f5 without preventing the black king from reaching e7.

If at once 12 a8+ e7 13 f6+ e6 14 a8+ d5 15 e6 c6! draws; and slower methods do not work since both of Black’s pieces are active. For instance even if White reaches the relatively favourable looking diag 83e the position is still drawn.

Diagram 83e

Capablanca tried:

1 e6

If 1 f6 e8 2 d4 d1+ 3 c5 c1+ 4 d4 d1+ 5 c4 (5 c3 e6! 6 b8+ d7 7 b7+ e6 8 e7+ d5 9 xf7 e3+ 10 d2 e5 11 d7 e6=) 5 ... c1+ 6 d3 d7 7 b7+ e6=

Or 1 d7 e2 2 d5 e4 3 a5 d4+ 4 c6 xg4 5 a8+ e7 6 f6+ e6=.

1 ... e1!

In the game Black was lost after 1 ... a6+? 2 e5 fxe6 3 f6! g8 4 d6 a1 5 xe6 e1+ 6 f5 a1 7 d8+ f7 8 d7+ f8 (or 8 ... g8 9 g5! wins - also 9 a7+ and 10 g5 - see diag 57c) 9 h7+ and wins.

1 ... a7 would also be a sufficient defence.

2 d7 e2

3 d6 e4

4 d8 e1

5 xf7 e4

6 d7 xf7= 5 h3 and 6 g4 would only simplify the position.

3 g2 b5

4 f3 f6

5 h4

White finally decides to push his pawns; but Black is not really in any trouble.
Rook v Rook

Gligoric - Euwe
Zürich Ct 1953

Here White has got in h5 himself which makes the position much more critical.

1 g5!?

Gligoric played this now since they had still to make the time control, i.e. this was White's 38th move. But from a technical point of view it would be better to improve the kingside first with e.g. \+B_r3\+f3, f3, e4 and \+B_f4.

1 ... gxh5?!

1 ... h6! would draw relatively easily.

2 \+B_a6! \+B_b3?

2 ... \+B_e7! forced a draw at once since if 3 \+B_g3 \+B_e6! and 4 ... h6, or if 3 \+B_h6 \+B_e5 4 \+B_xh5 \+B_g6 5 \+B_h6+ \+B_g7=.

3 \+B_h6 \+B_a3
4 \+B_g3 \+B_a1
5 e4

Not 5 \+B_xh5 \+B_g6 6 \+B_h6+ \+B_xg5 7 \+B_xh7 \+B_g6=.

5 ... \+B_g1+
6 \+B_f4 \+B_h1
7 e5 h4?*

The decisive mistake. Now White can round up the h-pawn and this eventually forces diag 81. Black should have remained passive with 7 ... \+B_g8, keeping control of g4.

8 \+B_g4 \+B_g1+

If 19 ... \+B_h2 20 \+B_h6 wins the h-pawn at once.

20 \+B_h6 (85a)

By excellent manœuvring Gligoric has forced the black king back to g8. Euwe now played

20 ... h2

At the time of the game this was thought to be a decisive error. However if 20 ... \+B_g1+
21 \+B_xh3 \+B_h1+ 22 \+B_g4 \+B_xh6
23 \+B_xh6 f6 Maizelis pointed out a win in this apparently drawn ending, viz: 24 \+B_f6 \+B_f8 (or 25 ... \+B_e8 26 \+B_e6 \+B_f8 27 \+B_d7 \+B_f7 28 \+B_d8 \+B_f8 29 \+B_f7) 26 \+B_e6 \+B_e8 27 f7+ \+B_f8 28 \+B_d6 \+B_xf7 29 \+B_d7 and wins (see diag P35).

21 \+B_g3 \+B_g1+
Botvinnik - Najdorf
Moscow 1956
As a result of the excellent position of his king and the deplorable state of Black's kingside, White is able to force a win.

1... a5 c7
2... d5 a7
3... e5 fxe5
4... xe5 c7

White threatened 5 d7+ and 6 e6+

5... e6 a4
If 5... a6 6 d7+ f8 7 g6! a6+ 8 h7 and Black loses both his pawns.

6... g5!
Not 6 d7+ f8 7 e7+ e8! 8 b7 a5++; nor 6 d7+ f8 7 f7+ g8 8 g5 a5++; (8... hxg5? 9 g6) 9 e4 a6=.

6... a7! (86a)
In the game White won easily after 6... hxg5? 7 d7+ f8 8 f7+ g8 9 g6 4... h6 gxh6 11 e7 a8 and Black resigned in view of the unstoppable a6-d6-d8.

7 e5!
The only way to win. If 7 d7+? a6x7 8 exd7 g6 hxg5=.

7 gxh6 comes very close but Kopaev has shown in a long analysis that Black can just draw, viz: 7... gxh6 8 a5+

- a7 threatening e6 and if then...

... g8, f5 will win.

26 g4 g1+
27 f5
We have reached the won diag 81.

Rook v Rook

22 hxh2 g4
23 h6 g7
24 h3 g1
25 b4 h1+

Black cannot keep the white king cut off on the g-file since White can play h5 and a6

C7 9 b6 c5+ 10 g6 e5!
11 xh6 f6 12 a6 f5 13 a1 xe6 14 g6 f6+ 15 g7 f7+ 16 g8 b7 17 f1 b5 18 h6 g5+ 19 f8 h5 20 a1 f5+ 21 e8 b5 22 a6+ f5 23 h7 b7 24 h6 b8+ 25 d7 (25 e7 b7+) 25... h8 26 e7 g5 27 h1 g6= (cf diag 24a).

7... hxg5
Or if 7... d6 8 gxh6 gxh6 9 f6, or 7... a6 8 g6! xe6+ 9 xe6+ xe6 10 xg7 and wins.

8 xg5 a1
If 8... a6 9 g6 f8 10 h7!, or 8... f8 9 g6 e7 10 h6! gxh6 - or 10... g8 11 h6 etc. - 11 f6 and wins; 11... f7+ is impossible with the h-pawn on the board.

Finally if 8... d6 9 f5!
(9 h6 e7 10 g6 xe7=) 9... g7 (or 9... a8 10 e7 e8 11 h6!) 10 h6! gxh6 11 f6 and wins.

9 g6 f1
9... g1+ 10 g5 is worse for Black.

10 xg7 g1+
11 h6! g2
12 g5 f2
13 g7 xe6
14 h6 f7+
15 g8 and wins
In addition to the extra pawn, Black has several positional advantages. His king is already active, his h-pawn is very well placed and most importantly: the position of the white f-pawn gives Black a very dangerous pawn lever with ... g4.

It would appear that these additional advantages probably add up to a win.

1  ...  \( \text{a}4! \)
2  \( \text{f2} \)
If 2 \( \text{b}2 \text{g}5 \) 3 \( \text{b}6 \) Black can still play 3 ... g4 and if 4 fxg4+ \( \text{x}4 \).
2  ...  g5
3  g4+?

This was suggested by Kasparov as a possible improvement. If 3 \( \text{h}3 \) \( \text{f}4 \) we’ve reached diag 86 with colours reversed. The game actually continued 3 \( \text{b}2 \text{g}4 \) 4 fxg4+ \( \text{x}4 \) 5 \( \text{b}6 \text{a}2+ \) 6 \( \text{g}1 \text{f}5 \) 7 \( \text{g}6+ \) \( \text{f}4 \) 8 \( \text{h}6 \text{e}3 \) 9 \( \text{h}3 \) (Black threatened mate) 9 ... e4 10 \( \text{x}4 \text{h}4 \) 11 \( \text{h}8 \text{a}1+ \) 12 \( \text{h}2 \) \( \text{f}2 \) 13 \( \text{f}8 \text{f}3 \) 14 \( \text{h}4 \) \( \text{g}1! \) 15 gxg3 \( \text{g}2+ \) 16 \( \text{h}1 \text{e}3 \) 17 \( \text{h}8 \text{g}3 \) 18 \( \text{h}2 \) \( \text{xf}3 \) 0-1. In principle such a passive defence ought to lose if Black can force a passed pawn. Kasparov’s suggestion is much more challenging for Black:

3  ...  hxg3+
Not 3 ... \( \text{f}4? \) 4 \( \text{h}3\)-.
4  hxg3
If 4 \( \text{x}3 \) g4! and Black gets two connected passed pawns.

4  ...  g4
5  \( \text{b}2 \text{g}5 \)
6  \( \text{e}2 \) \( \text{x}3 \)
7  \( \text{xf}3 \) \( \text{a}5! \)
8  \( \text{b}2 \)

If 8 \( \text{e}4 \text{f}5 \) 9 \( \text{h}4 \) \( \text{a}3+ \) 10 \( \text{f}2 \) \( \text{f}4 \) 11 \( \text{h}3 \) \( \text{a}2+ \) 12 \( \text{f}3 \) e4+! 13 \( \text{x}4 \) \( \text{g}4 \) and wins since if 14 \( \text{h}8 \text{f}3 \) 15 \( \text{xf}4 \) \( \text{a}4+ \).

8  ...  f5
9  \( \text{h}8 \) (87a)

As Kasparov points out this position arose with colours reversed in Lyskov - Selezniev, USSR 1956.

9  ...  \( \text{e}4! \)
In that game Lyskov played “1 \( \text{a}3+ \)” which is weaker.
10  \( \text{e}3 \)
If 10 \( \text{g}2 \) \( \text{a}2+ \) 11 \( \text{h}3 \) e3 12 \( \text{e}8 \) (12 \( \text{g}8+ \) also loses) 12 ... e2 13 \( \text{e}6 \) \( \text{b}2 \) (zugzwang) 14 \( \text{e}3 \) \( \text{a}2 \) 15 \( \text{e}8 \) \( \text{b}2 \) (zugzwang) 16 \( \text{e}3 \) (16 \( \text{h}4 \) e1?? or 16 ... \( \text{b}4+ \) - e4) 16 ... \( \text{f}4 \) 17 \( \text{gf}4 \) \( \text{b}3 \) 18 \( \text{xb}3 \) e1?? with a theoretical win.

10  ...  \( \text{a}3+ \)
11  \( \text{f}2 \) \( \text{a}2+ \)
12  \( \text{e}3 \) \( \text{g}4 \)
13  \( \text{g}8+ \) \( \text{h}3 \)
14  \( \text{g}5 \) \( \text{a}3+ \)
15  \( \text{e}2 \) \( \text{f}3 \) (87b)
16  \( \text{e}1! \)

As we shall see Black wants to get the opposition - so this is better than 16 \( \text{d}2 \) \( \text{h}2 \).

16  ...  \( \text{h}2 \)
17  \( \text{d}2 \)
If 17 \( \text{g}4 \) \( \text{f}4 \) Black wins by at least a tempo in all variations.

17  ...  \( \text{h}1! \)
18  \( \text{d}1 \)
Or if 18 \( \text{e}1 \) \( \text{g}1 \) 19 \( \text{e}2 \) \( \text{g}2 \) 20 \( \text{e}1 \) \( \text{f}2 \) as in the main line.

18  ...  \( \text{f}2! \)
19  \( \text{e}1 \) \( \text{g}2 \)
20  \( \text{d}1 \)
If 20 \( \text{g}8 \) \( \text{f}3 \) etc; or 20 \( \text{h}5 \) \( \text{g}3 \) 21 \( \text{g}5+ \) \( \text{h}4! \).

20  ...  \( \text{f}1 \)
And the e-pawn queens.
Here again, White's additional positional advantages are sufficient to force the win.

1. \texttt{g4} \texttt{hxg4}
2. \texttt{fxg4} \texttt{c4}

Or 2 ... \texttt{b7} 3 \texttt{e5+}!

3. \texttt{g5+} \texttt{f7}
4. \texttt{a7+} \texttt{f8}
5. \texttt{g5} \texttt{e4}!

If 5 ... \texttt{xe5+} 6 \texttt{f6} wins at once.

Diagram 88a

Now if 1 \texttt{g4?} would be ineffective after 1 ... \texttt{hxg4} 2 \texttt{fxg4} \texttt{f1+}. Instead White has:

1. \texttt{f2}

Stopping 2 \texttt{e5+} \texttt{f5} 3 \texttt{a8} \texttt{g5!} and if 4 \texttt{f8+} \texttt{e4} the \texttt{f}-pawn is pinned.

2. \texttt{b5}!

Zugzwang.

2. \texttt{a2}

If 2 ... \texttt{f7} 3 \texttt{h7+} \texttt{f6} 4 \texttt{e5+} \texttt{f5} 5 \texttt{f7+} \texttt{e4} 6 \texttt{h6} and wins.

Or 2 ... \texttt{f1} 3 \texttt{e5+} \texttt{f5} 4 \texttt{b8} \texttt{g5} 5 \texttt{g2}! \texttt{a1} 6 \texttt{f8+} and wins.

Or 2 ... \texttt{h4} 3 \texttt{xh4} \texttt{hxh2+} 4 \texttt{g4} \texttt{g2} 5 \texttt{e5+} \texttt{f7} 6 \texttt{b7+} \texttt{f8} and either 7 \texttt{g5} \texttt{xg3+} 8 \texttt{f6} or simply 7 \texttt{b3} and 8 \texttt{g5} wins.

B.

1. \texttt{e5}

This brilliant idea also just fails to draw.

2. \texttt{exf5}!

Timman has shown that 2 \texttt{a6+} and 3 \texttt{f5} is just insufficient to win.

2. \texttt{e2}
3. \texttt{e8} \texttt{f7}
4. \texttt{a8} \texttt{e4}
5. \texttt{h4} \texttt{f6}

If 5 ... \texttt{e2} 6 \texttt{g5} (not 6 \texttt{h3}?) \texttt{h2=} 6 ... \texttt{hxh2} 7 \texttt{a7+} \texttt{e8} 8 \texttt{g6} \texttt{g2} 9 \texttt{h7} \texttt{xg3+} 10 \texttt{f6} \texttt{g4} 11 \texttt{f5} \texttt{h4} 12 \texttt{h8+} \texttt{d7} 13 \texttt{f7} and wins since the black \texttt{h}-pawn isn’t dangerous - Black's king cannot possibly support it in time and the black king is on the \texttt{long} side of the \texttt{f}-pawn.

6. \texttt{a6+} \texttt{f5}
7. \texttt{h3!} \texttt{g5+}
If 7 ... ℄e1 8 g4+ hxg4 9 hgx4+ ℄xf4 10 ℄f6+ ℄e5 11 ℄xg6 and wins since the black king is cut off along a rank.

8 ℄xh5 gxh4 9 g4+ ℄e5 10 ℄g5 f3

And White's pawns are much too quick - but not the overelaborate 12 ℄f4 ℄a3 13 h4 ℄a8! 14 ℄xf3 (14 ℄f5+ and 15 h5) 14 ... ℄g8+=.

a) The attacking rook behind the passed pawn

Alekhine - Capablanca
34th Match Game 1927

Alekhine won this very famous ending to become World Champion.

1 ℄a4!

With the white rook on this beautiful square the black rook must remain totally passive until it is relieved by its king.

1 ... ℄f6
2 ℄f3 ℄e5
3 ℄e3 h5
4 ℄d3 ℄d5
5 ℄c3 ℄c5
6 ℄a2!

This is zugzwang - the black king is forced to give way. Putting the opponent into zugzwang is the normal technical procedure in positions such as this, where he cannot move his rook.

7 ℄d4 ℄d6+
8 ℄e5 ℄e6+
9 ℄f4 ℄a6

Black has succeeded in changing the guard and thus activating his rook. But the lone rook cannot really be expected to defend the whole kingside against the white king - the only piece that can ever really do that successfully is an "opposite bishop".

10 ℄g5 ℄e5+
11 ℄h6 ℄f5 (90a)

If 11 ... ℄e7 12 ℄g7 ℄d7 13 ℄f6 ℄e7 14 ℄e2! ℄xa5 15 ℄e7 ℄c2 16 ℄xf7 ℄xf2+ 17 ℄xg6 ℄g2 18 ℄e3 etc.

12 ℄f4?!

Although this looks natural, Capablanca is now able to pose further problems by withdrawing his rook to the second rank.

The best plan is to play for zugzwang. The obvious way to do this is 12 ℄g7 ℄f3 13 ℄g8. Now if 13 ... ℄f6 14 ℄f4 ℄f5 15 ℄g7 and wins; or 13 ... ℄f5 14 ℄f4 ℄f6 15 ℄f8! etc. But Black can create some minor technical problems with 13 ... f5 14 ℄g7 f4 when presumably 15 ℄xg6 would win but not utterly trivially.

White can circumvent even this minor inconvenience by playing 12 ℄h7! ℄f6 (after 12 ... ℄f3 13 ℄g7 etc, or 12 ... ℄d5 13 ℄g7 also wins easily) 13 ℄g8! ℄f5 14 ℄f4 ℄f6 15 ℄g7 ℄f5 16 ℄a3 etc.
And another good line is 12
\[ \text{Rg7} \text{Rf3} 13 \text{Rd2!} \text{Rx}a5 14 \text{Rd5+} \text{and if} 14 \ldots \text{Rb6} 15 \text{Rx}d6+ - f6 or 14 \ldots \text{Rb4} 15 \text{Rx}d4+ - f4.
\]
12 \ldots \text{Cc5}!
13 \text{Rc3} \text{Cc7}
14 \text{Cg7} \text{Cd7}
15 \text{f5}?! \text{Rf6}

15 \text{f6} \text{is simpler:} 15 \ldots \text{Cc7}
16 \text{f5} \text{Cc6+} 17 \text{Rxf7} \text{gxf5} 18 \text{Rf3 etc.}
15 \ldots \text{gxf5}
16 \text{Rb6} \text{f4}!

There are now some technical problems but despite his inaccuracies Alekhine did succeed in winning:
17 \text{gxf4} \text{Cd5}
18 \text{Cg7} \text{Cf5}
19 \text{Ra4} \text{Cb5}
20 \text{Re4}! \text{Ra6}
21 \text{Rb6} \text{Rx}a5?
If 21 \ldots \text{Rb7} \text{then} 22 \text{Re7+}
still leaves the position messy after 22 \ldots \text{Rxa6} 23 \text{Re5} \text{Rx}f4
24 \text{Rx}h5 \text{f6}; and 22 \text{Re5} \text{Rx}f4 23 \text{Rxh5} \text{f5} 24 \text{Cg5} \text{Ra4} 25 \text{Cg7+} \text{Ra6} is similarly a bit confused.

But White could play simply
22 \text{Cg7} \text{Rc6} (23 \text{Ce7+} \text{was threatened}) 23 \text{Cg8} \text{Cb7} (23 \ldots \text{Cf6} 24 \text{Cf8} \text{Cf6} or 24 \text{Cf5} 25 \text{Cg7} - zugzwang - 25 \text{Rx}f7 \text{Cg4} 26 \text{Cf6+} \text{Cx}a5 27 \text{f5} \text{wins easily}) 24 \text{Cf6+} \text{Cg6}
25 \text{Rx}f7 \text{Cx}a5 26 \text{Cg7} \text{Cd6}
27 \text{Cg6} and with his king cut off, Black has no way of reaching a reasonable ending of \text{Rf+ h v R}.

With it only on the fourth rank White may be able to activate his rook for one final burst of activity. (i.e. 1 \text{Rmoves a4} 2 \text{Rxpawn a3} 3 \text{Rf1 rank a2 4 Ra1}).

With the passed pawn already on a4 this would be completely out of the question.

A.
1 \ldots \text{Cg5}
This very obvious move was played in the game, however it is a mistake since it facilitates White's kingside counterplay.
2 \text{f3}! \text{Cf5}?

Now White is clearly okay. 2 \ldots \text{f5!} was better, but after 3 \text{Cf2} \text{Cf6} 4 \text{Cc3} \text{Cf5} 5 \text{h4} \text{C}d5 6 \text{g4} \text{Cf}4 7 \text{Cf}4 \text{Cc5} (not 7 \ldots \text{hx}g4 8 \text{C}xg4 \text{C}a6 9 \text{C}d3 threatening 10 \text{Cc5+}) 8 \text{C}d3 \text{Cb5} 9 \text{Cc4} \text{Cf7} 10 \text{gx}h5!
(10 \text{Cc5?} \text{Cc6} 11 \text{Cc5+} \text{Cc5} 12}
Rook v Rook

\[ \text{He6 g5! 13 hxg5 hxg4 14 g6} \]

\[ \text{He5} \]

\[ 10 \ldots \text{gxh5} \]

\[ \text{He8} \]

White's active pieces give him good drawing chances.

3 \text{g4+ hxg4?!}

This is also somewhat dubious since now White gets a passed h-pawn - just what he needs. But if 3 … \text{He6 4 gxh5 gxh5 5 Hf2} White should have sufficient counterplay against Black's weakened kingside, e.g. 5 … \text{Hd6 6 He3 Hf7+} (otherwise the white king will go on the rampage) 7 \text{He3 He5 8 Hf4 Hf5 9 Hh4! Hfd5 10 Hxh5 f4 11 Hh4 He3+ 12 Hd2 Hxf3 13 Hh5+= (Smyslov and Levenfish)).

4 \text{fxg4+ He5}

Black can reach an ending of \text{+2 vs +1} with 4 … \text{Hg5 5 Hg2 Hh4 6 Hgl! Hh3 7 Hhl He7 (7 … f5 8 gxh5 gxh5 9 Hg1) 8 Hf4+ Hxg4 9 Hxa5. Although this is theoretically drawn it is far from easy as we saw in diags 57 and 58.}

\[ \text{h4!} \]

\[ \text{He5} \]

\[ \text{He4+} \]

Or 7 … \text{Hc5 8 Hh6 Hb5 9 Hh4 Hh7 10 Hh5+ Hb4 11 Hh4+ Hb3 12 Hh3+ Hb2 13 Hh4!=.}

\[ 8 \text{h6 Hf7} \]

\[ 9 \text{Hg4! Hf8} \]

\[ 10 \text{Hf4 Ha6} \]

\[ 11 \text{Hg4 Ha7} \]

\[ 12 \text{Hf4 Hg8} \]

\[ 13 \text{Hxf6 a4} \]

\[ 14 \text{Hf2 Hh7} \]

\[ 15 \text{Ha2 Hxh6} \]

\[ 16 \text{Hf2 Hg5} \]

\[ 17 \text{He3 Hf6} \]

black king since it does not come under fire from the enemy pawns. Nevertheless, Black must play very carefully to win.

2 \text{f3}

He must activate his pawns immediately. If 2 \text{He2 Hf7 3 Hf3 He6 4 Hh4 (4 g4 Hh4! 5 g5 Hxf5 6 Hg4 Hf6 7 Hh3 Ha8 zugzwang and White is quite lost) 4 … f5 5 Hf4 (if 5 He3 Hd5 6 f3 intending 7 g4 White is an invaluable tempo down - he has played Hg1 - g2 f3 - e3) 5 … Hf5 6 Hg5 Ha6 7 f3 Hc5 8 g4 Hxg4 9 Hxg4 Hxg4 10 Hgxg4 Hb5 and wins.}

2 \ldots \text{Hf7}

3 \text{h4!}

Not 3 g4? h4, but White could also have played 2 h4 and 3 f3.

3 … \text{He6!}

If 3 … f5 4 Hf2 He6 5 He3 Hd5 6 g4 transposes to line A, the note to 2 … Hf5?

4 \text{g4 Hd5}

5 \text{Hxh5 Hxh5}

6 \text{Hf2 Hc5}

7 \text{He3 Hb5}

8 \text{Ha1 (91a)}

But not 8 Hf4? a4 and wins.

8 … \text{He7+!}

He must give priority to protecting his kingside. If e.g.

8 … a4? 9 Hf4 He4 10 Hf5 Ha5+ (10 … Ha6 11 Ha6 or 10 … a3 11 Hxf6 transposes) 11 Hxf6 a3 (11 … Hd4 12 Ha3=) 12 f4 Hf4? (trying to win the f-pawn) 13 f5 He4 14 Hg6! and White is even better!

9 \text{Hf4}

Alternatively:

a) 9 Hxd4 a4 10 Hb1+ Hc6!

(10 … Ha5 is very messy since the king is bad on the edge) 11 Ha1 (if e.g. 11 Hb8 Ha7 the
Rook v Rook

white king cannot stop the a-pawn) 11 ... $a7 12 $e4 $a5! and wins;
   b) 9 $d3 a4 10 $b1+ $c6!
      (10 ... $c5 should also win but this is much simpler) 11 $a1
      (11 $b8 $a7 12 $c2 a3 13 $b1 $b7+) 11 ... $a7 12 $e4 $a5! etc.

   9 ... $e5 %
   10 $b1+ $c5
   11 $c1+ $b4
   12 $c6
   Better not to drive the king forward, e.g. if 12 $b1+ $c3
       13 $c1+ $b2 14 $c6 $b5 15 $a6 $b3 l6 $xf6 a4 Black is
       even better placed than in the main line.

b) The rook defends the passed pawn from the side
   Although the best place for a rook is usually behind the
   passed pawn, it can also be quite well placed defending it
   from the side.

   Andersson - Christiansen
   Hastings 1978/79
   Here White has a “b-pawn” (rather than an “a-pawn”) which is to his advantage. The
   winning plan must consist of bringing the king across to support the passed pawn. But
   with the pawn one file nearer the kingside the journey both to and from the queenside will
   be one move less. So, the b-pawn is virtually two tempi more favourable to White
   than an a-pawn.

   Andersson won the position with great ease.
   1 $b5 $h5
   2 $e3 $b2
   3 $d4!

   As always in such a position
   White must sacrifice some of the kingside pawns in order to activate his king.
   3 ... $xg2 $a6 $b3 l6 $xf6 a4 Black is
   even better placed than in the main line.

   12 ... $a4
   13 $xf6 $a5
   14 $b6+ $b5
   15 $a6 $a3
   16 $e4 $b3
   17 $f4 $a2

      Black threatened 18 ... $b4+
      18 ... $xa2
      19 $f5 $b4+
   And wins since he retains his h-pawn.

   4 $b6 $b2
   Not 4 ... $xh2 5 $b7 $b2 6 $d8+ etc.
   5 $c5 $c2+
   6 $b5
   Even better than 6 $d6
   $xh2 7 $b7 (7 $b5 $d2+) 7 ...
   $b2 8 $c6 $xb7 9 $xb7 -
   though no doubt that also
   wins. White’s plan is to win
   the black rook with his king
   as near the kingside as pos-
   sible.

   6 ... $xh2
   7 $d4! $e2
   7 ... $b2+ 8 $b4 $e2 9 $b7
   $e8 10 $c4 transposes a move
   later.

   8 $b7 $e8!
   9 $c4 $g7
   10 $e8 $e1
   11 $b8+ $b1+
   12 $c4
   Black has managed to pre-
   vent White from creating a
   permanent new queen but in
   fact he resigned here at once.
   After 12 ... $xb8 13 $xb8 the
   proximity of White’s king to
   the kingside makes Black’s
   position utterly hopeless.

   298
Rook v Rook

Tartakower - Nimzowitsch
Berlin 1928

White's plan is simply to transfer his king to b8 and queen the a pawn. Black can oppose that with his king but only at the cost of abandoning his kingside. Although this position is won for White, Black can put up stiff resistance and in the event Tartakower faltered and only drew.

1...\textit{f}6
2\textit{e}1\textit{g}6

If 2...\textit{g}5 3\textit{d}1\textit{g}4 4\textit{hxg}4\textit{hxg}4 5\textit{g}3! (he must not allow...\textit{g}3, creating a passed e-pawn) 5...\textit{e}5 6\textit{c}1\textit{e}3 7\textit{fxe}3\textit{e}4 8\textit{f}7!\textit{exe}3 9\textit{b}1\textit{a}6 10\textit{c}2\textit{d}4 11\textit{b}3\textit{c}5 12\textit{f}5+!\textit{d}4 (if 12...\textit{b}6 13\textit{f}6+\textit{xa}7 14\textit{xa}6+ the pawn ending is won for White) 13\textit{f}4+ and 14\textit{a}4 wins.

3\textit{d}1\textit{e}5
4\textit{c}1\textit{d}5
5\textit{b}1\textit{a}6
6\textit{b}2\textit{c}6
7\textit{g}7\textit{c}5!
8\textit{h}4

The black king is effectively defending the queenside so White now turns his attention to the other half of the board. Before undertaking decisive action, he improves his pawn structure. If at once 8\textit{xa}6\textit{xa}7 9\textit{g}5+\textit{d}4 10\textit{xa}5!\textit{d}7!=.

8...\textit{a}5! (93a)

Here Tartakower was seduced by the brilliant trap which Nimzowitsch has just set. He played 9\textit{g}4?\textit{hxg}4 10\textit{h}5\textit{g}3! 11\textit{fxg}3\textit{e}3! 12\textit{a}6\textit{xa}7 13\textit{c}2\textit{a}2+ 14\textit{d}1\textit{d}4 15\textit{h}6\textit{e}2+ 16\textit{e}1\textit{e}3=.

(Note that White had to be a strong player in order to fall into this!)

Instead White could force the win with:

9\textit{g}3\textit{a}6
10\textit{c}3\textit{a}3+

If 10...\textit{a}2 11\textit{a}6 now wins: 11...\textit{a}+ (or 11...\textit{a}7 12\textit{g}5+) 12\textit{d}2\textit{xa}7 13\textit{e}3 etc.

11\textit{d}2\textit{d}4
12\textit{d}7+\textit{c}5

Or 12...\textit{e}5 13\textit{c}2\textit{e}6 14\textit{b}2\textit{a}6 15\textit{g}7\textit{d}5 16\textit{c}3\textit{c}5 17\textit{a}6\textit{a}5 and wins.

By this rather roundabout manoeuvring White gained a vital tempo.

13\textit{e}2\textit{c}6
14\textit{g}7\textit{d}5
15\textit{a}6\textit{a}7
16\textit{g}5+\textit{d}4
17\textit{a}5\textit{a}2+
18\textit{f}1\textit{e}3
19\textit{f}e3+\textit{e}4
20\textit{a}5\textit{f}3
21\textit{g}1 and wins

c) The rook in front of the passed pawn

This is clearly the worst position for the rook and very often presages a draw.

Ilivitsky - Krogius
Kislovodsk 1956

Despite White's extra pawn, the position is completely drawn and indeed the players agreed to draw in this adjourned position without resumption. White has two conceivable winning plans:

a) To play a7. This would win if there were something for the white king to attack on the kingside (cf diag 67). Here, however, that is obviously not the case. After 1 a7 White
could never support the a-pawn with his king since as soon as he played \( b_6 \) it would immediately be checked away. Hence 1 \( a_7 \) would be totally useless.

b) White leaves the pawn on a6 and move his king towards the queenside. Now there is a shelter on a7 but the Black rook is not chained to the a-file. It can therefore maraud on the kingside.

As we shall see the a-pawn is simply too far away for this plan to promise White anything but trouble, e.g.

1 \( \text{f}f1 \text{a}2 \\
2 \text{e}1 \text{f}6 \\
3 \text{f}3 \\

If 3 \( \text{d}1? \text{xf}2 4 \text{cl a}2 \\
5 \text{bl a}5 6 \text{b}2 \text{f}5 7 \text{b}3 \\
8 \text{g}4 8 \text{b}4 \text{al 9 b}5 \text{x}g3 \\
and it is only White who is in danger - indeed lost presumably.

3 ... \text{a}3 \\
4 \text{e}2 \text{g}7 \\
5 \text{d}2? \text{xf}3 \\
6 \text{c}2 \text{g}3 \\
7 \text{b}2 \text{g}2+ \\
8 \text{b}3 \text{g}1 \\

And here it would be most advisable to take a draw with 8 ... \text{al 9 b}2 \text{g}2+ 10 \text{b}3 \\
\text{g}1 11 \text{b}2=. If instead:

9 \text{b}4? \text{a}1 \\
10 \text{b}5 g5! \\
11 \text{x}g5 \text{h}4 \\
12 \text{c}8 \text{h}3 \\
13 \text{c}2 \text{g}6 \\
14 \text{h}2 \text{a}3! \\

And Black has magnificent winning chances.

Bronstein - Romanishin
Erevan 1975

Here White has an extremely significant extra advantage in that he has a "b-pawn" rather than an "a-pawn". As discussed in the introduction to diag 92 this gives him two extra tempi. Moreover, after Romanishin's very natural but weak first move the white king is several tempi more active than was its counterpart in the previous diagram.

1 ... \text{b}5? \\
1 ... \text{f}6 was correct if then \\
2 \text{f}1 \text{e}6! White has no way of activating his king except by playing the useless \text{b}8 and \text{b}7 when, as we know, ... \\
\text{b}6 leads to a dead draw.

2 \text{f}3 \text{b}2 \\
3 \text{e}4! \text{xf}2 (\text{f}c1) \\
4 \text{f}7 \text{b}2 \\
5 \text{b}7 \text{f}6 ? \text{b}5 \\
6 \text{c}4 \\
7 \text{d}5 \text{h}3 \\
8 \text{c}6 \text{h}2 \\
9 \text{d}5 \text{h}3 \\
10 \text{e}4 1-0 \\

Not only has Black been unable to capture a second pawn on the kingside but his king is also not very active. After:

6 \text{d}5 \\
He therefore had to sacrifice back a pawn.

6 ... \text{f}5! \\
7 \text{xf}7+ \text{g}4 \\
8 \text{g}7! \text{xf}3 \\
9 \text{xf}6+ \text{xh}4

Black has levelled material, but his king is stuck in front of his passed pawn. Due to this, White wins by a tempo.

10 \text{c}6 \text{h}3 \\
11 \text{g}5! \text{xb}7 \\
Forced since if 11 ... \text{h}4 12 \\
\text{b}5 wins at once.

12 \text{xb}7 \text{h}4 \\
13 \text{c}6 \text{h}2 \\
14 \text{d}5 \text{h}3 \\
15 \text{e}4 1-0 \\
Black resigned in view of 15 ... \text{h}1 16 \text{f}3 \text{h}2 17 \text{a}5 \text{g}1 \\
18 \text{g}1 mate.
Rook v Rook

Hollis - Florian
Corr. 1979

As we saw in the previous diagram a “b-pawn” confers very definite winning chances. Here, however, White’s king is very bad, for Black has got his rook optimally placed as in diag 94.

Diag 96 is extremely close - the result certainly hangs on one tempo. Hollis won the game and published analysis claiming that the position is indeed won. However, later analysis suggests that with perfect play Black can just hold.

1...\text{Qf1} \text{Ab2}!
2 \text{Qe1} \text{Qf6}
3 \text{Qd2}! \text{Bb3}
4 \text{Qc2} (96a)

This move highlights the advantage of a “b-pawn” over an “a-pawn”. The black rook has already got to work to get back to the b-file.

Black can now try:

A.

5 ... \text{Qxg3}

This is possible since if 6 \text{Qxf7+} \text{Qxf7} 7 \text{b7} \text{f3} 8 \text{b8w} \text{Qg7} 9 \text{Qb7+} \text{Qf7} Black has a fortress. He will put the rook on f5 and can then safely pass with his king forever.

6 \text{Qc7!} \text{Qg2+}
7 \text{Qb3} \text{Qg1}
8 \text{Qb2}

8 \text{b7} would be too slow, e.g.
8 ... \text{Qb1+} 9 \text{Qc4} \text{Qc1+} (but not 9 ... \text{g5?} 10 \text{hxg5+} \text{Qxg5} 11 \text{Qc5+} and 12 \text{b5}) 10 \text{Qd5} \text{Qb1} 11 \text{Qc6} \text{g5} 12 \text{hxg5+} \text{Qxg5} 13 \text{Qe8} \text{h4} 14 \text{b8w} \text{Qxb8} 15 \text{Qxb8} \text{h3} 16 \text{Qd5} \text{Qf4} 17 \text{Qh8} \text{Qg3} 18 \text{Qe4} \text{h2} 19 \text{Qe3} \text{Qg2} 20 \text{Qg8+} \text{Qf1=}

cf diag RP12.

B.

5 ... \text{Qf5}

This was the game continuation.

6 \text{Qc7} \text{Qb5}
7 \text{b7} \text{Qe6}

If 7 ... \text{Qf5 not 8 \text{Qxf7+}?} \text{Qg4=} but 8 \text{Qc3!} \text{Qb1} (8 ... \text{Qg4} 9 \text{Qc4+} \text{Qxg3} 10 \text{Qb4} wins; or 8 ... \text{f6} 9 \text{Qc4 intending 10 \text{Qc5+}, 11 \text{Qb5}) 9 \text{Qxf7+} \text{Qg4} 10 \text{Qf4+!} and 11 \text{Qb4}.

8 \text{Qc3} \text{f6}
9 \text{Qc4} \text{Qb1}
10 \text{Qc5} \text{Qf5}

White threatened 11 \text{Qc6+ - b6}.

11 \text{Qd7!} \text{Qc1+}

Due to White’s threat to interpose on the b-file, Black must start checking.

12 \text{Qd6} \text{Qb1}
13 \text{Qc7} \text{Qc1+}
14 \text{Qd8} \text{Qb1}
15 \text{Qe8} \text{Qg4}
16 \text{Qd6} \text{g5}
17 \text{Qxf6} \text{gxh4}
18 \text{gxh4} \text{Qxh4}
19 \text{Qg6!} \text{Qh3}
20 \text{Qe7!} 1-0

Black resigned since, in view of the threat of 21 \text{Qb6}, he must take at once on b7 (if 20 ... \text{h4} 21 \text{Qb6} \text{Qxb6} 22 \text{Qxb6} \text{Qg2} 23 \text{b8w} \text{h3} the h-pawn is only on the sixth rank). But after 20 ... \text{Qxb7+} 21 \text{Qxb7} White wins by a tempo exactly as in diag 95.

A very fine technical per-
formance by Hollis!

C. 5 ... \texttt{\textit{Qe3}!}

This is best. Although the black rook ends up very passive on b8 there will be no threats of interposition on the b-file. And therefore White would have to spend a lot of extra time winning the rook - in fact so slow would this be that White must try a different plan.

6 \texttt{\textit{Cc7}} \texttt{\textit{Qe8}}
7 \texttt{\textit{B7}} \texttt{\textit{Be8}}
8 \texttt{\textit{Qe3}} \texttt{\textit{Qf5}}
9 \texttt{\textit{Qxf7}+}

If 9 \texttt{\textit{Qe3}} f6 10 \texttt{\textit{Qf3}} g5 11 \texttt{\textit{Qe7}} \texttt{\textit{Qd8}} 12 \texttt{\textit{Qe3}} \texttt{\textit{Qb8}} 13 \texttt{\textit{Qb3}}
\texttt{\textit{Qe5}} 14 \texttt{\textit{Qe3}} \texttt{\textit{Qd5}} and Black holds without too much trouble.

9 ... \texttt{\textit{Qg4}}
10 \texttt{\textit{Qf4}+} \texttt{\textit{Qxg3}}
11 \texttt{\textit{Qb4}} (96b)!
11 ... g5!

Black must play actively.

Hollis gave only passive defense with 11 ... \texttt{\textit{Qh3}?} But this loses since White can use zugzwang to cross the fourth rank without allowing ... \texttt{\textit{Qxh4}}, viz: 12 \texttt{\textit{Qe2}} (but not 12 \texttt{\textit{Qc2}} \texttt{\textit{Qg3}} 13 \texttt{\textit{Qb3}} \texttt{\textit{Qh3}} 14 \texttt{\textit{Qa4}} \texttt{\textit{Qg3}} 15 \texttt{\textit{Qa5}} \texttt{\textit{Qxb7}+}) 12 ... \texttt{\textit{Qg3}} (12 ... \texttt{\textit{Qg2}} 13 \texttt{\textit{Qb3}!}) 13 \texttt{\textit{Qe3}} \texttt{\textit{Qh3}} 14 \texttt{\textit{Qf3}} \texttt{\textit{Qf8}+} 15 \texttt{\textit{Qe4}} and wins.

12 h\texttt{\textit{xg5}} h4
13 \texttt{\textit{Qg7}} h3
14 \texttt{\textit{Qg7}} h2
15 \texttt{\textit{Qb1}} \texttt{\textit{Qg2}}
16 \texttt{\textit{Qe4}} h1\texttt{\textit{W}}
17 \texttt{\textit{Qxh1}} \texttt{\textit{Qxh1}}

This position would be won if the pawns were closer together but here its dead drawn.

18 \texttt{\textit{Qd5}} \texttt{\textit{Qh2}}
19 \texttt{\textit{Qc6}} \texttt{\textit{Qg8}!}

\texttt{\textbf{Nunn - Smejkal}}

\texttt{Lucerne Ol 1982}

This extremely difficult position arose in a game from the 1982 Olympiad. Black started nearly 40 moves ago(!) with the pawn on a3. But clearly that promises nothing and after extensive adjournment analysis Smejkal was finally ready to join battle.

1 ... \texttt{\textit{Qb3}}
2 \texttt{\textit{Qb8}+} \texttt{\textit{Qc3}}
3 \texttt{\textit{Qc8}+!}

Not 3 \texttt{\textit{Qa8}}? \texttt{\textit{Qd1}}! 4 \texttt{\textit{Qxa2}} (4 \texttt{\textit{Qa3+ Qb2}}) 4 ... \texttt{\textit{Qd2+}} 5 \texttt{\textit{Qxd2}} \texttt{\textit{Qxd2}} and the pawn ending is won for Black, viz: 6 \texttt{\textit{Qh3}} \texttt{\textit{Qe3}} 7 g4 \texttt{\textit{Qxg4+}} 8 \texttt{\textit{Qxg4}} \texttt{\textit{Qf2}} 9 f4 \texttt{\textit{Qe3}} 10 fxe5 fxe5 11 \texttt{\textit{Qf5}} \texttt{\textit{Qd4}} and wins.

3 ... \texttt{\textit{Qd3}}
4 \texttt{\textit{Qa8}} \texttt{\textit{Qc4}}
5 \texttt{\textit{Qc8}+} \texttt{\textit{Qd3}}
6 \texttt{\textit{Qa8}} \texttt{\textit{Qd1}!}

This is the only way to make progress. If 6 ... \texttt{\textit{Qe2}} 7 \texttt{\textit{Qa7}} \texttt{\textit{Qel}} (threatening 8 ... \texttt{\textit{Qdl}}) 8 \texttt{\textit{Qg1}}! \texttt{\textit{Qd1}!} (8 ... \texttt{\textit{Qe2}+!} transposing back into the game) 9 \texttt{\textit{Qxa2}} \texttt{\textit{Qd3}} 10 \texttt{\textit{Qa1}!} (not 10 \texttt{\textit{Qg2}?? \texttt{\textit{Qd2}+}!}) 10 ... \texttt{\textit{Qe2}} 11 \texttt{\textit{Qg2}+}.

7 \texttt{\textit{Qa3}+!}

Not 7 \texttt{\textit{Qxa2}? \texttt{\textit{Qd2}+}!} and wins.

7 ... \texttt{\textit{Qe2}}
8 \texttt{\textit{Qxa2}+ \texttt{\textit{Qe3}!}}

Black has returned his extra pawn in order to force his pieces to extremely active squares. In view of the ever
present threat of ... \( \text{d}2+ \)
White cannot now defend passively so:
9 \( \text{a}3+ \) \( \text{d}3 \)
10 \( \text{a}6 \) \( \text{d}2+ \)
11 \( \text{h}3 \) \( \text{x}f3 \)
12 \( \text{x}f6+ \) \( \text{x}e4 \) (97b)
13 \( \text{h}6 \)

If 13 \( \text{h}4 \) \( \text{h}2+ \) 14 \( \text{g}5 \) \( \text{g}2 \) 15 \( \text{h}4 \) \( \text{e}3 \) 16 \( \text{a}6 \) \( \text{e}4 \)
17 \( \text{a}3+ \) \( \text{f}2 \) and wins.

Or 13 g4 \( \text{hxg}4+ \) 14 \( \text{gx}4 \) \( \text{g}2+ \) 15 \( \text{h}3 \) \( \text{g}8 \) 16 \( \text{f}1 \) \( \text{d}3 \) and wins.

Given that everything else really does lose there is even something to be said for the seemingly utterly absurd 13 g4 \( \text{hxg}4+ \) 14 \( \text{gx}4 \) \( \text{g}2+ \) 15 \( \text{h}3 \) \( \text{g}8 \) 16 \( \text{f}1 \) \( \text{d}3 \) and wins.

Due to this extensive analysis, much of it found by the English and Czech teams during the Lucerne Olympiad and thus sorted out by Nunn later, it would appear that diag 97 is actually lost for White!
Underlying Elements of Rook Endgames

Tactics

The rook is a powerful piece and rook and king together can be a formidable attacking force. So it is not surprising that tactical ideas are often of extreme importance in rook endings.

Checkmate

Novak - Rye
Czechoslovakia 1978
Although Black has a passed pawn, the dominant factor here is the unfortunate position of his king. The game continued:

```
1 ... g6
If 1 ... a5 2 bxh6 a4 3 h4! etc. as in the game. Or if 1 ... b7 2 f8+! g6 3 f6+ winning easily
2 e8! f5
3 h4 a5
Or 3 ... h5 4 g8 and mates on g5.
```

Piskalnietis - Berzins
USSR 1962
After:

```
1 f4+
White incautiously played:
2 g4??
2 ... g2 should hold since the white rook is very active on a6.
```

```
2 ... d6!
But now 3 xxa7+ d6 and the threat of 4 ... d4 mate wins a rook. Or 3 xd6 xd6 leads to a completely lost pawn ending. So White had to resign.
```

Unzicker - Lundin
Amsterdam 1954
White won easily by the technical procedure of playing his king round to h6 and then giving up the a-pawn to annihilate Black’s kingside, i.e. 1

```
1 c8! a6+
2 c6 xa7
3 c5 mate!
```

The rook is a powerful piece and rook and king together can be a formidable attacking force. So it is not surprising that tactical ideas are often of extreme importance in rook endings.
This is a very important defensive idea. When it works it can save seemingly hopeless positions. See for example diagram 60. Here are some further examples:

**Bernstein - Smyslov**  
Groningen 1946

Black is winning easily. But he blundered with:

1 ... b2??
2 axb2!

And it turns out that after the intended skewer 2 ... h2+ 3 f3 axb2 is stalemate.

After 2 ... g4 3 f1 the draw was soon agreed.

**Meduna - Speelman**  
France 1979

(Analysis variation)

This somewhat unusual position arose during adjournment analysis - though not actually in the game! White is threatening to disrupt Black's defences with 1 d6 and therefore a possible defensive move is:

1 ... f6
At the time I was concerned about:

2 d8
But later Jonathan Mestel found the defence:

2 ... e6+!!
3 d7 e4
drawing easily.

**Korchnoi - Petrosian**  
Moscow 1971

(Analysis variation)

Black's position looks very difficult. But there is a hidden defence:

1 ... a4!

2 c6
Or 2 e6 c5!

2 ... h5
3 xc7 h6!

And the threat of 4 ... axb4! 5 axb4 stalemate forces a draw.

**The Skewer**

As the knight's primary tactical ability is to fork, so the rook's main talent is the skewer. We have already seen many examples of this, see especially diagrams 20 and 67. Here are a couple more:

1 ... a1+!
2 xe2 a2

Now the white king has nowhere to hide. If he wishes he can give a few checks but the black king will simply go to the b-file. So instead he might try:

3 f2
If 3 - third rank 3 ... h checks and wins. And 3 d2 is met as in the text by:

3 ... h1!
4 xa2 h2+
and wins.
Erinas - Ilmaz  
Turkey 1976

Everything is set up for the skewer. But first White played:

1. $\text{c7!}$

But not 1. $d6? \text{cxd6}$ 2. $\text{d8+?} (2. \text{c7! =}) 2. ... \text{c6}$ 3. $\text{h8} \text{a4 mate!}$ One must always look for tactics for one's opponents as well as for oneself!

1. ... $b5$

There is nothing better.

2. $\text{c8!} \text{d6}$

Or 2. ... $\text{xh7}$ 3. $\text{xc7+,}$ the skewer, and wins easily.

---

**The Pin**

This is a very powerful weapon for a rook against minor piece. But a rook cannot ordinarily pin another rook and so pins don't usually arise in rook endings except in one very typical circumstance - cf diag 46 etc.

1. $\text{h5!} \text{xh5}$

2. $\text{d8++}$ and wins.

---

**The Fork**

Diagram 106a

If the white rook is on c1 then it can deflect the enemy rook from the other side with a fork.

1. $\text{c5+!} \text{xe5}$

2. $\text{d8++}$

But although rooks very often fork pairs of pawns, this is the only reasonable scenario in which rook forks king and rook.

---

**Interposition (discovered attack)**

This is an extremely important strategical and tactical theme. The idea is that a rook, supported by its own king, or possibly a pawn, can cut the line of action of an enemy rook.

Diag 107 is one of the two main lines in the Lucena position diag 3. As we know after

1. ... $\text{e1+}$

2. $\text{e4!}$ wins at once

2. $\text{e4}$ was an *interposition*. It is a tactical device which achieves a strategic aim: the black rook's checks are brought to an end.
Rook v Rook

Kozlov - Tukmakov
USSR 1977

Here Black has another tactical device, discovered attack to achieve his interposition. (I think that the question of whether an interposition is tactical or strategic would depend on an exact definition of those terms. For the moment I shall use them rather loosely.)

1 ... $b4!

So that if 2 $xa2 $b3 check.

2 $e5 $b3
3 $xa2

Forced, since Black threatened the interposition 3 ... $a4 after which White cannot prevent the pawns from queening: 4 $b8+ $a3 etc.

3 ... $xa2
4 $f6 $b3
5 $g7 $b7+
6 $f6 $c4
7 g4 $d5
8 f5 $a7
9 fxg6 $a6+ 0-1

Some Underlying Strategic Ideas

Properties of the Rook

a) The rook is a powerful attacking piece but a poor defender. It is therefore usually correct to play actively in rook endings. (see numerous examples: especially 125);

b) It is normally best to place your rook behind passed pawns. See diags 69, 71, 90-97 etc.);

c) Specific properties of the rook:

A. Cutting;
B. Rook on the seventh rank;
C. Checking distance;
D. Pressure from behind.

A. Cutting

Since it controls whole ranks and files, a rook can completely exclude the enemy king from the proceedings. This ability to cut off the king is extremely valuable.

In diag 109 Black is threatening to get his king in front of the pawn with 1 ... $d7.

But White to move can exclude him from the struggle with:

1 $d1 $e7

Or 1 ... $c8 2 $b5 $b8+ 3 $b6 $b6 $b8+ 5 $c7 and wins. The rook had insufficient checking distance; see C below.

Diagram 109a

If, however, the black king starts on e7 then he can draw:

1 $d1 $d8!

Opposing the file. This is the thematic way to neutralise a rook which is cutting off your king.

2 $xd8

If 2 $d5/d4 $xd5/d4=. Or if the rook moves away, Black simply plays 2 ... $d7.

2 ... $xd8
3 $b5 $c7=

The strategic weapon of opposing the file is very closely allied to interposition (see diags 107 - 108). In each case the idea is to neutralise the enemy rook by placing your own in its line of fire.
**Rook v Rook**

**B. Rook on the Seventh Rank**

Until quite late in the game, there are likely to be several pawns unmoved. A rook on the seventh rank will therefore be extremely inconvenient for the opponent.

White to move in diag 110 can seize considerable advantage with:

1\( \text{d7!} \)

Black must now choose between:

a) Passive defence with 1\( \text{b8;} \)

b) A pawn sacrifice to activate his rook.

Normally, one would want to activate the rook. However, I can’t see any very sensible way to do this. So, perhaps Black should try a), i.e. 1\( \text{b8}. \)

**Diagram 110a**

Here, however, Black is more fortunate:

1\( \text{d7} \)
2\( \text{e2} \)
3\( \text{e3} \)
\( \text{c8} \)
\( \text{f8} \)
\( \text{e8} \)

And the rook is evicted without doing any real damage.

**Lilienthal - Smyslov**

**USSR 1941**

Black is already a pawn down and his queenside pawns in particular are extremely weak. But he has a rook on the seventh rank.

In this case the white king is cut off on the first rank - a particularly serious case of cutting.

As a result Black drew extremely easily:

1\( \text{g5!} \)

He must play actively. 1\( \text{f6} \) would be quite wrong.

Although White then has rather a free hand, Black has no other disadvantages and I don’t see a “clear winning plan”. At the right moment Black will probably have to go active. See diag 119. But it will be hard for White to keep sufficient control to prevent this from being effective. Note that in this position, Black has no way of evicting the rook - he will have to “play around it”.

2\( \text{h7} \)
3\( \text{h6+} \)
4\( \text{xc6?} \)
5\( \text{xf4} \)

As a result of the bad position of his king and the active black pieces, White is now threatened with mate.

6\( \text{exf4} \)
7\( \text{a1+} \)

Since Black gains perpetual check.
C. Checking Distance
It quite often happens that a player has to defend by checking the enemy king repeatedly. In that case it is vital that the rook is placed as far away as possible from the enemy king, i.e. rooks need room ("checking distance") in order to function effectively - cf. especially diags 4, 5, 6, and 13 (and diag 109).

Thus in diag 112, Black to move draws with:
1 ... a2!

Or 2 ... a7+ 3 c7 a8 4 e7 €f7 (cf diag 5).
2 ... a7+!
As in diag 4.
But only 1 ... a2 will do. If e.g.
1 ... b2??
Or 1 ... d2+ 2 e7 a2 3 g1+.
2 e7 wins
Thus Black has insufficient checking distance and loses (cf diag 4a).

Similarly in diag 113 Black to move only draws with 1 ... h8! (see diag 12 variation B).

For if
1 ... h7?
2 b4!

But not 2 c5? d7= opposing the file.
2 ... b7+

D. Pressure from Behind
In diag 113, the black rook defended by exerting pressure from in front of the pawn. In certain positions, it is possible to restrain the pawn by exerting pressure from behind the pawn (see diag 2).

Since diag 2 makes the point so well, I shan’t repeat it here. But I should point out that this method of defence will tend to work only in very simplified positions. For if a rook is pressurizing a pawn from behind, there will often be an extremely convenient square for the enemy king in front of the pawn. That is, the king will have cover. Which brings me to:

Cover for the King
In order to move the king to an active position one must have some way of hiding it from checks from the enemy rook. Essentially, there are two possibilities:

a) One can interpose one’s rook to stop checks;
b) One can find cover - either from one’s own or enemy pawns.

It will usually be best if the king can find its own cover, leaving the rook free to forage (cf diags 20 and 21: note the essential difference between these and diags 50 and 51, where a king found artificial shelter.

Savon - Jeliadinov
Riga 1964

Although he is a pawn up, Black is in great danger since...
the white king and rook are enormously active.

1 \( b5 \)

Here Black played the obvious 1 ... \( xh4 \), but he soon succumbed to a combined attack by White's king and rook and soon-to-be-passed d-pawn:

2 \( c6 \) \( xe4 \) 3 \( xd6 \) \( f8 \) (mate was threatened) 4 \( a8+ \) \( g7 \) 5 \( e7 \) \( d4 \) 6 \( d6 \) \( e4 \) (if 6 ... \( h4 \) 7 \( d7 \) \( h3 \) 8 \( d8 \) \( xd8 \) 9 \( xd8 \) is also winning for White) 7 \( d7 \) \( e3 \) 8 \( xe3 \) \( c6+ \)

Instead, rather surprisingly, Black could have defended passively.

1 ... \( c3! \)

Rubinstein - Lasker
St. Petersburg 1909

Not only is White a pawn up, but he also has a positional advantage - his rook is much more active than Black's.

Diag 115 is winning for White, but it would be perfectly possible to mess such a position up. This example is instructive mainly for the supremely calm way in which Rubinstein demonstrated the win.

1 \( \text{x}a6! \)

Severely restricting the black king. Black cannot now free his rook from the burden of defending the a-pawn by playing his king to b8, since the white e-pawn would be too strong. So he must remain passive.

1 ... \( f8 \)
2 \( e4 \) \( c7 \)
3 \( h4 \)

Rubinstein plans to advance his kingside in a unit. Once the h- and g-pawns are far enough up the board, Black will have to weaken his kingside to deal with them: then the white king will get additional possibilities.

Note also that by advancing his whole kingside together, White prevents Black from "going active", i.e. abandoning the pawns to free his rook. For example, 3 \( f4? \) (instead of 3 \( h4 \)) 3 ... \( c2! \) 4 \( f3 \) \( c3+! \) and White is considerably embarrassed.

3 ... \( f7 \)
4 \( g4 \) \( f8 \)
5 \( f4 \) \( e7 \)
6 \( h5 \) (115a)
7 ... \( h6 \)

Of course Black does not want to create a weakness on g6, but if he does nothing then White will advance his pawns further, e.g. 6 ... \( f7 \) 7 \( f5 \) \( e7 \) 8 \( g5 \) \( f7 \) 9 \( e5 \) \( e7 \) 10 \( g6 \) \( h6 \) (if 10 ... \( hgx6+ \) 11 \( xg6 \) the white king is much
too active) 11 a3 (zugzwang) 11
... $b7 12 $e6+ $d7 (or 12 ...
$f8 13 $c6 $e7 14 $c8 and
wins) 13 $f6! $e8 (13 ...
gxf6 14 $g7 etc.) 14 $f7! $xf7+ 15
gxf7+ $xf7 16 e6+ $e7 17
$f5 and wins easily.
7 $f5 $f7
8 e5 $b7
9 $d6 $f8
10 $c6 $f7
11 a3!

A calm and elegant move.
By preventing ... $b4 Rubinstein forestalls any possible
counterplay against the g4-
pawn. Here Lasker actually re-
signed. He is in zugzwang, i.e.

If 11 ... $e7 12 e6+ $g8 13
$g6 $e8 14 e7!.
Or 11 ... $e7 12 $g6 $f8
13 $e8+ $e7 14 $xg7 etc.
Or 11 ... $f8 12 $g6 $b3
(note that 12 ... $b4 is impos-
sible because of 11 a3) 13
$c8+ $e7 14 $xg7 $xa3 15
$e6 winning easily.
Finally, if 11 ... a5 12 $a6
$b5 13 $a7+ $g8 14 a4 $c5
15 $e6 is also quite hopeless -
the e-pawn soon queens.

7 $c2
If White had reasonable
queenside pawns then he
would be able to set up a
passed pawn and get some
chances of drawing with $+P
vs $+$. But here, although
he does have a passed pawn,
the case is hopeless. There is
no conceivable way of elimi-
nating the black c-pawn.
7 ...
8 $h1 $h3
9 a4
Or 9 $b3 $g1 10 $xh2+
$hx2 11 $a4, hoping to
reach the c-pawn via b5, 11 ...
$b1 and wins.
9 ...
10 $xh2+ $xh2
11 $d3 $e1!
0-1

Rook v Rook

Kasparian - Botvinnik
Moscow 1931

Black is an outside passed
pawn up and the white queen-
side pawns are shattered.
Botvinnik won quickly and
easily by the simple expedient
of advancing his $h$-pawn. The
white rook simply does not
have time to inflict real dam-
age on the queenside - espe-
sively given the woeful state of
White's pawns.
1 ...
2 $d7 h5
3 $xa7 h4
4 $b7 h3
5 $xb6+ $g5
6 $bl
Or if 6 $b8 $g4! wins, pre-
paring to interpose on the h-
file.
6 ...

... $g4
Rook v Rook

Konstantinopolsky - Shaposhnikov
Sochi 1952

In this more unbalanced position, White should eventually be able to set up two connected passed pawns on the kingside. But on the other hand, Black can get a passed pawn on the queenside and thus obtain counterplay.

1...b5 b6
2...b2!
Correctly defending the queenside before undertaking kingside play.

2...e6
3...g2 d5

He could also have tried to impede White’s advance with 3...g5. But after 4...h5 5f4...f6 (if 5...c5 6a4 - to threaten b5 again - 6...c4 7a5 bxa5 8b5 g4+ 9h4 a4 10hxh5 should win) 6b5 g4+ 7h4...e2 8hxh5 hxh2+ 9xg4 dxa2 10e4 and White must win the race fairly easily.

4...d2+ c6
To support his pawn. If 4...e5? 5d7 is much too strong.

5...f4 a5
6...f3 b5
7...f5 a4
8...e4...c1

He must attend to White’s e-pawn. If 8...b4 9e5 b3 10axb3 axb3 11e6...c2 (or 11...e1 12e2!) 12e7 wins easily.

9...e5...e1
If 9...f1+ 10...e4...e1+ 11...d4 merely improves White’s king position. Or 9...b4 10e6...e1! (not now 11...e2??...e2 12...e2 b3 13axb3 a3!) 11...c5 12...d4 winning.

10...e2...f1+
11...g4...d7

Utilising the position of Black’s king to reposition his rook with tempo.

15...e7
16...a8 bxg5? b4.

Black was threatening 16...b3 17axb3 a2.

16...e1
This may look rather tame but really there was nothing for Black to do. If 16...f2 17a7+ d6 (or 17...f8 18f7+ g8 19b7 wins easily) 18xg7 dxa2 19b7 wins by at least a tempo.

So Black keeps his rook on the eighth rank still hoping to get in his breakthrough ... 17a4

i.e. if 17a7+ d6 18xg7?? b3 would have followed - this is possible only with the rook on the eighth rank.

17...e2
Acquiescing in a rather hopeless exchange, but if 17...b1 White could simply start the plan he later played in the game with 18h4 intending h5, +, h6 etc.

18...b4...a2
19...b7+...f8
20...f7+...g8
21...a7...f8
22...h4!...a1
23...h5 1-0

White threatens 24h6 to free his king i.e. if 23...a2 24h6 gxh6+ (or 24...g1 25hxg7+...g8 26a8+...xg7 27f6 mate!) 25...f6 etc.

And if 23...h6+ 24...g6 a2 25e7+...e8 26...xg7 wins easily.
As a result of the doubled f-pawns Black is effectively a pawn up. These pawns would be okay defensively but cannot be used to make a passed pawn.

A.
In the game Bronstein won extremely easily. He:

a) Seized the distant open file - the b-file;

b) Centralised his king; and

c) Then penetrated the white position using the a-pawn almost as a battering ram - or perhaps a tin opener?

1 $\text{g}1$\text{b}8

2 $\text{d}2\text{g}8$

3 $\text{e}2\text{e}7$

4 $\text{d}3\text{c}5$

5 $\text{c}2\text{d}6$

6 $\text{e}2\text{c}6$\! a5!

Already starting phase 3 of his plan.

7 $\text{c}1$

If 7 a3 a4 and $\text{h}3\text{b}xa3$: or 7 a4 d4 seizing $\text{b}4$ for the rook.

8 $\text{e}2\text{a}3$

9 c4?!

Trying to block the position. But White is already clearly lost.

9 $\text{c}2$

10 $\text{c}2$ g5

White's idea is that if 10 ... $\text{b}2+$ 11 $\text{c}4$ moves $\text{xd}2+$ then the black a-pawn will be weak. But Bronstein simply ignores him, improving his position on the kingside.

B.
But in the initial position after 1 ... $\text{b}8$, I think that White should have created counterplay immediately with:

2 c4! $\text{dxc}4$

3 $\text{c}1$

Now if 3 ... $\text{b}2$ 4 $\text{xc}4$ $\text{xa}2$ 5 $\text{xc}6$ is only a draw so Black play the obvious:

3 $\text{b}4$

4 $\text{c}2$

When Black must choose between:

a) 4 ... $\text{f}8$ 5 $\text{e}2$ $\text{e}7$ 6 $\text{d}2$ $\text{d}6$ 7 $\text{c}3$; and

b) 4 ... $\text{a}4$ 5 $\text{e}2$ $\text{a}3$ (5 ... $\text{f}8$ 6 $\text{e}3$!) 6 $\text{c}1$ $\text{c}3$ 7 $\text{e}2$ $\text{f}8$ 8 $\text{d}3$ $\text{e}7$ 9 $\text{c}4$. In each case Black is much better - I think that I marginally prefer b) for him. But White has reasonable drawing chances.

It is quite wrong for White to sit back and let Black activate his centre without a fight. He should have taken what steps he could immediately before Black could get organised.
Positional Features
We shall look at the following types of advantage:

A. Better pawn structure;
B. Better passed pawns;
C. Active vs Passive pieces.

A. Better pawn structure
Dia 118 brought us nicely on to this matter. As usual, pawns can be weak because they either:

a) are subject to attack and capture;

b) cripple a pawn majority of which they are part.

Dia 118 was a good instance of b) - as were, for instance, diags 75 and 108. In the next few pages we will examine some instances of a).

 Flohr - Vidmar
Nottingham 1936
Although White has a clear advantage due to Black's shattered queenside pawns, Black has quite a solid position elsewhere.

If Black can choose the right moment to "go active" then he will have good drawing chances.

But this is always very difficult and in the game Vidmar allowed Flohr to get a complete stranglehold on the position after which he was demonstrably lost ...

1... $e2 $e7
2 $d3 $d6
3 $a5!

Not 3 $d4? $b8 breaking the blockade at once, e.g. if 4 $a5 c5+ is possible.

3... $a8
4 $d4
White has cemented his advantage by preventing ...c5. At the moment he has no particular threats; but given time he could create play on the kingside with g4, h4 and then e4.

Since White intends to play e4 eventually, Vidmar decides to make this as expensive as possible in terms of pawn exchanges.

4... f5?!  
5 b4 $b8?

This is the first good chance to "go active": 5 ... $c7 6 $c5 $b7 7 $d6 $e8
8 $a3 d4! 9 exd4 $e2 10 $c3
$xc2 11 $xc6 $xb2 12 a4
g5!= (Smyslov and Levenfish).
6 $a3 $a8
6... $b6? would be very bad since the rook would have no pass move and so Black could easily fall into zugzwang. Moreover, on b6 it would be two more moves away from activity - as distinct from one on a8.

7 e4! fxe4
8 fxe4 $e4
9 $xe4 $a7?

This was Black's final chance to "go active": 9 ... $c7 10 $e5 (10 $f4 $f8+! 11 $g3 $b6=) 10... $b6 11 $e7
a5! 12 $xb7 axb4 13 axb4 $a4
14 $g7 $xb4+ 15 $f3 $h4
16 h3 $h6! 17 $g4 c5 18 $g5
$xb4 19 $xb4+ $b5 20 $g7
c4 21 h4 $c8! and the c-pawn gives drawing chances.

10 $f4 (119a)
Black's pawn weaknesses have mutated from one backward pawn and one isolated to two isolated pawns.

Although this would have been very difficult to judge in a game, Black should have gone active either on move 5 or, if he missed that opportu-
Rook v Rook

Schlechter - Rubinstein
San Sebastián 1912

In this much clearer position Rubinstein won exceedingly quickly:

1 ... e6

Forcing the white rook into a passive position.

2 fxe6 fxe6

Now the black king advances.

3 c2 e5

Or 5 d3 d6+, forcing the black king to e4 anyway.

If 12 ... f7 White still plays 13 h5.

13 h5! g5

Or 13 ... gh5+ 14 f7 e5 15 g4 f6 16 f3 e6 etc.

14 g3 f7

Now Black must choose which way to go with his king - but unfortunately both choices lose:

17 e8 e5+ 18 d6

Or if 17 ... f6 18 c7 e5 19 a4 e6 20 e4 e5 21 h6 c7 22 f6 e6 and wins by a tempo; 23 f7 c6 24 a5+ c7 25 f5 wins easily.

11 h4 e6

12 f4 e8

If 12 ... f7 White still plays 13 h5.

13 h5! g5

Or 13 ... gh5+ 14 f7 e5 15 g4 f6 16 f3 e6 etc.

14 g3 f7

5 e4

With his king beautifully centralised Rubinstein now starts to mobilise his pawns. Although White also gets a passed pawn, it cannot be supported by his king and is therefore harmless.

6 h4 g5

5 e4

6 h4 g5

With his king beautifully centralised Rubinstein now starts to mobilise his pawns. Although White also gets a passed pawn, it cannot be supported by his king and is therefore harmless.

7 c3 e4

8 c5 h4

9 g2 g6

10 c4 g3

11 hxg3 hxg3

12 b5 f3

13 a1 bxc5
14 bxc5 a6+!
Cutting the white king off from his passed c-pawn. The g-pawn, however, beautifully supported by king and rook, will quickly cost White his rook, so:

\[0-1\]

Rook v Rook

5 ... \(\text{d}4\)

White was in zugzwang. Obviously \(\text{h}4 \text{g}6\) does not help him. And if 5 \(\text{d}1 \text{c}3+ 6 \text{d}3 \text{d}3+ 7 \text{d}3 \text{a}5\), the pawn ending is an easy win for Black.

5 ... \(\text{d}4\)

Black is now a pawn up and has retained his positional advantage. He won easily: 6 \(\text{d}3 \text{e}4+ 7 \text{d}2 \text{h}4! 8 \text{e}7 \text{h}xg3 9 \text{e}xg7 \text{f}xg3 10 \text{e}xg3 \text{e}5 11 \text{e}e2 \text{c}4 12 \text{g}6 \text{h}4 13 \text{g}3 \text{f}4 14 \text{b}3 \text{c}4 15 \text{d}1 \text{e}4 16 \text{h}4 \text{f}3 17 \text{e}1 \text{f}4 18 \text{h}5 \text{c}1+ 19 \text{f}2 \text{c}2+ 20 \text{e}1 \text{g}3 0-1

\[\]

Chekhover - Budo

USSR 1937

The white pawn on d5 is weak since it is cut off from the rest of White's army. Moreover, Black's c5-pawn in particular is very strong; and his rook is much more active than White's.

Black therefore has a considerable positional advantage. But his position too is not without slight weaknesses and White should have reasonable chances if he can find the right moment to go active.

1 ... \(\text{e}b4\)
Threatening ... \(\text{d}4\text{xd}5\).

2 \(\text{d}2 \text{e}7\)

This is slightly weakening but he must prevent the black king from settling on e5.

4 ... \(\text{f}5\)

This is extremely natural, but also possible is 4 ... \(\text{g}5\) at once fighting for the e5-square.

5 \(\text{g}3 \text{h}5\)

6 \(\text{h}3\)

Alternatively:

a) If 6 \(\text{h}3 \text{g}5\) and:

\[\]

3 \(\text{e}3 \text{f}6\)

4 \(\text{f}4\)

Alternatively:

a1) If 7 \text{f}x\text{g}5 \text{e}x\text{g}5 8 \text{b}3 \text{f}6!

9 \text{e}2 \text{d}4 (9 ... \text{h}4?? if 9 ... \text{a}5

10 \text{e}4) 10 \text{e}6 \text{x}d5 11 \text{a}8 gives reasonable drawing chances.
Rook v Rook

a2) 7 g4+ hxg4+ 8 hxg4+ ♕f6 9 f5! ♕xf4+ 10 ♕g3 ♕e5 (not 10 ... ♕d4? 11 ♕xd4!) 11 ♕h2 ♕b4 12 ♕h7 ♕b7! is now good for Black and reasonably under control;

b) 6 ♕e2?! is interesting and:

b1) 6 ... g5?! 7 ♕e7 gxf4 (7 ... g4+!? 8 ♕xf4 f6) 8 ♕xf7+ ♕xf7 9 gxf4+ ♕xf4 10 b3! a5 11 ♕a7 prevents the creation of two connected passed pawns;

b2) 6 ... ♕f6! 7 b3 (7 ♕d2 g5!) 7 ... ♕d4 8 ♕e8 ♕xd5 9 ♕a8 ♕d2 10 ♕xa7 ♕xb2 is very pleasant for Black.

6 ... a5

He could also play 6 ... g5 at once.

7 f3

This is deplorably passive. Perhaps he should have tried 7 ♕e2 a4 8 ♕e7 (8 bxa4 ♕xa4 9 ♕c7 ♕a3+ 10 ♕e2 ♕xa2+ 11 ♗e3 comes to more or less the same thing) 8 ... axb3 9 axb3 ♕xb3+ 10 ♕d2 (10 ♕f2 ♕d3). But after e.g. 10 ... ♕b2+ 11 ♕e3 (11 ♕f3 ♕d2!) 11 ... f6 White's position is very bad.

7 ... a4

8 bxa4

Maybe he should leave it. But Black's plan in any event will be to force his king to e5.

9 a3 g5!

10 fxg5 ♕xg5

11 ♕e2 ♕f5

12 ♕d2

If 12 ♕e3 ♕e4!? 13 h4 ♕xe3+ 14 ♕xe3 ♕e5 15 g4 (15 a4 f5 wins) 15 ... hxg4 16 ♕a4 c4 17 a5 c3 18 a6 c2 19 ♕d2 g3 20 a7 g2 21 a8♕ ♕f1+ 22 ♕xf1 ♕h5+ and Black must win.

Or 12 ♕f3+ ♕e4 13 ♕xh5 ♕xa3 is hopeless for White.

12 ... ♕e4(122a)

This position is already quite hopeless for White. The connected passed c- and d-pawns will win easily. The game concluded:

13 ♕c2 c4

14 ♕c3 ♕d5

15 ♕f3 ♕c6

16 ♕b2 ♕a7

17 ♕f5 d5

18 ♕h5 ♕c5

19 ♕c2 ♕b3

20 ♕h6+ ♕c5

21 ♕a6 ♕f3

22 ♕h4 ♕xg3

23 ♕h5 ♕h3

24 ♕h6 ♕f6

25 ♕xf6 ♕xa3

26 ♕xf8 ♕h3

27 ♕h8 ♕d4

28 ♕h7 ♕h2+ 0-1 (cf Diag 61a).

Black therefore has a considerable advantage.

1 d5!!

The d-pawn isn't really dangerous for Black and this opens up the rank for the black rook. But maybe this is correct anyway. If White waits then Black would merely centralise his king and win the d-pawn and it seems very hard.
to find a good moment to "go active", e.g. 1 \( \text{Q}f2 \text{Q}f8 2 \text{Q}f3 \text{f}5 3 \text{c}c2?! (3 \text{b}4) 3 ... \text{d}x\text{d}4 4 \text{c}c7 \text{b}4 5 \text{a}x\text{h}7 \) (hoping to profit from the bad position of the black king) 5 ... a5 6 h4 \text{a}x\text{h}4+ 7 \text{f}4 \text{a}x\text{b}2 8 \text{g}5 \text{b}6 and Black wins easily.

1 ... \text{f}8!
2 d6 \text{e}8
3 \text{c}c2

He must abandon the d-pawn, hoping to use the time Black must spend to take it to get some compensating advantage.

3 ... \text{b}4
4 \text{c}c7 \text{a}x\text{b}3
5 \text{c}c7+ \text{f}8?

Presumably in time trouble, Miles repeats moves. 5 ... \text{d}8 was right at once.

6 \text{c}c7?

Better was 6 \text{e}2 \text{d}3 7 \text{e}7! with reasonable drawing chances since if 7 ... \text{b}6?! 8 \text{d}d7! (8 \text{a}x\text{a}7 \text{d}x\text{d}6) 8 ... a5 9 \text{d}d8+! \text{g}7 10 \text{f}2 \text{f}6 11 \text{e}2 \text{d}5 12 d7! and White will force the exchange of his d-pawn for the black b-pawn.

6 ... \text{e}8
7 \text{c}e7+ \text{d}8!

The d6-pawn is now entirely harmless and Black’s queenside pawns can easily carry the day.

8 \text{f}2

Or 8 \text{e}f7 \text{a}x\text{b}2 9 \text{a}x\text{h}7 a5.
8 ... a5!

There is no hurry to take the b-pawn and free the white king.

9 \text{a}x\text{f}7 a4
10 \text{e}x\text{h}7 \text{a}x\text{b}2+
11 \text{e}f3 a3
12 h4

Or 12 \text{g}h8+ \text{d}7 13 \text{a}a8 a2 followed by b5 - b4 - b3 etc.

12 ... \text{b}6!

0-1

White resigned in view of 13 \text{a}h8+ \text{d}7 14 \text{a}a8 \text{a}a6!.

Better Passed Pawns

Keres - Alekhine

AVRO 1938

White is better simply because his pawns are further advanced; and moreover it is his move:

1 \text{c}6! \text{e}7
If 1 ... \text{e}c2 2 b5 \text{e}c5 3 \text{b}4! and the threat of 4 \text{b}6 \text{a}x\text{c}6 5 \text{b}7 is decisive.

A.

The game now continued:

2 b5?

Keres had analysed up to move 7 and decided that Black was in zugzwang, but:

2 ... \text{b}2
3 \text{e}c4 \text{d}8
4 \text{e}c5 g4
5 \text{f}4 \text{b}4+

Rook v Rook
Rook v Rook

wins.
3 b5 c5! 7\3/7\1/
4 b4!
Much the strongest move - though analysis has shown 4 d7+ would also lead to a win.
4 ... d8

Alekhine - Alexander
Margate 1937
This is from another Alekhine game. White’s connected passed pawns are immeasurably stronger in a rook ending than Black’s disconnected ones. On the move, Black would have got some chances with 1 ... g5 intending 2 ... g6. But it was White’s move and he completely squashed Black after:
1 a5! b6
Maybe he could have tried 1 ... h6. But after 2 d4 h3+ 3 f4 h4+ 4 f3! (not 4 f5?? h5+) 4 ... h6 (the a-pawn was hanging) and e.g. 5 g4 or 5 d5, Black’s position is pretty grim all the same.
2 d4 h3+? 4 b4
4 d5
But not 5 e5?? b5+! and in the pawn ending Black wins! (6 xbx a5 bx b5 7 d6 b4 8 d7 b3 9 e5 b2 10 e6+ f6 11 e7 b1 12 e8 b5+ 13 d8 xe8+ 14 xe8 ef6!).
4 ... e6
5 c7+ f5
6 c7+ f8??
7 a7 1-0

Active v passive pieces
The activity of pieces is always an important factor in all chess positions - and one which can sometimes balance or outweigh material considerations. This is especially so in rook endings.

King position
The king is an extremely powerful piece. A big disparity in the effectiveness of the two kings can sometimes outweigh a large material disadvantage.

Capablanca - Tartakower
New York 1924
This is a very famous example. White is a pawn down and his c-pawn is doomed, but the black king is badly cut off on the back rank. Capablanca demonstrated the overwhelming importance of king position with
1 g3! x c 3+
2 x h 4 
Also losing are:
1) If 2 ... c 1 3 h 5! will win (but not 3 g 6? h 1+ 4 g 5 x h 7 5 g x h 7 g 7 6 x f 5 c 5 !) e.g. 3 ... c 5 4 d 7 cxd 4 5 x d 5 d 1 6 g 6 d 3 7 f 6 e 8 8 g 6 d 2 9 g 7 winning;
2) If 2 ... a 5 ? 3 g 6 b 5 4 x b 5 a 4 5 g 5 a 3 6 f 6 wins easily;
3) 2 ... a 6 is a somewhat better attempt - a tempo slower than b), but Black keeps control of c6. However, even after...
Rook v Rook

e.g. 3 g6 (better is 3 d7!) 3 ...
b5 4 axb5 axb5 5 ff7+ g8 6
g5 b4 7 xf5 b3 8 xd5 b2
(8 ... c6 9 f5 b2 10 d8+ gg7 11 f6+! wins) 9 b5 gg7
(9 ... c2 10 f5 wins) 10 xb2
f5 11 f5 xg6 White
must win, for instance, 12
c2 c6 13 b2 is one very
good plan.

3 g6 xf4+
4 g5 e4

Not 4 ... xd5 5 f6 g8 6
d7 and Black is actually
mated.

5 f6!

But not 5 xf5? xd4=.

v

8 g7+! gh8
7 xc7 e8 (126a)

Note how White has avoided
taking this pawn (i.e. on move
5) until he had improved the
position of his rook. Now
Black was threatening to ad-

White is a pawn up but unfor-
tunately the black king is ex-
tremely active and White's
kingside pawns are weak.

1 b7 e8!
2 xa7?

Taking a second pawn. But
now Black's kingside pawns,
supported by the king, will be
overwhelming.

White should have played
instead 2 d2 f3 3 e1 and
now Black can easily force a
"draw" (uncomfortable only
for White) with e.g. 3 ... e8 4
xf7 exf2 5 xa7 xf2 6
xh7 xa2 7 b4 xe3 8
f4+ f3 9 e6=. But per-
haps he can do no better, e.g.
if 3 ... e5 4 e4!? is very ra-
tional, intending to evict the
black king or maybe 4 b3
and if 4 ... e4 5 c4.

2 ... f3
3 a4 xf2
4 a5 g5

Botvinnik - Kopylov
Moscow 1951

White is a pawn up but unfor-
tunately the black king is ex-
tremely active and White's
kingside pawns are weak.

1 b7 e8!
2 xa7?

Taking a second pawn. But
now Black's kingside pawns,
supported by the king, will be
overwhelming.

White should have played
instead 2 d2 f3 3 e1 and
now Black can easily force a
"draw" (uncomfortable only
for White) with e.g. 3 ... e8 4
xf7 exf2 5 xa7 xf2 6
xh7 xa2 7 b4 xe3 8
f4+ f3 9 e6=. But per-
haps he can do no better, e.g.
if 3 ... e5 4 e4!? is very ra-
tional, intending to evict the
black king or maybe 4 b3
and if 4 ... e4 5 c4.

2 ... f3
3 a4 xf2
4 a5 g5

Since White's queenside
pawns are isolated, it takes
many moves to create any se-
rious threat there. As a result,
Black's connected pawns sup-
ported by the king easily
carry the day.

8 xh7

Or 8 b5 (8 b3+ e2! merely loses a tempo) 8 ... e4 9
xf5 xa7 10 xg5 e2 and the e-pawn will cost White his
rook.

8 ... f4
9 xf4 gxf4
10 d1 f3
11 c4

If 11 e1 f8 12 f1 d8! and wins.

11 ... d8+
12 c2 f2 c2
t?

And Botvinnik resigned in
view of the unanwserable
threat of 14 xa7!.

5 a6 xe3
6 b7 e5
7 a7 a8

Since White's queenside
pawns are isolated, it takes
many moves to create any se-
rious threat there. As a result,
Black's connected pawns sup-
ported by the king easily
carry the day.

8 xh7

Or 8 b5 (8 b3+ e2! merely loses a tempo) 8 ... e4 9
xf5 xa7 10 xg5 e2 and the e-pawn will cost White his
rook.

8 ... f4
9 xf4 gxf4
10 d1 f3
11 c4

If 11 e1 f8 12 f1 d8! and wins.

11 ... d8+
12 c2 f2 c2
t?

And Botvinnik resigned in
view of the unanswerable
threat of 14 xa7!.
General activity and rook position

*Lasker - Levenfish*
*Moscow 1925*

White's position looks completely hopeless. The black rook is excellently posted behind the passed pawn, and it would appear that White has absolutely no counterplay to offset the pawn's triumphant advance.

However, White can obtain counterplay - by a pawn breakthrough to create a passed pawn on the kingside after which the king which was previously doing nothing on g7 suddenly becomes active.

1 f5!

In the game Lasker played 1 \( \text{Kf6} \) \( \text{Ke5} \) 2 \( \text{Kd1} \) a4 and only then 3 f5. As a result he lost a vital tempo and with it the game, which ended 3 ... exf5 4 e6 fxe6 5 \( \text{Kxg6} \) f4 6 h5 f3 7 h6 e5 8 \( \text{Kf1} \) a3 9 \( \text{Kxe5}+ \) \( \text{Kc4} \) 10 \( \text{Kf1} \) \( \text{Kb5} \) 11 \( \text{Kb2} \) \( \text{Kd5} \) 12 h5 e5 13 h6 f3 14 h7 \( \text{Kxh7} \) 15 h8(\( \text{K} \)) f2 16 h7=.

Lasker later stated that he "instinctively wanted to avoid the discovered check with \( \text{Kf6} \)". However this does sound a little odd.

1 ... exf5

If 1 ... gxf5? then the h-pawn is already passed.

2 e6 \( \text{fxe6}+ \)
3 \( \text{Kg6} \) \( \text{Kf5} \)
4 \( \text{Kd1} \) f4
5 h5 e5

If 5 ... f3 6 \( \text{Kf1} \) a4 7 \( \text{Kxf3} \) a3 8 \( \text{Kf1} \) a2 9 \( \text{Kd1} \) \( \text{Kc4} \) 10 h6 \( \text{Kb3} \) 11 h7 \( \text{Kb8} \) 12 \( \text{Kd1} \) \( \text{Kb2} \)
13 \( \text{Kc2}+ \) \( \text{Kb3} \) 14 \( \text{Kf1} \) and draws.
6 \( \text{Kd1} \) \( \text{Kc4} \)
Or 6 ... a4 7 \( \text{Kxe5}+ \) \( \text{Kc6} \) 8 \( \text{Kxe4} \) a3 9 \( \text{Kxf4} \) a2 10 \( \text{Kd1} \) a1= 11 \( \text{Kxal} \) \( \text{Kxal} \) 12 h6=.

Not 9 ... \( \text{Kxa8} \) 10 \( \text{Kxa5} \).
10 \( \text{Kxh7} \) f2
11 \( \text{Kf5} \) \( \text{Kd3} \)
12 \( \text{Kd5} \) \( \text{Kf3} \)
13 \( \text{Kf8}+ \) \( \text{Kf3} \)
14 \( \text{Kg8} \) \( \text{Kg2} \)
15 \( \text{Kg8} \) \( \text{Kg2} \)
16 \( \text{Kf8} \) \( \text{Kf3} \)

Spielmann - Rubinstein
*St Petersburg 1909*

This famous position is very difficult. Black has much the better pawn structure with a nice compact position against White's four isolated pawns. On the other hand, the passed a-pawn could become very dangerous.

1 ... \( \text{Kb8} \)!

It would be wrong to look for immediate material gain. After 1 ... \( \text{Kb3} \) 2 \( \text{Kd2} \) \( \text{Kd3} \) a4 \( \text{Kxd4} \) 4 a5 White is certainly not worse. Now, however, White faces a difficult choice.

2 \( \text{Kc3}?! \)

Here the rook is a little passive. It seems that 2 \( \text{Kc2} \) would have been better, viz. 2 ... \( \text{Kd4} \) 3 \( \text{Kf3} \) \( \text{Ke7} \) 4 \( \text{Kf1} \) \( \text{Kg6} \) 5 \( \text{Kxe4} \) g5 (5 ... d5+ 6 \( \text{Kd3} \) \( \text{Kd6} \) 7 \( \text{Kc3} \) \( \text{Kb6} \) 8 \( \text{Kd3} \) \( \text{Kb6} \) 9 \( \text{Kb2+} \) 6 \( \text{Kd1} \) f6 7 \( \text{Kf2} \) f5+ 8 \( \text{Kd1} \) \( \text{Kd5} \) 9 \( \text{Kc3} \) \( \text{Kc4}+ \) 10 \( \text{Kb3} \) \( \text{Kxd4} \) 11 a4 (129a). At last the a-pawn gets going, justifying the placement of the rook behind the passed pawn. White should draw after either:

a) 11 ... \( \text{Kd3} \) + 12 \( \text{Kb4} \) \( \text{Kxd3} \)
Rook v Rook

13 a5 \texttt{h8} 14 a6 \texttt{g4} 15 a7 \texttt{a8} 16 \texttt{b5} \texttt{f3} 17 \texttt{b6}; or
b) 11 ... \texttt{c6} 12 a5 \texttt{b7} 13 a6+ \texttt{a7} 14 \texttt{a5} \texttt{h4} 15 \texttt{d5} \texttt{xf2} 16 \texttt{xd6} \texttt{f3}+ 17 \texttt{c4} \texttt{hx3} 18 \texttt{g6} g4 19 \texttt{b5} \texttt{b3}+ 20 \texttt{a5}. However this
was an immensely hard decision - of course Spielmann
was well aware that rooks should go behind passed
pawns - and one certainly
should not criticise White too
much for it.

4 d5 is an attempt to con-
fuse matters but after 4 ... \texttt{g5!}
(not 4 ... \texttt{f6} 5 \texttt{f3}+; nor 4 ... 
\texttt{f5} 5 \texttt{e3}+ 5 \texttt{g3} \texttt{f6} 6
\texttt{f3}+ \texttt{g6} 7 \texttt{d3} \texttt{f6} Black is
very much in control. And in
any case, White was clearly
aiming for diag 129b.

4 ... \texttt{e6}
5 \texttt{f3} \texttt{d5}
6 \texttt{e2}? (129b)

A serious mistake, allowing
Black to set up a very strong
kingside pawn chain; and fix
the h-pawn on a vulnerable
square. Instead he ought to
have blockaded Black's kingside
pawns with 6 \texttt{h4}.

6 ... \texttt{g5!}

Of course not 6 ... \texttt{xd4}? 7
\texttt{e3} \texttt{xd3}+ 8 \texttt{xd3} and the
outside passed pawn guaran-
tees at least a draw.

7 \texttt{h3} \texttt{f6}!

If 7 ... \texttt{xd4} 8 \texttt{d3} or con-
ceivably 8 \texttt{f5}+; or 7 ...
\texttt{xd4} 8 \texttt{b7} \texttt{f6}! (8 ... \texttt{xa3} 9
\texttt{xf7} \texttt{hx3} 10 \texttt{g7} is easier
for White) 9 \texttt{g7} \texttt{xa3} 10
\texttt{h4}! \texttt{gxh4} 11 \texttt{g4}+ with
excellent drawing chances.

8 \texttt{e3} \texttt{c4}
9 \texttt{d3}

If 9 \texttt{b7} \texttt{xa3}+ 10 \texttt{e4}
d5+ 11 \texttt{f5} \texttt{h3} 12 \texttt{g5} \texttt{f3}+ and wins.

9 ... \texttt{d5}

Now, after systematically
strengthening his position
and, most important of all,
improving the position of his
king, Black is ready for this
advance.

10 \texttt{e2} \texttt{e7}
11 \texttt{e2} \texttt{a7}
12 \texttt{e2} \texttt{e7}?(129c)

White is now in zugzwang.

If:

a) 13 \texttt{e3}? \texttt{xe3} 14 \texttt{fxe3}
f5+!;

b) 13 \texttt{e2}?! \texttt{e2}+ 14 \texttt{e2}
\texttt{xd2}+ 15 \texttt{h2} \texttt{b3};

(c) 13 \texttt{f3}? \texttt{a7} 14 \texttt{e2} \texttt{a8} 15
\texttt{e2} \texttt{b8}. He must therefore
choose between:

d) 13 \texttt{a4} and the game
continuation. At first sight, 13
\texttt{a4} has little point. However, I
now believe it may, in fact, be
the best:

d1) If 13 ... \texttt{a7} 14 \texttt{a3} and:

d11) If 14 ... \texttt{xd4} White is
a tempo up on the game and
can play the very useful 15
\texttt{a5};

12) 14 ... \texttt{a5}? blockades
the pawn but allows 15 \texttt{e3}
and if 15 ... \texttt{b4} 16 \texttt{a1} \texttt{a4}
17 \texttt{b1}+ is very annoying;

13) 14 ... \texttt{b4} is natural but
after 15 \texttt{c3}! in return for the
a-pawn White is able to cut
the black king off on the b-
file: 15 ... \texttt{xa4} 16 \texttt{c5} \texttt{a5} 17
\texttt{c7} \texttt{a2}+ and both 18 \texttt{e1}!
\texttt{a3} 19 \texttt{c5} \texttt{hx3} 20 \texttt{f5d}
\texttt{c4} 21 \texttt{d7}; and 18 \texttt{e3}?
\texttt{a3}+ 19 \texttt{d2} \texttt{f3} 20 \texttt{e2}
\texttt{c3} 21 \texttt{e7} \texttt{c4} 22 \texttt{g6}
looks adequate to draw;

12) 13 ... \texttt{b4} is also
possible at once but White can
play 14 \texttt{c3} (also 14 \texttt{a5}?) at
once, 14 ... ♗xa5 15 ♗c3) and
if 14 ... ♗e4 15 a5! ♗xd4+ 16 ♗d3 Black must try 16 ... ♗f4
17 ♗e2 since the pawn ending
after 16 ... ♗xd3+ 17 ♗xd3 is
drawn, viz. 17 ... ♗xa5 18 ♗d4 ♗b4 19 ♗xd5 ♗c3 20 ♗e6 ♗d3 21 ♗f7 ♗e2 22 ♗xg7 ♗xf2 23 ♗xf6 ♗g3 24 ♗xg5 ♗xh3.

13 ♗c3+!? ♗xd4
14 a4 ♗a7
15 ♗a3 ♗a5
16 ♗a1 ♗c4
17 ♗e3?!

Smyslov and Levenfish
claim that this is the decisive
mistake. Certainly, after it
White is lost. But the
alternative of offering the a­
pawn to misplace the Black
king may also be insufficient.

17 ♗c1+!? ♗b4 18 ♗bl+ (not
18 ♗c7 ♗xa4 19 ♗xg7 ♗c5 20 ♗f7 ♗f4 and Black is back in
control) 18 ... ♗xa4 (if 18 ...
 ♗a3 19 ♗b7 ♗xa4 20 ♗xg7
 ♗f4 21 ♗e2 ♗b3 22 ♗c7!) 19 ♗d3 ♗c5 and now if:
a) 20 ♗b7 ♗c4 21 ♗xg7
 ♗b5 22 ♗e3 ♗e4+ (22 ...
 ♗c5 23 ♗e7+ ♗d6 24 ♗xc4
dxc4 25 ♗d4) 23 ♗d3 ♗c5
should be winning;
b) So Smyslov and
Levenfish proposed 20 ♗d4
 ♗c2 21 ♗b7 ♗xf2 22 ♗xg7
but Kasparov has continued
this analysis: 22 ... ♗d2+ 23
 ♗c5 ♗b3 24 ♗g6 ♗c3 25
 ♗xf6 d4 with a winning
position.

17 ... d4+!
18 ♗d2
If 18 ♗e4 ♗e5+ 19 ♗f3 d3
20 a5 d2 21 a6 ♗e1.
18 ... ♗f5
19 ♗e1 ♗b4
20 ♗e2 ♗a5
21 ♗a3 ♗f4
22 ♗a2 ♗h4!
23 ♗d3

Or 23 ♗a3 ♗b4. Note how
Black's extremely solid struc­
ture on the kingside allows
him to play there with just a
rook and the king far distant.
That is one of the advantages
of a good pawn structure: if
Black's kingside pawns had
been at all weak, White could
easily have liquidated to a
draw. A further point is that
this adamantine solidity is due
in no small measure to his
getting in ... g5 - see the note
to 6 ♗e2?.

23 ... ♗xh3+
24 ♗xd4 ♗h4+
25 ♗d3 ♗xa4(129d)

Now it only remains for the
black king to work its way
back to the kingside. Rubin­
stein won quite easily.

26 ♗e2

Or 26 ♗e2 ♗b6.

26 ... ♗f4
27 ♗e3 ♗b6
28 ♗e2 ♗b7
29 ♗c1 ♗a4
30 ♗h1 ♗c6
31 ♗h7 ♗a7
32 ♗e4 ♗d6
33 ♗f5 ♗c6+
34 ♗xg6 ♗xh7
35 ♗xh7 ♗e5
36 ♗g6 g4
0-1
Two Rooks v Two Rooks

Although double rook endings have many similarities with single rook endings and of course usually transpose into them sooner or later there are certain distinct differences.

Extra Fire Power
A rook by itself can’t usually checkmate the enemy king unless heavily supported. In single rook endings, therefore, one requires either rook and king or rook and several pawns or some freak accident in order to create serious mating threats. However, two rooks are an extremely powerful force. Mating attacks therefore play a very important part in double rook endings and bad positions can be saved by perpetual check more frequently than in single rook endings.

“Small Advantages”
With so much power on the board it is very difficult to identify and classify generic positions, e.g. 2\( \mathcal{R} \) + P v 2\( \mathcal{R} \) in the same way as in simpler endings since so much depends on the exact placement of the pieces. However, one can make the general observation that:

A small advantage, e.g. an extra pawn on one side of the board, is much more likely to be exploitable with two pairs of rooks on than in a single rook ending.

The reason for this is that the extra pawn should provide cover for the king which is at a premium - but which is not so important in single rook endings. Moreover, weak pawns are relatively more vulnerable with the extra material.

**Underlying Tactical Ideas**

<table>
<thead>
<tr>
<th>RR</th>
<th>1</th>
<th>Mating Attack</th>
</tr>
</thead>
<tbody>
<tr>
<td>[</td>
<td>[</td>
<td>Rinck 1921</td>
</tr>
<tr>
<td>[</td>
<td>[</td>
<td>Although there are no pawns left, White to move has a mating attack. Henri Rinck produced dozens of studies with this material balance. Even if not very game-like, they do illustrate the vast power of two rooks working together.</td>
</tr>
<tr>
<td>[</td>
<td>[</td>
<td>1 ( \mathcal{R}d6 + \mathcal{Q}f7 )</td>
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</tbody>
</table>

| Or 1 \( \mathcal{Q}g5 \) 2 \( \mathcal{R}a5+ \mathcal{Q}h4 \) 3 \( \mathcal{Q}h6 \) mate. |
| 2 \( \mathcal{R}a7+ \mathcal{Q}e8 \) |
| 3 \( \mathcal{R}h6 \mathcal{Q}c3+ \) |
| Or 3 \( \mathcal{Q}b3+4 \mathcal{Q}e4 \mathcal{Q}e2+ \) |
| 5 \( \mathcal{Q}d4 \mathcal{Q}d2+6 \mathcal{Q}c4 \mathcal{Q}f3 \) 7 \( \mathcal{Q}h8+\mathcal{Q}f8 \) 8 \( \mathcal{R}a8+\) |
| 4 \( \mathcal{Q}e2 \mathcal{B}b2+ \) |
| 5 \( \mathcal{Q}d1 \mathcal{Q}d3+ \) |
| 6 \( \mathcal{Q}c1 \mathcal{Q}f2 \) |
| 7 \( \mathcal{Q}h8+ \mathcal{Q}f8 \) |
| 8 \( \mathcal{R}a8+\) and wins |

<table>
<thead>
<tr>
<th>RR</th>
<th>2</th>
<th>Sahovic - Korchnoi</th>
</tr>
</thead>
<tbody>
<tr>
<td>[</td>
<td>[</td>
<td>Biel 1979</td>
</tr>
<tr>
<td>[</td>
<td>[</td>
<td>Although Black is obviously much better White seems still to be fighting. But Korchnoi wins at once with a beautiful mating attack:</td>
</tr>
<tr>
<td>[</td>
<td>[</td>
<td>1 ... ( \mathcal{Q}h5+! ) 2 ( \mathcal{Q}xh5 \mathcal{Q}d8! ) 3 hgx5+</td>
</tr>
<tr>
<td>[</td>
<td>[</td>
<td>Or if 3 ( \mathcal{Q}g4 ) gxh4! is similarly quite disastrous, e.g. 4</td>
</tr>
</tbody>
</table>

| \( \mathcal{Q}c2 \mathcal{Q}g8+5 \mathcal{Q}h5 \mathcal{Q}g5+6 \) |
| \( \mathcal{xh4} \) (or 6 \( \mathcal{Q}h6 \mathcal{Q}f5! ) 6 ... |
| \( \mathcal{Q}f5 \) 7 \( \mathcal{Q}h2 \mathcal{Q}g8! ; \) or 4 \( \mathcal{Q}h2 \mathcal{Q}g8+5 \mathcal{Q}h5 \mathcal{Q}f5+6 \) \( \mathcal{xh4} \) |
| \( \mathcal{Q}h8+7 \mathcal{Q}g3 \mathcal{Q}g5+, \) |
| 3 ... \( \mathcal{Q}f5 \) |
| 4 \( \mathcal{Q}h6 \mathcal{Q}h3+ \) |
| 5 \( \mathcal{Q}g7 \mathcal{Q}d7+ \) |
| 6 \( \mathcal{Q}g8 \mathcal{Q}g6 \) |
| 7 \( \mathcal{Q}f2 \mathcal{Q}g7+ \) |
| 8 \( \mathcal{Q}f8 \mathcal{Q}h8 \) mate |

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Two Rooks v Two Rooks

Doubled Rooks on the Seventh Rank
These are one of a chessplayer's dreams. But to be operative they must clear the rank of protectable pawns.

J. Speelman 1984
Although it is Black to move in diag 3 he is in terrible trouble since he can't challenge White's absolute control of the seventh rank. Perhaps the best he can do is to evacuate his pawns, e.g.

1 ... h6!
2 dd7 g5

Now White's best seems to be:

3 h5!
3 ... f5!?
4 g7+ h8
5 h7+ g8
6 ag7+ not 6 xh6? cl+! 7 g2

Diagram 3a

However if the black f-pawn is on f7 then even with the move after 1 dd7 f8 White has no advantage whatsoever. With the seventh rank closed the doubled rooks are only beating the air.

A plausible alternative to 1 cl+ is:

1 dd4

Now, e.g. 1 ... h5 is quite equal, but not

1 ... cl+?
If he must double rooks then better is 1 cl+ 2 g2 cc2 but 3 f4 f5 is still not nice for Black.

2 f4!

Here the rook is perfectly placed; it both defends the white f-pawn and attacks the enemy one.

In general the only way to play against two rooks on the seventh rank is to protect one of the pawns in their path. And it is almost always best to do this actively with the rook in front of the pawn aiming down the board at the enemy position.

Now Black is forced into the abject:

2 f5!

But he does seem just about to survive since if 3 d4 d2! 4 c4 (either)c2 etc. Or if 3 h5 a2! (chasing the rook on the seventh rank) 4 b7 (either)b2.

Diagram 3b
If Black's kingside pawns are f7, g7, h6, then any sensible move will draw easily, e.g. 1 h5. But not

1 h5??
2 d8+! h7
3 xf7

White has managed to protect the f-pawns from the front and has tremendous winning chances.
Two Rooks v Two Rooks

Miles - Timman
Linares 1983

1 d4!
An excellent move returning the extra pawn to make his control of the seventh rank absolute.

2 �xa8 §xa8
3 §xd4 §b8
4 §d1 §bb2
Although Black has a great advantage his winning chances are reduced by the shattered state of his kingside pawns. In the play which follows White attempts and finally succeeds in jettisoning a pawn or two in order to exchange off one pair of rooks.

5 §h5
5 §c3 was an alternative intending to put that rook on f3 and thus activate the one on d1.

5 ... §a2
6 §f1 §g7?
But not 6 ... §xa3? 7 §f2 and White has got off lightly.

7 §f3
White would like to maintain his rook on h5 with 7 f5, but then 7 ... §xa3!! is much stronger since 8 §f2 §xf2 9 §xf2 §a4! leaves the h5-rook stranded.

7 ... §g2+
8 §h1 §g6
9 §a5
Not 9 §h4? f5!

9 ... §hxh2+
10 §g1 §hxh2+
11 §f1 §gb2
12 §e3
If 12 §gl? f5! when if 13 §xa7? §h5 14 §xf7 §g4 and wins.

12 ... §f2+
13 §gl §fc2
14 §f1 §h2
15 §gl (4a)

This critical position occurred just after adjournment (move 43). Here Timman decided to cash in on his positional advantage for material gain with 15 ... §hc2 16 §f1 §cl1+ 17 §e1 §c3 18 §e2 §xa3 (If 18 ... §f3+ 19 §g2) 19 §xa3 §xa3 20 §g2. Although Black is much better this position is defensible. Miles fought his way to §f+h and drew on move 105.

Instead Black should perhaps have played:
15 ... §hg2+!?

Now White would like to play 16 §f1. However: 16 ... §af2+ 17 §e1 §h2!! and there is no defence to the threat of 18 ... §a2 followed by execution with either ... §a1+ or ... §h1+.

Therefore White would have had to answer 15 ... §hg2+ with:
16 §h1! §gb2
17 §e1

However, even with White in this state of abject passivity there is nothing absolutely clear for Black, e.g.

a) 17 ... §h2+ 18 §g1 §hg2+ 19 §h1 §xg3 20 §g1;

b) 17 ... §h2+ 18 §g1 §ag2+ 19 §f1 §f2+ (19 ... §xg3??) 20 §g1 §hg2+ 21 §h1 §xg3 22 §g1 §xg1+ 23 §xg1 §xf2 24 §a7;

c) 17 ... f5 18 §xa7 §h5 19 §xf7 §h2+ 20 §g1 §ag2+ 21 §f1 §g4 22 §h1 h5 23 §h7;

d) 17 ... h5 18 §a7 §f5 19 §ae7 (19 §xf7? §g4 20 §h7 §h2+ 21 §g1 §ag2+ 22 §f1 §f3) 19 ... §g4 20 §h7 §h2+ 21 §g1 §h3 22 g4+1.
Fixing the weakness.

6 $\text{f}6 $\text{h}6
7 $\text{e}1

White must prepare to defend the h-pawn with the horrible $\text{e}1$.

7 ... $\text{d}8+$
8 $\text{e}5 $\text{d}4
9 $\text{h}1 $\text{g}6$?

In her opponent's time trouble Gaprindashvili misses a trick: 9 ... $\text{g}6$ won at once since the threat $9 ... $\text{g}7$ and ... $\text{e}4$ mate wins the h-pawn for nothing.

10 $\text{g}3! $\text{e}4+$
11 $\text{d}5 $\text{f}5
12 $\text{h}3$

If 12 $\text{x}g4?! $\text{h}xg4$ or 12 $\text{f}3+$ $\text{e}f4$ 13 $\text{xf}4+$ $\text{xf}4$ the endings are lost - the latter has more chances. But perhaps she should have tried that anyway since the double rook ending is obviously hopeless.

12 ... $\text{a}4$
13 $\text{f}3+ $\text{g}6
14 $\text{f}h3 $\text{h}6
15 $\text{e}5$

Or 15 $\text{e}5 $\text{a}5+! 16 $\text{b}6 $\text{f}5$ intending ... $\text{g}6+$ and ... $\text{f}7+$ etc, but still she should have tried that.

15 ... $\text{a}4$

Reforming the mating net she let slip on move 9.

16 $\text{e}6 $\text{g}6

Of course 16 ... $\text{g}6$ had the same effect.

0-1

In view of 17 $\text{e}7 $\text{e}4+$ 18 $\text{f}8 $\text{d}8$ mate.

---

Endings with Limited Material

Ivanka - Gaprindashvili
Thessaloniki Ol 1984

If we removed any pair of (opposite coloured) rooks then this ending would be dead drawn. But here Black has the huge additional advantage that whereas her king is quite safe the white one is in mortal danger.

1 ... $\text{e}8$!

2 $\text{h}4$

If 2 $\text{g}3 $\text{f}1+ 3 $\text{g}4 $\text{e}4+$
4 $\text{h}5 $\text{f}3! 5 $\text{xf}3$ - there's nothing better - 5 ... $\text{g}6$ mate!

Or 2 $\text{f}3 $g5+! 3 $\text{f}5 $\text{f}8+$
4 $\text{e}4 $\text{e}1+ 5 $\text{e}3 $\text{e}8+$ wins a rook.

Or 2 $\text{cc}3 $\text{f}8+ 3 $\text{e}4$
$\text{g}6$ 4 $\text{f}3 $\text{h}6+ 5 $\text{d}5 $\text{e}8$ and with the white king cut off so far from the kingside, Black is winning easily.

2 ... $\text{f}8+$
3 $\text{e}5 $\text{g}4
4 $\text{h}3$

Horrible but forced since if

4 $\text{h}5 $\text{g}5+ 5 $\text{d}4 $\text{f}4+ 6 $\text{e}3 $\text{xc}5 7 $\text{xf}4 $\text{hx}5$ etc.
4 ... $\text{e}8+$
5 $\text{d}5$?!

Obviously if 5 $\text{f}5$ it gets mated. But 5 $\text{d}6$ is better and if 5 ... $\text{g}6+$ 6 $\text{d}5$! (not 6 $\text{d}7 $\text{a}8$ and ... $\text{h}6$ with a mating threat) when 6 ... $\text{h}5$ is less good than with the rook on $g4$.

5 ... $\text{h}5!$
Petrosian - Larsen
Biel IZ 1976

Much the same comments apply (with colours reversed) as to diag 5. An 'easy draw' suddenly becomes quite untenable because of the extra pair of rooks.

1 ... \text{f6}+ \text{g7} 2 \text{w7}\\

Here Petrosian in Informator indicates that White is actually winning. The immediate threat is 3 \text{de8} followed by either 4 \text{h5}+ 5 \text{h6}+ or first 4 \text{h5}.

2 ... \text{f7}\\

Defending against the threat since if now 3 \text{de8} \text{g7}.

3 ... \text{h8}+ \text{g7}\\

Of course if 3 ... \text{g6}? 4 \text{h5}+ and mate next move.

3 ... \text{f6} is a possible alternative but simply 4 \text{f5}+ \text{e7} 5 \text{h5} is very strong, e.g. 5 ... \text{g2} (if 5 ... \text{b3} 6 \text{g4} \text{a3} 7 \text{g5}! \text{fxg5} 8 \text{d6} wins; or 5 ... \text{b4} 6 \text{d8}+ \text{f8} moves 7 \text{e3}) 6 \text{d8}+ 1 (6 \text{g4} \text{b4} is a bit problematical) 6 ... \text{d6} 7 \text{e3} and Black's kingside disintegrates in a few moves.

4 ... \text{f5} 5 \text{g2}\\

White was threatening 6 \text{d6} and 7 \text{d8}. Note that if 5 ... \text{d7} 6 \text{e8}+! \text{e7} 7 \text{xh7+} \text{d8} 8 \text{e7} wins.

4 ... \text{g6} 5 \text{d6+} \text{d6}\\

6 ... \text{xg5} 6 \text{e5}+ \text{g5} 7 \text{h5} \text{fxg5} 8 \text{e5+} \text{g4} 9 \text{g3} 1-0

Inkiov - Alburt
Thessaloniki Ol 1984

White decided to eliminate some pawns with:

1 g4?!\\

But in retrospect he felt that 1 \text{e3} was better.

2 ... \text{e3} 3 \text{f5} 4 \text{e4} 5 \text{h4}!\\

The f-pawn can be surrounded later. This is much better than 2 ... \text{gxf5} when White could draw quite easily.

3 ... \text{h6} 4 ... \text{g5}+ \text{h4}\\

Having embarked on simplification he must continue before Black can consolidate on the kingside.

5 ... \text{b5}\\

Taking control of the fifth rank - but 5 ... \text{h6} seems more natural to help the g-pawn, e.g. 6 \text{xg5+} \text{xg5} 7 \text{c5} a4 8 \text{d2} \text{b4}! (not 8 ... a3 9 \text{h1} with counterplay) when if 9 \text{h1} \text{h4}. Nevertheless Inkiov, who should know, gives 5 ... \text{e7} an ! in Informator.\n
6 ... \text{e5} 7 \text{c7} 8 ... \text{g7+} \text{h6} 9 f6 \text{f5} \text{e7} 10 ... \text{xf6} 11 \text{b7} 12 ... \text{f6}\\

A very unusual "theoretical position". White has drawing chances because he can sometimes exchange a pair of rooks getting to \text{v v} + two pawns cf diags R40-41.

11 ... \text{f4}?!\n
He should have shifted the enemy rook at once with 11 ... \text{g6}+! and 12 ... \text{g5}.

12 ... \text{h2}\\

Of course not 12 \text{e5}! \text{g6}+ 13 \text{h2} \text{h4} mate.

12 ... \text{a4} 13 ... \text{a3}\n
Black's problem now is that
Two Rooks v Two Rooks

if he brings the f4-rook to the fifth rank, e.g. 13 ... Ag4 14 Ac5 Ag5 then simply attacking the a-pawn with 15 Ac4 will force either repetition with 15 ... Ag4 or the silly 15 ... Aa5. That's why he should have shifted the white rook in diag 7a - before White was organised. Now he has to transfer the a6-rook to White's fourth rank. But White has time to construct a watertight defence.

13 ... Ag6
14 Aa5 Ah4+
15 Ac3 Ag4
16 Aa6+ Kg5

This position which is outside the present domain (double rook endgames) is just drawable, cf diag R21. The game ended 21 ... Ad6 22 Bh3 Ag1 23 Aa5 Aa1 24 Kg2 Bc6 25 Af5! Adl (25 ... Aa3 26 Hf3l) 26 Aa5 Ad4 27 Hf3 Bb6 28 Aa8 Bb5 29 He2 Bb4 30 Ab8+ Cc3 31 Ac8+ Bb2 (31 ... Ac4 32 Hx4!!) 32 Ab8+ Aa2 33 Aa1 Kh2

Bolbochan - Markeluk
Israel 1981

White is a pawn up and has an excellent rook on d7 but the rest of his pawns are rather scattered. One feels that Black ought to have reasonable drawing chances though it will certainly be difficult for him. In the game he started a barrage of checks which only succeeded in driving the white king into a better position.

1 ... Ac2+

I suspect that 1 ... Ab8 at once would be better since White's men are hard to coordinate even given time.

2 Aa5 Aa2+
3 Aa5 Ag5+

If 3 ... Axh7 4 Axf6 Ad6+ 5 Ag5 (5 Ag6??) the ending is just winning for White, viz. 5 ... Ab6 6 Aa7 Ac6 7 Aa4 Ad6 8 a5 9 a6 (not 9 Aa7 Aa6 10 Aa6 Cxa5+ 11 Axb7 Aa1! 12 f5 Ag1+ 13 Aa6 Ag8=!) 9 ... Aa6 10 Ac6 Ac6 11 Aa8+ Aa7 12 a7 Aa6 (12 ... Aa5 13 Ac8+!) 13 Ac8 Aa5 14 f5! Axf5 15 Af8+ and wins.

4 Ac6 Aa2+
5 Ac4 Ac2+
6 Aa7 Aa2+
7 Ac4 Aa2+
8 Ac7 Aa2+
9 Ab4 Aa2+
10 Ac6 Aa2+
11 Ac7 Aa2+
12 Ac8 Aa2+
13 Ac9 Aa2+

This is the point of White's 11th move deflecting the Black rook from the b-file.

13 ... Aa5+

Obviously now totally forced.

14 Axh5 Aa5+
15 Aa7 Aa5+

And White is winning. The
Two Rooks v Two Rooks

Further examples

Christiansen - Larsen
Lone Pine 1977

Although White is a pawn down he has reasonable drawing chances. One of his rooks (on b7) is extremely active and Black's pawns are fairly scattered.

1 ℄e1
White plans to tie down one black rook with 2 ℄e7 and then go after the enemy pawns, but Larsen found an excellent riposte.

1 ... h4!
Now if 2 ℄e7 h3 is very uncomfortable so:

2 ℄g2
If 2 gxh4 ℄a4 3 ℄e7 ℄f4 is very pleasant for Black. As mentioned before, cf diag 3b, the ideal way to defend against doubled rooks on the seventh rank is with a pawn blocking the rank defended by a rook in front of it.

2 ... ℄e8!
So that now if 3 ℄e7? h3+ 4 ℄f3? (Or 4 ℄fxh3 ℄xf2) 4 ℄xc3+ 5 ℄g4 ℄xf2 and Black still manages to defend the f-pawn with an active rook.

3 gxh4??
Acceding to his opponent's wishes - perhaps he could have tried instead 3 ℄e3 (threat 4 ℄f3) 3 ... h3+ 4 ℄f3 since the h-pawn might be surrounded later. But that would be very sharp and it is understandable that he preferred 'damage limitation' to an unknown degree of danger.

3 ... ℄a4
4 ℄e7 ℄f4
Reaching the ideal position - Black now has a permanent advantage and good winning chances.

5 ℄g3 ℄f5
6 ℄e3
Not 6 ℄e7?? ℄xc3 7 ℄xc7 ℄c5.

6 ... ℄c5
It is somewhat of a pity to move the rook now that it has got to f5 but this way he wins a pawn or forces White into terrible passivity. Normally one would try to activate the other rook as well but that seems difficult here, e.g. 6 ... ℄a8 7 ℄f4 a4? (7 ... ℄c8! forces repetition with 8 ℄e3 etc.) 8 ℄a7 ℄a5 9 ℄ab7 ℄f5 10 ℄a7! etc.

7 ℄f4! ℄xc3+
8 ℄f3 ℄f8
9 ℄e7 ℄e5
10 ℄ed7 ℄ed5
11 ℄f4 (Q, K, )

So Black has remained a pawn up but at the cost of one passive rook.

11 ... g6
12 h5!
White offers another pawn to clarify matters. If 12 ... gxh5? Black would be badly
discoordinated and 13 \( \text{e}4 \text{e}5+ \text{f}4 \) wins a pawn back at once, so naturally he played:

12 ... \( \text{f}xh5! \)

The only question was whether White needed to sacrifice the h-pawn at all. If he had just waited, Black would probably have had to play ... \( \text{f}f5 \) to free his other rook - but maybe he could activate his king instead? This is another case of 'damage limitation' as at move 3. Christiansen shows he prefers to keep things clear (if unpleasant) rather than giving his opponent unknown scope.

13 \( \text{a}x\text{d}6 \text{f}5+ \)
14 \( \text{g}4 \text{b}8 \)
15 \( \text{d}4 \text{b}1 \)
16 \( \text{f}4 \text{g}1+ \)
17 \( \text{f}3 \text{a}1 \)
18 \( \text{g}3 \text{g}7 \)
19 \( \text{e}4 \text{a}3+ \)
20 \( \text{g}4 \text{f}6 \)

It turns out that Black can do nothing whilst keeping the position, i.e. he can't defend both the a- and f-pawns and activate both rooks simultaneously. Therefore he plans to exchange the a-pawn for White's f-pawn reaching a position which would be drawn in a single rook ending but contains many chances in a double rook ending ... It takes another dozen moves to carry out this plan:

21 \( \text{d}4 \text{h}6 \)
22 \( \text{c}4 \text{f}5 \)
23 \( \text{a}8 \text{a}2 \)
24 \( \text{h}3 \text{a}1 \)
25 \( \text{d}4 \text{g}7 \)
26 \( \text{a}7 \text{h}6 \)
27 \( \text{a}8 \)

Not 27 \( \text{d}d7?? \text{a}4 \) 28 \( \text{xf}7 \text{axf}4+! \).

27 ... \( \text{b}5 \)
28 \( \text{d}3 \text{a}4 \)
29 \( \text{a}7 \text{g}7 \)
30 \( \text{d}d7 \text{f}5 \)
31 \( \text{d}4 \text{a}3 \)
32 \( \text{d}a4 \text{f}1 \)
33 \( \text{a}x\text{a}3 \text{f}x\text{f}4+ \)

So we reach a 'theoretical position' (diag 9a) where Black has very reasonable winning chances.

34 \( \text{g}3 \text{h}6 \)
35 \( \text{a}4 \text{f}5 \)
36 \( \text{d}3 \)

If 36 \( \text{a}5 \text{g}1+ ! \) 37 \( \text{h}2 \text{f}1 \) Black manages to keep all the rooks on the board.

36 ... \( \text{g}1+ \)
37 \( \text{h}2 \text{b}1 \)
38 \( \text{d}2?! \)

Surrendering the third rank after which his h-pawn becomes very weak, e.g. 38 \( \text{ad}4 \) looks better.

38 ... \( \text{b}3 \)
39 \( \text{h}4+ \text{g}7 \)
40 \( \text{g}2 \text{f}f3 \)
41 \( \text{h}2 \text{a}3 \)
42 \( \text{g}2 \text{f}b3 \)
43 \( \text{e}2 \text{g}5 \)

After improving the positions of both of his rooks, Larsen now starts his attack. White's position is now extremely critical.

44 \( \text{g}2 \text{f}6 \)
45 \( \text{h}5 \text{b}8 \)
46 \( \text{h}4 \text{b}1 \)
47 \( \text{c}4 \text{b}b3 \)
48 \( \text{h}4 \)

Not 48 \( \text{h}4? \) \( \text{h}3+ 49 \text{g}1 \text{a}1+ 50 \text{f}2 \text{a}2+ 51 \text{g}1 \text{xg}2+ 52 \text{g}2 \text{h}4. \)

48 ... \( \text{c}3 \)
49 \( \text{h}5 \text{c}4 (9b) \)
50 \( \text{h}4! \)

This is totally forced. Black was threatening 50 ... \( \text{a}8 \) and 51 ... \( \text{g}6 \) winning the rook. And if 50 \( \text{g}4 \) \( \text{c}2+ 51 \text{g}2 \)
Two Rooks v Two Rooks

70 ... $\text{h6}$?

Completely natural but he missed a trick. As Benko pointed out 70 ... $\text{ff}2!$ would keep control after which Black could improve his king and kingside pawns with a won game. The main point is that after 70 ... $\text{ff}2$ 71 $\text{ff}1$, allows mate in three. Now, however Christiansen found:

71 $\text{ff}1!!$ $\text{a}a3$

72 $\text{ff}5!$

Now if 72 ... $\text{xf}1+$ 73 $\text{xf}1$ $\text{ff}3+$ 74 $\text{xf}3$ $\text{gg}3$ 75 $\text{ff}2$ $\text{eh}5$ 76 $\text{ff}1$ $\text{gg}5$ 77 $\text{gg}3=\text{e}$. Exchanging just one pair of rooks is obviously no good so Black had to try:

72 ... $\text{g}3+$

73 $\text{ff}2$ $\text{gg}7$?

With this (actually his 102nd move) he throws away everything. Black had to play 73 ... $\text{f}h3+$ 74 $\text{gf}2$ $\text{ag}3+$ 75 $\text{ff}2$ $\text{ff}3+$ 76 $\text{ef}1$ (not 76 $\text{ff}2$ $\text{eg}3+$ 77 $\text{gh}2$ $\text{xf}1$ 78 $\text{xf}1$ $\text{eh}3+$ 79 $\text{gg}2$ $\text{gg}3+$ and wins) 76 ... $\text{eg}3+$. But it seems that both 77 $\text{dd}2$ and 77 $\text{ff}2$ draw anyway, e.g. 77 $\text{g}6? \text{h}3+ 78 \text{gg}2$ $\text{ag}3+$ 79 $\text{gg}1$! (but not 79 $\text{gg}2? \text{eg}2+ 80 \text{gh}1$ $\text{eh}3+$ 81 $\text{gg}1$ $\text{ag}3+$ 82 $\text{gh}1$ $\text{gg}2!$) and Black can't make any progress. Hence the decisive error was probably 70 ...

74 $\text{h}6+$

Obviously Larsen had overlooked this, seeing only 74 $\text{xf}6?? \text{h}3+ 75 \text{gg}2$ $\text{ag}3+$ 76 $\text{ff}2$ $\text{xf}6$.

74 ... $\text{h}7$

75 $\text{xf}6$ $\text{h}3+$

76 $\text{gg}2$ $\text{eg}3+$

77 $\text{ff}2$ $\text{a}3$

78 $\text{gg}2$ $\text{h}4$=...
# Rook v Knight

## Without Pawns

<table>
<thead>
<tr>
<th>Move</th>
<th>White</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>$\text{R}f6$</td>
<td>$\text{K}h7+$</td>
</tr>
<tr>
<td>2.</td>
<td>$\text{R}g6$</td>
<td>$\text{K}f8+$</td>
</tr>
<tr>
<td>3.</td>
<td>$\text{R}h7$</td>
<td>$\text{K}h8$</td>
</tr>
<tr>
<td>4.</td>
<td>$\text{R}f7$</td>
<td>$\text{K}g8$</td>
</tr>
<tr>
<td>5.</td>
<td>$\text{R}g7+$</td>
<td>$\text{K}h8$</td>
</tr>
<tr>
<td>6.</td>
<td>$\text{R}h1$</td>
<td>$\text{K}d7$!</td>
</tr>
</tbody>
</table>

Not 6 ... $\text{K}h7$? 7 $\text{R}g6$! $\text{K}g8$ 8 $\text{R}h1$ $\text{K}f8+$ 9 $\text{R}f6+$ $\text{K}h8$ 10 $\text{R}g6$ $\text{K}f8+$ and Black holds the draw.

Note that this type of ending can arise from Rook v Pawn(s) (see diag RP13, 20 and 21).

<table>
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<td>$\text{K}h7+$</td>
</tr>
<tr>
<td>2.</td>
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<td>$\text{K}g8$</td>
</tr>
<tr>
<td>3.</td>
<td>$\text{R}h7$</td>
<td>$\text{K}h8$</td>
</tr>
<tr>
<td>4.</td>
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<td>$\text{K}f8+$</td>
</tr>
<tr>
<td>5.</td>
<td>$\text{R}g7+$</td>
<td>$\text{K}h8$</td>
</tr>
<tr>
<td>6.</td>
<td>$\text{R}h1$</td>
<td>$\text{K}d7$!</td>
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</tbody>
</table>

## Arabic manuscript 1257!

Analysis by Frink and Averbakh

<table>
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</tr>
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<tbody>
<tr>
<td>1.</td>
<td>...</td>
<td>$\text{K}a5+$</td>
</tr>
<tr>
<td>2.</td>
<td>$\text{K}b5$</td>
<td>$\text{K}b7$</td>
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After 2 ... $\text{K}b3$ 3 $\text{R}d8$ the knight is trapped.

3 $\text{K}h5$! Quickest.

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Alternatively:

- a) 3 ... $\text{K}d6+$ 4 $\text{K}c6$ and now:
  - a1) 4 ... $\text{K}c4$ (2a). A key position of Averbakh's which often features in analysing rook v knight 5 $\text{K}c5$ $\text{K}e3$ 6 $\text{K}a5+$ $\text{K}b8$ 7 $\text{K}a4$ $\text{K}f3$ 8 $\text{K}e4$ $\text{K}g3$ 9 $\text{K}h4$ $\text{K}a7$ 10 $\text{K}b7+$ $\text{K}a8$ 11 $\text{K}c7$.
  - a2) 4 ... $\text{K}e4$ 5 $\text{K}h7+$ $\text{K}b8$ 6 $\text{K}b7+$ $\text{K}a8$ 7 $\text{K}b4$ $\text{K}f6$ 8 $\text{K}f4$ $\text{K}h5$ 9 $\text{K}h5$ $\text{K}f5$ 10 $\text{K}c3$ $\text{K}h5$ 11 $\text{K}c7$.

- b) 3 ... $\text{K}d8$ 4 $\text{K}d5$ $\text{K}e6$ (4 ... $\text{K}b7$ 5 $\text{K}d7$ 5 $\text{K}c6$ $\text{K}b8$ (5 ... $\text{K}f4$ 6 $\text{K}d7+$ $\text{K}b8$ 7 $\text{K}d8+$ $\text{K}a7$ 8 $\text{K}e8$) 6 $\text{K}d6$ $\text{K}g5$ (6 ... $\text{K}f4$ 7 $\text{K}d8+$ $\text{K}a7$ 8 $\text{K}e8$ $\text{K}d3$ 9 $\text{K}e4$ $\text{K}f2$ 10 $\text{K}a4+$ $\text{K}b8$ 11 $\text{K}b4+$ $\text{K}a7$ 12 $\text{K}b7+$ $\text{K}a8$ 13 $\text{K}c7$) 7 $\text{K}d8+$ $\text{K}a7$ 8 $\text{K}d7+$ $\text{K}a6$ 9 $\text{K}d3$ $\text{K}a7$ 10 $\text{K}e3$ $\text{K}b8$ 11 $\text{K}d7$ $\text{K}f7$ 12 $\text{K}e7$ $\text{K}h6$ 13 $\text{K}e6$ $\text{K}g4$ 14 $\text{K}e2$ $\text{K}c7$ 15 $\text{K}f5$ $\text{K}h6+$ 16 $\text{K}g6$ $\text{K}g4$ 17 $\text{K}g5$.

- b1) 3 ... $\text{K}d8$ 4 $\text{K}d5$ $\text{K}e6$ (4 ... $\text{K}b7$ 5 $\text{K}d7$ 5 $\text{K}c6$ $\text{K}b8$ (5 ... $\text{K}f4$ 6 $\text{K}d7+$ $\text{K}b8$ 7 $\text{K}d8+$ $\text{K}a7$ 8 $\text{K}e8$) 6 $\text{K}d6$ $\text{K}g5$ (6 ... $\text{K}f4$ 7 $\text{K}d8+$ $\text{K}a7$ 8 $\text{K}e8$ $\text{K}d3$ 9 $\text{K}e4$ $\text{K}f2$ 10 $\text{K}a4+$ $\text{K}b8$ 11 $\text{K}b4+$ $\text{K}a7$ 12 $\text{K}b7+$ $\text{K}a8$ 13 $\text{K}c7$) 7 $\text{K}d8+$ $\text{K}a7$ 8 $\text{K}d7+$ $\text{K}a6$ 9 $\text{K}d3$ $\text{K}a7$ 10 $\text{K}e3$ $\text{K}b8$ 11 $\text{K}d7$ $\text{K}f7$ 12 $\text{K}e7$ $\text{K}h6$ 13 $\text{K}e6$ $\text{K}g4$ 14 $\text{K}e2$ $\text{K}c7$ 15 $\text{K}f5$ $\text{K}h6+$ 16 $\text{K}g6$ $\text{K}g4$ 17 $\text{K}g5$.

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<tr>
<td>2.</td>
<td>$\text{K}d7$</td>
<td>$\text{K}b7$</td>
</tr>
<tr>
<td>3.</td>
<td>$\text{K}b5$ (2b)</td>
<td>A key position, identical to w$\text{K}b5$, $\text{K}d7$; b$\text{K}a7$, $\text{K}b7$.</td>
</tr>
<tr>
<td>4.</td>
<td>$\text{K}c6$</td>
<td>$\text{K}d8+$</td>
</tr>
<tr>
<td>5.</td>
<td>$\text{K}d7$</td>
<td>$\text{K}b7$</td>
</tr>
</tbody>
</table>
| 6.   | $\text{K}b5$ | A key position, identical to w$\text{K}b5$, $\text{K}d7$; b$\text{K}a7$, $\text{K}b7$.

Write an answer.
Rook v Knight

---

**Averbakh**

1 \( \text{Qd5} \) \( \text{Qf6} \)

2 \( \text{Qc6!} \)

Not 2 \( \text{Qc5?} \) \( \text{Qe5!} \) when due to zugzwang, the knight escapes. This position is diagram (3a) with White to play; it represents a key defensive motif: 3 \( \text{Qd2} \) \( \text{Qa4+} \) 4 \( \text{Qb4} \)

---

**Welin - Benjamin**

Reykjavik open 1986

76 \( \text{Qb4} \) \( \text{Qa6} \)

77 \( \text{Qc4} \)

This is the Averbakh position (see diag 2a) moved one rank back.

77 ... \( \text{Qe2} \)

78 \( \text{Qa4+} \) \( \text{Qb7} \)

79 \( \text{Qe4} \)

79 \( \text{Qa3} \) would be the analogous method, but here White has more difficulty switching to attack the king. By contrast, now the knight has less room to run. It would appear that 79 \( \text{Qa3} \) hunts down the knight as well: 79 ... \( \text{Qf4} \) 80 \( \text{Qe3} \) \( \text{Qg2?} \)

(80 ... \( \text{Qc7??} \) 81 \( \text{Qe7+} \) \( \text{Qd8} \) 82 \( \text{Qd6} \) \( \text{Qe8} \) 83 \( \text{Qe4} \) \( \text{Qd3} \) 84 \( \text{Qd4} \) \( \text{Qe1} \) 85 \( \text{Qd2} \) \( \text{Qb7} \) 86 \( \text{Qd5} \) \( \text{Qf3} \) 87 \( \text{Qf2} \) \( \text{Qg5} \) 88 \( \text{Qf5} \) \( \text{Qh3} \) 89 \( \text{Qe4} \) 81 \( \text{Qe4} \) \( \text{Qc7} \) 82 \( \text{Qc4} \) \( \text{Qc6} \) 83 \( \text{Qc3!} \) \( \text{Qd5} \) 84 \( \text{Qd3} \) \( \text{Qc5} \) 85 \( \text{Qd2} \) \( \text{Qd5} \) 86 \( \text{Qg4} \).

79 ... \( \text{Qg3} \)

Or 79 ... \( \text{Qc3} \) 80 \( \text{Qe3} \) \( \text{Qa4+} \)

(80 ... \( \text{Qd1} \) 81 \( \text{Qf3} \) \( \text{Qa6} \) 82 \( \text{Qb4} \) 81 \( \text{Qb5} \) \( \text{Qb6} \) (81 ... \( \text{Qb2} \) 82 \( \text{Qb4} \) \( \text{Qd1} \) 83 \( \text{Qf3} \) 82 \( \text{Qe7+} \).)

80 \( \text{Qg4} \)

White can play so directly since his king is well centred and the black king rules out the knight escaping along the b-file.

80 ... \( \text{Qf5} \)

Alternatively: 80 ... \( \text{Qe2} \) 81 \( \text{Qc4} \); or 80 ... \( \text{Qf1} \) 81 \( \text{Qd4} \) \( \text{Qd2} \) (81 ... \( \text{Qc6} \) 82 \( \text{Qg2} \)) 82 \( \text{Qe3} \) \( \text{Qb3} \) 83 \( \text{Qb4+} \); or 80 ... \( \text{Qh5} \) 81 \( \text{Qd6} \) \( \text{Qf6} \) 82 \( \text{Qf4} \) \( \text{Qe8+} \) 83 \( \text{Qd7} \) \( \text{Qg7} \) (83 ... \( \text{Qc7} \) 84 \( \text{Qb4+} \)) 84 \( \text{Qe7} \) \( \text{Qh5} \) 85 \( \text{Qg4} \).

81 \( \text{Qg5} \) \( \text{Qh4} \)

81 ... \( \text{Qe3} \) fails to 82 \( \text{Qd4} \) \( \text{Qc2+} \) 83 \( \text{Qd3} \) and 81 ... \( \text{Qh6} \) to 82 \( \text{Qd5} \).

82 \( \text{Qd5} \) \( \text{Qf3} \)

83 \( \text{Qg2} \) \( \text{Qh4} \)

Or 83 ... \( \text{Qe1} \) 84 \( \text{Qb2+} \) \( \text{Qc7} \) 85 \( \text{Qe4} \).

84 \( \text{Qg7+} \) \( \text{Qc8} \)
This is very nearly a lost Arabian position (cf diag 2). Note the defence.

87 \( \text{Kf6} \) \( \text{Ke8}+! \)

87 ... \( \text{Kh5}+ \) 88 \( \text{Kg5} \) \( \text{Kg7} \) 89 \( \text{Ka7} \) (al-Adli).

88 \( \text{Ke7} \) \( \text{Kg7} \)

Better is 90 \( \text{Kc7} \) \( \text{Kc1} \) (90 ... \( \text{Kf6} \) 91 \( \text{Ke8} \) 92 \( \text{Kf8} \)).

90 ... \( \text{Kf6} \)

91 \( \text{Ke8}+ \) \( \text{Kc7} \)

92 \( \text{Kg7} \)

Compare with the Arabian position.

92 ... \( \text{Kf7} \)

92 ... \( \text{Ke1} \) is also possible:

a) 93 \( \text{Kf5}+ \) \( \text{Kf6} \) 94 \( \text{Kd6} \) (94 \( \text{Kd6} \) \( \text{Kg6} \) \( \text{Ke6} \) 95 \( \text{Ke4} \) \( \text{Ke6} \) 96 \( \text{Ke3} \) \( \text{Ke5} \) 97 \( \text{Kh7} \) \( \text{Kg5} \) 98 \( \text{Kg7} \) \( \text{Kf4} \)).

86 \( \text{Kg4} \) 1-0
Rook v Knight

Rook and One Pawn v Knight

\[ \text{Averbakh} \]

\[ \text{White: } R7 \text{ Pawn} \]

1. \( \text{a}5 \)

A classic position which demonstrates the only saving grace with this material balance - White's extra pawn being isolated/too far advanced.

1. ... \( \text{c}e7! \)

Not 1 ... \( \text{b}6 \) 2 \( \text{d}4 \) and:

a) 2 ... \( \text{c}8 \) 3 \( \text{e}6 \) \( \text{d}7 \) (3 ...

\( \text{a}8 \) 4 \( \text{c}5 \) 4 \( \text{d}5 \) \( \text{f}8 \) 5

White cannot make progress - his king cannot reach the pawn.

2. \( \text{f}4 \)

3. \( \text{e}5 \)

4. \( \text{f}5 \)

5. \( \text{a}3 \)

6. \( \text{d}5 \)

7. \( \text{a}4 \)

8. \( \text{b}2 \)

9. \( \text{a}4 \)

10. \( \text{b}3 \)

11. \( \text{d}4+ \)

See also diag 9.

\[ \text{La Bourdonnais - Macdonnell} \]

\[ \text{New York 1834}. \]

This move was found by Berger (the starting position is London 1834).

1. \( \text{a}4! \)

Not 1 ... \( \text{c}6 \) 2 \( \text{b}4 \). 

2. \( \text{d}5 \)

3. \( \text{d}6 \)

4. \( \text{d}7 \)

5. \( \text{d}8 \)

6. \( \text{a}7 \)

7. \( \text{a}7 \)

8. \( \text{d}6+ \)

9. \( \text{b}5 \)

10. \( \text{c}4 \)

11. \( \text{d}6 \)

12. \( \text{b}5 \) and wins

336
Rook v Knight

Rook and Pawn v Knight and Pawn

RN Stein - Bobotsov
Moscow 1967

The f-pawn is distraction enough to hold the draw.

47 ... 
48 e2 f3+
49 d2 f2
50 e2 d4
51 b8 c4
52 f1

Or 52 c8+ d4? (52 ... b4!) 53 d8+ (53 b3!) 53 ... e4 54 xd3 f1?+

52 ... d4
53 b7 c4
54 e2 d4
55 g7+ e4

Not 55 ... e4?? 56 b3+.

56 b7 d4
57 b8

Not 57 b3 e3.

57 ... c4
58 c8+ b4!

Black plays to surround the b-pawn, not falling for the tactic in the earlier note.

59 e2 c5
60 xf2 a4
61 e3 b3
62 c8 e2 b2=
63 d4 a4
64 c6 b4
65 c4+ b5
66 c1 b6
67 c5+ b4

\[1/2-1/2\]

RN Dokhoian - Shirov
Klaipeda 1988

79 ... g5

Black tries to provoke h4, presumably to create counterplay by advancing the king towards the more exposed h-pawn.

80 g4

White's play in the game is rather aimless. 80 g3 is met by 80 ... h5 with the idea of 81 ... h4. 80 h4 looks critical, aiming for positions similar to diag 13:

a) 80 ... f7 81 h3 h5 (81 ... d6 82 h5+ h6 83 h2 g7 84 h2) 82 f5 e5 83 xf6 g6 84 f5 xh4+ 85 f4;

b) 80 ... e6+ 81 g4 and

White wins as in (the notes to)
Bertona - Soppe:

b1) 81 g7 82 d6 h5 83 d5 g7 84 h5+ h6 85 a5 h7 (85 ... f5+ 86 h4 xh5 87 a6+) 86 a6;

b2) 81 f5+ 82 g3 h5

(82 ... g7 83 d6+) 83 d6 with the idea of f6.

80 ... e4
81 e3 g5
82 g3 e4
83 g1 g5
84 g2 e6
85 e2 g5
86 e8 f7
87 f4 g5
88 g4 f7
89 g8+ h7
90 h8 g6
91 a8 e5+
92 f4 d3+
93 e3 e5
94 g8+ h4
95 e4 h4
96 h8+ g5

97 d5 f3 98 d6 e5
99 e6 f3 100 e7 e5
101 h8 g6+ 102 f7 f4
103 h3 f5 104 e3 xh3 105
xh3 g4 106 h6 f4 107
g6+ h3 108 f6 g3 109
e6 f3 110 e5 f2 111 e4

f2 112 e3 f1=\# 113 xf1

xf1 1/2-1/2
Rook v Knight

\[ \text{Bertona - Soppe} \]
\[ \text{Argentine Ch 1990} \]
\[ 67 \text{g} 3 \]

67 f3!? and transferring the knight to e4 would give Dokhoian - Shirov (diag 12).

\[ 67 \text{...} \text{g} 5 \]
\[ 68 \text{g} 2 \text{g} 4+ \]
\[ 69 \text{h} 3 \text{a} 4 \]
\[ 70 \text{g} 3 \text{h} 5 \]
\[ 71 \text{h} 3 \]
\[ 71 \text{f} 3 \text{h} 4+ 72 \text{h} 3 \text{a} 1 73 \text{h} 2 \text{a} 3 \text{wins}. \]

\[ 71 \text{...} \text{a} 3+ \]
\[ 72 \text{g} 3 \text{a} 1 \]
\[ 73 \text{g} 3 \text{h} 4+ \]
\[ 74 \text{h} 3 \text{a} 3 \]
\[ 75 \text{g} 2 \text{a} 2 \]
\[ 76 \text{f} 3 \text{d} 2 \]
\[ 77 \text{g} 2 \text{d} 8! \]
\[ 78 \text{f} 3 \text{h} 8! \]
\[ 79 \text{g} 2 \text{h} 8! \]

\[ \text{80 f} 1 \]
\[ 80 \text{h} 3 \text{f} 4 81 \text{d} 5+ (81 \text{e} 2+ 82 \text{xh} 4+ \text{f} 4) \]
\[ 81 \text{...} \text{f} 3 82 \text{g} 7 \text{h} 7 83 \text{f} 5 \text{h} 5 84 \text{g} 7 \text{h} 6 85 \text{f} 5 \text{h} 7++ (zugzwang). \]

\[ 80 \text{...} \text{g} 4 \]
\[ 81 \text{d} 2 \text{h} 3+ \]
\[ 82 \text{h} 2 \text{h} 5 \]
\[ 83 \text{f} 1 \text{f} 3 \]
\[ 84 \text{g} 3 \text{h} 8 \]
\[ 85 \text{g} 1 \text{h} 2+ \]
\[ 86 \text{h} 1 \text{d} 2 \]
Rook v Knight

Ehlvest - Khalifman
USSR Ch 1987

61 b4 a6
61 ... b5 62 a5 f6 63 f5.

62 g3

An example of how easy it is to win when the defenders are not optimally placed.

Ehlvest - Khalifman
USSR Ch 1987

62 ... g6

With the idea of ... h5(+)

Taimanov - Bronstein
Leningrad 1946

1 a7+

This position demonstrates that even if Black had managed to erect the optimal position in the previous example he would still have lost.

Taimanov - Bronstein
Leningrad 1946

1 ... f8

2 d7!

Found after the game by Bronstein and Averbakh. 2 f5? only led to a draw in the game.

Taimanov - Bronstein
Leningrad 1946

2 ... g8

2 ... e8 3 h7 with the idea of f5+.

Taimanov - Bronstein
Leningrad 1946

3 e6!!

A rare case of rook winning against knight and pawn.

Taimanov - Bronstein
Leningrad 1946

3 ... xf4+

Or 3 ... f8 4 h7+ g8 (4 ... e8 5 f6! d8 6 f7) 5 e7 h8 6 f8 g3 7 g7 h5 8 xg6.

Taimanov - Bronstein
Leningrad 1946

4 f6 g5

Instead 4 ... h5+ 5 xg6 f4+ 6 g5 transposes, whilst 4 ... h8 5 d4 g5 6 d7 g4 (6 ... g8 transposes to other lines) 7 d4 g2 8 xg4 f3 9 e4 d5+ 10 f7.

Taimanov - Bronstein
Leningrad 1946

5 xg5 e6+

6 f6 f4

7 d4 e2

8 g4 f8

9 e4 g8

10 g6 f8

11 g5 g3

12 g4 e2

13 f3 g1+

14 g2 e2

15 f2 f1-0

Larsen - Tal
Bled 1965

White has a good defensive formation against the black king's approach to the front of the pawn. Black cannot make progress on the kingside so the king changes sides.

Larsen - Tal
Bled 1965

54 f3 f7

55 g3 e6

56 f4 a4+

57 f3 e5

58 h5! (18a)

This is the ideal position against the Black king's approach - it is given by Averbakh as a drawing formation.
With the idea of ... f5.

71 g3 h7
72 g3 h8
73 f3 h2
74 g3 b2
75 h5 b3+
76 f2 d3
77 g2 e4
78 xf6+ f4
79 f2 d2+
80 e1 d6

Black’s last hope is to isolate the knight.

81 g5!

A very important ending, illustrating the entire range of winning attempts.

(70 ... h8 71 d3=) 71 g3 b5 72 d3! xe4 73 f3.

70 g3 e8
71 f3 c5
72 e3 c4
73 h2 a8
74 f3

Finally, White reaches a theoretically drawn position.

74 ... a5
75 e2 c3
76 e3 c2
77 e2 ½-½

Black can no longer coordinate his pieces against e4 due to the pressure against e5.

Barle - Neverov
Voskresensk 1990

Another version of the Tal-Ciocalteia (diag 19) ending.

The shift of one file makes no difference to the result. Black’s ideally placed pieces hold draw.
Rook v Knight

Shirov - Fishbein
Kerteminde 1991

This is a good example of the defender needing to achieve a key position.

51 \( \mathcal{D}e2 \)

White has trouble getting the knight to e3: the knight cannot release the pressure against f5 without allowing the black king in.

51 ... \( \mathcal{A}a3! \)
52 \( \mathcal{D}c2 \)
52 \( \mathcal{D}d2 \mathcal{A}a5 53 \mathcal{D}c2 \mathcal{D}h5 \)
54 \( \mathcal{D}e3 \mathcal{D}h4 \) or 52 \( \mathcal{D}f2 \mathcal{A}d3 \) both lose.
52 ... \( \mathcal{A}a2 \)
53 \( \mathcal{D}d3 \mathcal{A}a4! \)

Not 53 ... \( \mathcal{D}h5 54 \mathcal{D}e3 \mathcal{A}a5 \)
(54 ... \( \mathcal{A}a3+ 55 \mathcal{D}e2 \mathcal{D}xe3+ \\
56 \mathcal{D}xe3 \mathcal{D}g4 57 \mathcal{D}f2 \mathcal{D}xf4 \\
58 \mathcal{D}f2) 55 \mathcal{D}e2 \mathcal{H}h4 56 \mathcal{D}f3=.)

54 \( \mathcal{D}e3 \)

A major achievement for Black - the white king sits on the knight's ideal square.

54 ... \( \mathcal{E}c4! \)

Driving the knight further from e3. (Not 54 ... \( \mathcal{D}h5 55 \mathcal{D}f3= \) when Black has no checks.)

55 \( \mathcal{D}d4 \mathcal{A}c3+ \\
56 \mathcal{D}e2 \mathcal{C}c5 \)

Preparing the invasion of the king.

57 \( \mathcal{D}f3 \)

57 \( \mathcal{D}f3 \mathcal{D}h5 \) wins easily.
57 ... \( \mathcal{D}h5 \)
58 \( \mathcal{D}e5 \mathcal{A}c3 \)
59 \( \mathcal{D}f2 \mathcal{D}h4 \)
60 \( \mathcal{D}g2 \mathcal{D}b3 \)

The black king invades thanks to zugzwang.

0-1

Razuvaev - Lputian
Sochi 1987

Despite the lack of pressure against g4 Black can put up tremendous resistance since it is difficult for White to encircle the g-pawn.

74 \( \mathcal{F}f1 \mathcal{D}g2 \)
75 \( \mathcal{F}f6+ \mathcal{D}g7 \)
76 \( \mathcal{F}f3 \)

Or 76 \( \mathcal{D}f5 \mathcal{D}e3+ 77 \mathcal{D}xg5 \)
\( \mathcal{D}xg4. \)

76 ... \( \mathcal{D}g6 \)
77 \( \mathcal{D}e4 \mathcal{G}g7 \)
78 \( \mathcal{D}f2 \mathcal{D}h4 \)
79 \( \mathcal{D}e5 \mathcal{D}g6 \)
80 \( \mathcal{D}e6 \mathcal{G}g7 \)
81 \( \mathcal{D}d7 \mathcal{D}g6 \)

Not 81 ... \( \mathcal{D}g6 82 \mathcal{D}f5 \mathcal{D}h4 \) (82 ... \( \mathcal{D}h6 83 \mathcal{D}e8 \) is analogous to the game) 83 \( \mathcal{D}xg5+ \)
\( \mathcal{D}f6 84 \mathcal{D}h5 \mathcal{D}g2 85 \mathcal{D}f5+ \)
\( \mathcal{D}g6 86 \mathcal{D}e5! (86 \mathcal{D}e6 \mathcal{D}e3) \\
\mathcal{D}f6 87 \mathcal{D}d6. \)

82 \( \mathcal{D}e7 \mathcal{D}g7 \)
83 \( \mathcal{D}e8 \mathcal{D}g6 \)
84 \( \mathcal{D}f5 \mathcal{D}h4 \)
85 \( \mathcal{D}f7+ \)

85 \( \mathcal{D}xg5+ \mathcal{D}f6 86 \mathcal{A}g8 \) (or 86 \( \mathcal{D}a5 \mathcal{D}g2 \) 86 ... \( \mathcal{D}g6 \). In both cases White must beware of having the pawn surrounded before the \( \mathcal{D}e8 \) returns to the game. Razuvaev is more methodical.

85 ... \( \mathcal{D}g6 \)
86 \( \mathcal{D}f8 \mathcal{D}g2 \)
87 \( \mathcal{D}e7+ \mathcal{D}f6 \)
88 \( \mathcal{D}e4 \mathcal{D}f4 \)
89 \( \mathcal{D}g8 \mathcal{D}g6 \)
90 \( \mathcal{D}e1 \)

Zugzwang - the encirclement is finally complete.

90 ... \( \mathcal{D}f6 \)

Or 90 ... \( \mathcal{D}d5 91 \mathcal{D}e6+ \)
\( \mathcal{D}f6+ 92 \mathcal{D}f8. \\
91 \mathcal{D}h7 \mathcal{D}d3 \\
92 \mathcal{D}f1+ 1-0
Rook v Knight

Rook and Pawn v Knight and Two Pawns

<table>
<thead>
<tr>
<th>RN</th>
<th>Bronstein - Podgaets</th>
<th>USSR 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>b5</td>
<td>b6</td>
</tr>
<tr>
<td></td>
<td>g6</td>
<td>g3</td>
</tr>
<tr>
<td>46</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>47</td>
<td>e4</td>
<td>e5</td>
</tr>
<tr>
<td>47</td>
<td>d5</td>
<td>d7</td>
</tr>
<tr>
<td>-</td>
<td>B</td>
<td>Bronstein and Lepeshkin.</td>
</tr>
<tr>
<td>47</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>48</td>
<td>e5?</td>
<td>e6+</td>
</tr>
<tr>
<td>48</td>
<td>d5=</td>
<td>d7</td>
</tr>
<tr>
<td>49</td>
<td>e5</td>
<td>e6+</td>
</tr>
<tr>
<td>50</td>
<td>e4</td>
<td>e8</td>
</tr>
<tr>
<td>51</td>
<td>d5</td>
<td>f6</td>
</tr>
<tr>
<td>52</td>
<td>d6</td>
<td>e5+</td>
</tr>
<tr>
<td>53</td>
<td>d4</td>
<td>xC7</td>
</tr>
<tr>
<td>54</td>
<td>e4</td>
<td>f5</td>
</tr>
<tr>
<td>55</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>56</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>57</td>
<td>e4</td>
<td>e5+</td>
</tr>
<tr>
<td>58</td>
<td>f4</td>
<td>f6+</td>
</tr>
<tr>
<td>59</td>
<td>e3</td>
<td>e5</td>
</tr>
<tr>
<td>59</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>60</td>
<td>h4</td>
<td>e6?</td>
</tr>
<tr>
<td>60</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

B

Rook and Two Pawns v Knight and Two Pawns

<table>
<thead>
<tr>
<th>RN</th>
<th>Romanishin - Am. Rodriguez</th>
<th>Moscow 1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>e4</td>
<td>g5</td>
</tr>
<tr>
<td></td>
<td>f4</td>
<td>f6</td>
</tr>
<tr>
<td></td>
<td>e5</td>
<td>g5</td>
</tr>
<tr>
<td></td>
<td>f4</td>
<td>e6+</td>
</tr>
<tr>
<td></td>
<td>e3</td>
<td>h5</td>
</tr>
<tr>
<td>56</td>
<td>...</td>
<td>g7+</td>
</tr>
<tr>
<td>56</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>57</td>
<td>e4</td>
<td>e5+</td>
</tr>
<tr>
<td>58</td>
<td>f4</td>
<td>f6+</td>
</tr>
<tr>
<td>59</td>
<td>e3</td>
<td>g5</td>
</tr>
<tr>
<td>59</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>60</td>
<td>h4</td>
<td>e6?</td>
</tr>
<tr>
<td>60</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

B

Gulko - Karpov

USSR Ch 1976

Black's plan is simply to advance his king and use the rook on the queenside to drive back White's pieces. Gulko decides to try to engage pawns, to gain space and seek exchanges.

<table>
<thead>
<tr>
<th>RN</th>
<th>Gulko - Karpov</th>
<th>USSR Ch 1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>g5</td>
<td>f7</td>
</tr>
<tr>
<td></td>
<td>g4</td>
<td>a7</td>
</tr>
<tr>
<td></td>
<td>f5</td>
<td>e7</td>
</tr>
<tr>
<td>56</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>57</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>58</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>59</td>
<td>g6</td>
<td>a5+</td>
</tr>
<tr>
<td>60</td>
<td>g4</td>
<td>hxg6!</td>
</tr>
<tr>
<td>60</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

W

White has prevented a frontal approach of the black king.

342
Rook v Knight

counterplay.

61 \( \text{\textit{\texttt{dxg6+ \textit{\texttt{f6}}} \)} \)

Despite the reduced material the activated king decides.

62 \( \text{\textit{\texttt{a4+}}} \)

63 \( \text{\textit{\texttt{h5}}} \)

Or 63 \( \text{\textit{\texttt{g3 \textit{\texttt{f5}}} \)} 64 \( \text{\textit{\texttt{h7}}} \)

Rook and Two Pawns v Knight and Three Pawns

\[
\begin{array}{|c|c|}
\hline
\text{RN} & \text{H Olafsson - Hort} \\
\text{26} & \text{Thessaloniki ol 1984} \\
\hline
38 & \text{\textit{\texttt{g8}}} \\
38 & \text{\textit{\texttt{a4}}} \\
\hline
40 & \text{\textit{\texttt{e4}}} \\
41 & \text{\textit{\texttt{f4}}} \\
42 & \text{\textit{\texttt{f5}}} \\
43 & \text{\textit{\texttt{c3}}} \\
44 & \text{\textit{\texttt{h3}}} \\
45 & \text{\textit{\texttt{e5}}} \\
\hline
\end{array}
\]

\[
\begin{array}{|c|c|}
\hline
\text{RN} & \text{Korchnoi - Mark Tseitlin} \\
\text{27} & \text{USSR Ch 1970} \\
\hline
43 & \text{\textit{\texttt{h4}}} \\
44 & \text{\textit{\texttt{e1}}} \\
45 & \text{\textit{\texttt{e2}}} \\
46 & \text{\textit{\texttt{f1}}} \\
47 & \text{\textit{\texttt{f2+}}} \\
48 & \text{\textit{\texttt{e2}}} \\
\hline
\end{array}
\]

\[
\begin{array}{|c|c|}
\hline
\text{RN} & \text{Neckar - Makarichev} \\
\text{28} & \text{Balasiba 1977} \\
\hline
59 & \text{\textit{\texttt{c6}}} \\
60 & \text{\textit{\texttt{b6}}} \\
61 & \text{\textit{\texttt{a6}}} \\
62 & \text{\textit{\texttt{g5}}} \\
\hline
\end{array}
\]

Black experiences no difficulties, thanks to his space control, which allows him to monitor White’s pawns as well as defend his own. (Compare with diag 28).

Or 63 \( \text{\textit{\texttt{f7}}} 64 \text{\textit{\texttt{g5}}} \)

An ending silently assessed as “=” in Informator. White’s kingside space gives him play, and Black is restricted to passive defence.

59 \( \text{\textit{\texttt{c6}}} \)

60 \( \text{\textit{\texttt{b6}}} \)

61 \( \text{\textit{\texttt{a6}}} \)

62 \( \text{\textit{\texttt{g5}}} \)

The only try — again the activity of the pieces is more important than material.

a) 65 \( \text{\textit{\texttt{e2}} 66 \text{\textit{\texttt{b1}}} \text{\textit{\texttt{e4}}} \) (66 \( \text{\textit{\texttt{f8}}} \) 67 \( \text{\textit{\texttt{e1}}} \) 68 \text{\textit{\texttt{xe2}}} \)

b) 65 \( \text{\textit{\texttt{e6}}} \) 66 \text{\textit{\texttt{g7}}} \)
now:

b1) 66 ... e2 67 Ml $f5+ 68 $g6 $h4+ 69 $g7 $f5+ 70 $g6 $h4+ 71 $h7 $f6! (71 ... $f3 72 $g7 $e1= 73 $xel+ $xel 74 $h6+)/ 72 $h6
and:

b1) 72 ... $g5 73 $g1+! $xh6 74 $l $f5 75 $xe2 $xh6 76 $h2++;

b2) 66 ... e2 67 $f1+ $e6 68 $e1 $e5 69 $f1 $e2!

68 $e1 $e5 69 $f1 $e2!

70 $e1 $e6 71 $f8 $e7.

b12) 72 ... $f5! 73 $e2 (73 $g3 74 $e1 $g3= 75 $xh8 $g6 76 $h7 $f7 77 $h1 $f8) 73 ... $g5 74 $xe2 $xh6+;

Andersson envisages a neat positional draw.

50 $h5+ $g5
51 $g8+ $h4

Karpov - Ftacnik
Thessaloniki ol 1988

74 ... $h5
75 $g5+ $xh5
76 $g6!
76 $g6 $f6 77 $f3.
77 $d6 $f4
78 $e7 $h5
79 $f6!
79 $xf7 $e5 80 $f6 $h4.
79 ...
80 $e5
80 $xf7 $h4 81 $f3 $e5 82 $e6 $e4 is given by Karpov.
80 ...
After 80 ... $h6! (Karpov)
White should not be able to progress.
Now we reach a tough rook v knight position.

RN

Tal - Andersson
Tilburg 1980

43 $b6 $f6
44 $f2 $g6
45 $h4 $c2
46 $f3 $d4+
47 $e3 $c2+
48 $e4 $d4!
49 $b8 $c6!

Andersson envisages a neat positional draw.

50 $h5+ $g5
51 $g8+ $h4

Karpov gives this a "?" but this seems harsh. Instead he gives 83 ... $g3! 84 $c7! (84 $e5 $e4+ - Karpov) 84 ...

P3f=. Really? The following variation seems to demonstrate that Black is indeed lost:
85 $c3+! (85 $e5? $e3 86 $c3+ $d2 87 $d4 $a4 88 $h3 $c2 89 $a3 $b2 and the knight escapes) 85 ...

Karpov gives 84 ... $g2 85

RN

Karpov - Ftacnik
Thessaloniki ol 1988

74 ... $h5
75 $g5+ $xh5
76 $g3! $h6
76 $g6 $f6 77 $f3.
77 $d6 $f4
78 $e7 $h5
79 $f6!
79 $xf7 $e5 80 $f6 $h4.
79 ...
80 $e5
80 $xf7 $h4 81 $f3 $e5 82 $e6 $e4 is given by Karpov.
80 ...

After 80 ... $h6! (Karpov)
\[ \begin{align*}
d8 & \ 88 \ 8a7+.
d5! \ 8g5
\end{align*} \]

85 8d3!
85 ... 8a5 86 8d5; 85 ... 8b6 86 8b3 8c8 87 8b7; and 85 ... 8b2 86 8d2 all lose (Karpov).

86 8d5 8b6+
86 ... 8b2 87 8d4 8f5 88 8c6 is a familiar motif; after 88 ... 8e5 89 8c5 we reach a zugzwang.

87 8e5! 8c4+
88 8e4 8b6

If instead 88 ... 8f6 89 8d4 and now:
a) 89 ... 8a5 90 8d5 and;
a1) 90 ... 8b7 91 8c6 8a5+
92 8b5 8b3 (92 ... 8b7 93 8d7) 93 8d3 8c1 94 8e3 8f5
95 8c4 8f4 96 8el;

\[ \begin{align*}
\text{Vidmar - Alekhine} \\
\text{San Remo 1930}
\end{align*} \]

Fine gives this as probably won, but Averbakh demonstrates a draw.

38 8g3 8f8
39 8h4 8e7
40 8e4 8h6
41 8f2?

41 8h3 8e6 (or 41 ... 8a3
42 8d4 8e6 43 8f4 8g6 44 8d4) 42 8g4! (see diag3 32, 33)
42 ... 8e5 43 8g3 8g6 (not 43 ...
44 8d4 44 8h5 8e3 45 8d6)
44 8f2 8a3 45 8h3 8a4 46
8f2! (46 8f2 8d4 47 8h3
8e3) 46 ... 8h5 47 8gxh5
8hxh4
48 8hxg6!=

41 ... 8e6
42 8d3 8f5
43 8f4 8a4
44 8d3 8e4
45 8f2 8e6
46 8h3 8e5
47 8h5

'... without g4 this move is a serious mistake, which simplifies Black's task' - Averbakh.

Averbakh demonstrates the following winning technique against passive defence: 47

\[ \begin{align*}
\text{f4} & \ 8c2 48 \ 8h3 \ 8d2 49
\text{f4} & \ 8a2 50 \ 8h3 \ 8d4 51
\text{f4} & \ 8e3 52 \ 8e6 \ 8a7 53
\text{f4} & \ 8a6! 54 \ 8h3 \ 8e2 55
\text{f4}+ \ 8f1 56 \ 8h5 (56 \ 8h3)
8a2 57 \ 8f4 \ 8g5 \ 58 \ 8hxg5 \ 8hxg5
59 \ 8e6 \ 8xg2+ 60 \ 8h3 \ 8f2)
56 \ ... \ 8a5 57 \ 8h2 \ 8f2 58
8h3 \ 8b5 59 \ 8h4 \ 8e3.
\end{align*} \]

47 ... 8c2!
48 8f4 8f4
49 8h3 8f4
50 8f4 8e3
51 8e6

Not 51 8h3 8h2 52 8f4
8b5 53 8e6 8e5 or 51 8g4
8d4 52 8g3 8a4.

51 ... 8d5
52 8f4
52 8h4 8e5! 53 8xg7 8g5
54 8e6 8xg2 was given by

Alekhine.

52 ... 8f5
53 8g4 8f6
54 8f5 8f7

A better try was 54 ... 8e4!
55 8xg7 (55 8c5+ 8d5 56

345
Rook v Knight

\[ \text{\textit{Rook}} \text{ v Knight} \]

A familiar scene from rook v knight - the knight has strayed.

And Black cannot strengthen his position due to pressure against g7.

---

**Diagram 32**

Leykin 1940

Leykin's analysis here and in diag 33 is a reaction to Vidmar's loss to Alekhine and shows the correct defensive array (See also diag 36a).

1. \( \text{\texttt{g2+}} \) 2. \( \text{\texttt{f4+}} \)

---

**Diagram 33**

Leykin 1940

With a positional draw.

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**Diagram 34**

Fischer - Robatsch

Vinkovci 1968

The simplest fortress with knight and three vs rook and two.

44 \( \text{\texttt{a4}} \) 45 \( \text{\texttt{d6}} \)

After 58 \( \text{\texttt{a3}} \) f6+ and 58 \( \text{\texttt{d6}} \) g3 White is stuck.
Rook v Knight

Rook v Knight: Numerous Pawns

Geller - Mikhalchishin, USSR Ch 1985

With three pawns each the knight has little hope, succumbing either to a pawn storm or the king and rook ganging up on one of the pawns, leading either to win of material or involuntary exposure.

39 ... $\textit{d2}$

RN 35

39 ... $\textit{h5}$

RN 36

40 ... $\textit{h5}$

41 $\textit{f3}$ $\textit{a3}$

42 $\textit{c2}$?

(RN 36a)

Here White should have played 42 $\textit{d6!}$ $\textit{c5}$+ 45 $\textit{e3}$ $\textit{b3}$ (Kovacevic).

43 $\textit{g5}$+

44 $\textit{e3}$ $\textit{e5}$

45 $\textit{d6}$ $\textit{xd6}$

46 $\textit{c4}$ $\textit{f6}$

47 $\textit{a2}$

Or 47 $\textit{a4}$ $\textit{b6}$ 48 $\textit{c3}$ $\textit{a2}$

49 $\textit{a3}$ $\textit{e6}$ 50 $\textit{e4}$ $\textit{c4}$ 51 $\textit{xd5}$ $\textit{c4}$ 52 $\textit{d4}$ $\textit{d5}$ $\textit{f5}$= (Kovacevic).

47 ... $\textit{c5}$

48 $\textit{a3}$ (36a)

48 ... $\textit{f5}$

49 $\textit{a8}$ $\textit{e6}$+

50 $\textit{d3}$ $\textit{e5}$

51 $\textit{h8}$ $\textit{f4}$

52 $\textit{c6}$ $\textit{g5}$

53 $\textit{h6}$ $\textit{c5}$+

54 $\textit{e2}$ $\textit{fxg3}$

55 $\textit{hxg3}$ $\textit{e4}$

56 $\textit{c3}$ $\textit{g4}$

57 $\textit{g2}$ $\textit{g5}$

58 $\textit{h8}$ $\textit{d6}$ $\frac{1}{2}$-$\frac{1}{2}$

347
Rook v Knight

**Tukmakov - Gulko**
Erevan 1976

42 \( \Box d3 \)

White should be able to defend as in the three pawns against two endings. His structure is ideal, with no weaknesses and with \( h4 \) ready to exchange against a pawn advance.

- 42 ... \( e6 \)
- 43 \( \Box f4+ e5 \)
- 44 \( \Box h3 h6 \)
- 45 \( \Box f4 d4 \)
- 46 \( e3+ c3 \)
- 47 \( g4 d6 \)
- 48 \( e2 c2 \)
- 49 \( f1 d1+ \)
- 50 \( g2 a1 \)
- 51 \( g5 \)

This is risky according to Tukmakov. White could safely wait.

- 52 ... \( \Box a4 \)
- 53 \( g3 \)
- 54 \( f4+ h5 \)
- 55 \( f3 d4 \)
- 56 \( f1 e4 \)
- 57 \( g2 d1 \)
- 58 \( f1 c1 \)
- 59 \( g2 d1 \)
- 60 \( d5 d3 \)
- 61 \( f3 d2+ \)
- 62 \( g3 e2 \)
- 63 \( e4 \)

Not 53 ... \( h5 \) 54 \( xg5! \)

\( h3 f3 \) with zugzwang.

**Korchnoi - Kotov**
USSR Ch 1958

Even with ruptured pawns, a four pawns against three advantage should be enough for the knight to draw.

- 46 ... \( e7 \)
- 47 \( g3 a2 \)
- 48 \( g2 d6 \)
- 49 \( g3 d5 \)
- 50 \( g2 f6 \)
- 51 \( g3 e4 \)
- 52 \( h4! \)

Guaranteeing that any Black pawn advance will entail maximum exchanges.

- 52 ... \( a5 \)
- 53 \( d2+ d3 \)
- 54 \( f3 h5 \)
- 55 \( d4 d5 \)
- 56 \( f3 e2 \)
- 57 \( g2 d1 \)
- 58 \( d4+ d3 \)
- 59 \( f3 e4 \)
- 60 \( g3 f5 \)
- 61 \( d4+ e4 \)
- 62 \( f3 d5 \)
- 63 \( g2 h6 \)
- 64 \( g3 d1 \)
- 65 \( g2 f5 \)
- 66 \( g3 h5 \)

\( h4 \) 57 \( g4 \) and now:

- a) 57 ... \( a2?! 58 g3 f5 \)
- 59 f3! (59 \( f3? a4 60 g3 \)
- 61 g4 \( f3 g4 62 e2 \)
- 63 g1 h1 64 f3 a1
- 65 d2 a7 and ... \( g4 \) will cost White the g-pawn)
- 59 ... \( e2 60 e4+ e5 61 f4 \)

White is still fighting.

- b) 57 ... \( b5! 58 f4 f5 59 h3 f3 \) with zugzwang.

53 ... \( h5 \)

Black should now play 63 ...

- 64 \( f4 \) with the idea of \( e5-e6!++ \)

\( 1/2-1/2 \)

\( \frac{1}{2}-\frac{1}{2} \)
Rossetto - Gligoric
Havana 1967

31 ... \( \text{\textgreek{g}} \text{e}5 \\
32 \text{\textgreek{d}}7 \text{\textgreek{d}}5 \\
33 \text{\textgreek{e}}1 \\

Or 33 \text{\textgreek{x}}f7 \text{\textgreek{d}}d4 34 \text{\textgreek{e}}1 a4 \\
35 \text{\textgreek{a}}7 (after 35 \text{\textgreek{x}}g7 \text{\textgreek{e}}3, \\
whilst 35 \text{\textgreek{d}}2 \text{\textgreek{f}}6 transposes to the game) 35 ... \text{\textgreek{e}}3. \\
33 ... \text{\textgreek{d}}d4 \\
34 \text{\textgreek{d}}2 a4 \\
35 \text{\textgreek{x}}f7? \\

Gligoric gives 35 \text{\textgreek{a}}7 \text{\textgreek{c}}3 \\
36 \text{\textgreek{d}}d7+= but 35 ... \text{\textgreek{b}}6! and \\
36 ... \text{\textgreek{c}}4+ still wins for \\
Black.

33 ... \text{\textgreek{d}}d4 \\
34 \text{\textgreek{d}}2 a4 \\
35 \text{\textgreek{x}}f7? \\

Gligoric gives 35 \text{\textgreek{a}}7 \text{\textgreek{c}}3 \\
36 \text{\textgreek{d}}d7+= but 35 ... \text{\textgreek{b}}6! and \\
36 ... \text{\textgreek{c}}4+ still wins for \\
Black.

Velimirovic - Haag
Vrnjacka Banja 1966

Sometimes an excellently-placed rook is worth more 
than a knight and three 
pawns. This practical ending 
shows the value of rook activity.

26 ... h5 
27 \text{\textgreek{d}}7 e5 

Trying to keep the white 
king out. If 27 ... \text{\textgreek{f}}5 28 \text{\textgreek{b}}7 
(28 \text{\textgreek{f}}3! e5 29 \text{\textgreek{e}}4 \text{\textgreek{h}}4 30 
\text{\textgreek{x}}e5 \text{\textgreek{g}}2 31 \text{\textgreek{f}}6 and 
again all of Black's pawns fall) 
28 ... b5 29 \text{\textgreek{a}}7 \text{\textgreek{d}}d4 30 \text{\textgreek{x}}a6 
\text{\textgreek{f}}7 and Black has coordi-
nated his position.

28 \text{\textgreek{f}}7 b5 

Or 28 ... \text{\textgreek{c}}6 29 \text{\textgreek{e}}6 \text{\textgreek{b}}4 
30 \text{\textgreek{x}}b6 (30 a3) 30 ... \text{\textgreek{x}}a2 
31 \text{\textgreek{a}}6? (31 \text{\textgreek{x}}g6+ \text{\textgreek{f}}7 32 
\text{\textgreek{g}}5) 31 ... \text{\textgreek{c}}3 32 \text{\textgreek{x}}g6+ 
\text{\textgreek{f}}7 33 \text{\textgreek{h}}6 \text{\textgreek{e}}4+ 34 \text{\textgreek{f}}3 

35 ... \text{\textgreek{f}}6! 

Now the d-pawn becomes 
strong enough to paralyse 
White's entire army. The a-
pawn becomes a decisive dis-
traction while White's pawns 
are far too slow.

29 \text{\textgreek{x}}e5 \text{\textgreek{f}}7 
30 \text{\textgreek{d}}5 

The knight cannot cope 
with the rook.

30 ... \text{\textgreek{e}}6 
31 \text{\textgreek{d}}6 a5 

Not 31 ... \text{\textgreek{c}}5 32 \text{\textgreek{f}}3.

32 \text{\textgreek{f}}3 \text{\textgreek{b}}4 
33 \text{\textgreek{a}}6 g5 
34 \text{\textgreek{x}}a5 \text{\textgreek{f}}6 
35 \text{\textgreek{c}}4 g4 
36 \text{\textgreek{h}}xg4 hxg4 
37 \text{\textgreek{f}}5+ \text{\textgreek{e}}7 
38 \text{\textgreek{x}}f4! \text{\textgreek{f}}x4 
39 \text{\textgreek{x}}f4 \text{\textgreek{f}}6 
40 \text{\textgreek{x}}g4 \text{\textgreek{e}}5 
41 \text{\textgreek{h}}5 \text{\textgreek{d}}4 
42 \text{\textgreek{g}}4 \text{\textgreek{c}}3 
43 \text{\textgreek{g}}5 \text{\textgreek{b}}2 
44 \text{\textgreek{g}}6 \text{\textgreek{xa}}2 
45 \text{\textgreek{g}}7 \text{\textgreek{b}}3 
46 \text{\textgreek{g}}8\text{\textgreek{a}} \text{\textgreek{a}}1 
47 \text{\textgreek{a}}8+ 1-0
This position demonstrates that White's best defensive array is king in front of pawns, rook working from behind (compare with rook vs bishop). Even with rook vs bishop.

White's simplest path to a draw consists of moving the king in front and rook behind. (Not 1 d? c2 2 ac8 cc3.)

Since the most dangerous position (two central pawns on the sixth rank) is drawn, lesser versions of this ending are rare in practice. Here Black keeps the rook active both from back and side, and the pawns do not even make it to the sixth.
Without Pawns

Generally this is a draw, though with the defending king caught on the edge of the board, disaster can result.

**RB**

Safe corner

When defending with a bishop against a rook, the king should retreat towards the corner of the opposite colour to the bishop, as this gives rise to stalemate possibilities.

1 \( \text{Rd8}^+ \text{g8} \)
2 \( \text{h8} \) stalemate

Of course 2 \( \text{g6} \) is also stalemate. In the safe corner the king is totally secure.

**RB**

Dangerous corner

Horwitz and Kling 1851

In the wrong corner, however, the position is a loss.

1 ... \( \text{g1}^* \)

The threat was 1 ... \( \text{d7}^? \text{b6} 2 \text{b7} \text{c5} 3 \text{b8}^+ \text{f8} 4 \text{R(any)}^8 \) and 5 \( \text{xf8} \) mate.

2 \( \text{f1}^+ \)

After 2 ... \( \text{d7}^? \text{f8} 3 \text{f6} \text{g6} \) White cannot maintain threats without allowing a liberating check – a very useful defensive idea. (3 ... \( \text{e8}^? \) seems to escape but instead runs into an essential attacking manoeuvre: 4 \( \text{e6} \text{f8} 5 \text{f7}^+ \text{g8} 6 \text{f6}^+ \) and 7 \( \text{g6}^+ \) when White will return to the winning position.)

2 ... \( \text{h2}^+ \)
3 \( \text{f2} \text{g3} \)

The bishop stays in shadow, avoiding a rook fork threatening the bishop and check on the last rank.

4 \( \text{g2} \text{e5}^+ \)

Alternatively, 4 ... \( \text{h4} 5 \text{h5}^+ \) or 4 ... \( \text{d6} 5 \text{d2} \text{e7} 6 \text{c2} \) (an important motif – the bishop prevents the king from fleeing successfully to e7 via f8).

5 \( \text{e2}^+ \)

Not 5 \( \text{f5}^? \text{g7} \).

5 ... \( \text{d6}^+ \)
6 \( \text{e8}^+ \text{f8}^+ \)
7 \( \text{a8} \) and wins

**RB**

Horwitz and Kling 1851

1 \( \text{g3} \)

Black to move draws with 1 ... \( \text{e8}^? \), running away with his king.

1 ... \( \text{e4}^+ \)

Alternatively, 1 ... \( \text{h5} 2 \text{h3} \text{f7} 3 \text{h8}^+ \text{g8} 4 \text{g6} \)

or 1 ... \( \text{c6} 2 \text{c3} \text{d7} 3 \text{b3} \text{g8} 4 \text{b8}^+ \text{h7} 5 \text{b7} \)

2 \( \text{e3} \text{g2} \)
3 \( \text{e2}^! \text{f3} \)
4 \( \text{f2}^+ \)

And White wins by direct analogy with the previous diagram.
Rook and Pawn v Bishop

Normally this is an easy win. Here we discuss two straightforward examples and some exceptional cases in which a draw can be made.

**RB Mills - Winkler**

Novi Sad Women’s ol 1990

A practical example of a basic position analysed as long ago as 1777 (Philidor). White experiences no practical difficulties by prefacing the advance of the pawn with a piece escort. Note, however, that advancing a pawn without support will lead to problems.

58 \( \text{Q}e4 \text{Q}h2 \)

**RB Cheron, after Guretzky-Corhnitz 1860**

Here we see that the win is much harder if the pawn has advanced ahead of the other pieces.

1 \( \text{Q}g1! \)

Much better than Fine’s cooperative 1 \( \text{Q}d4 \text{Q}g3 2 \text{Q}a1 \text{Q}f4 \) when Black neglects to drive the white king from its flexible post on \( d4. \)

1 ... \( \text{Q}a5 \)

White’s task is clear - he must invade with the king to \( c5 \) or \( e5 \) when it is simple to accomplish either \( d6 \) or rook to the seventh rank check, pushing Black off the board. But by constantly threatening to check back the white king Black can render this problematic, e.g. 1 ... \( \text{Q}b8 2 \text{Q}g7+ \text{Q}d6 \) and now:

- a) 3 \( \text{Q}d4 \text{Q}a7+! 4 \text{Q}c4 \) and White must begin again. (Not 4 \( \text{Q}xa7?? \) stalemate);
- b) 3 \( \text{Q}f7 \text{Q}c7 4 \text{Q}f6+ \text{Q}d7 (4 ... \text{Q}e7 5 \text{Q}g6) 5 \text{Q}d4 \text{Q}h2 (5 ... \text{Q}d8 6 \text{Q}g6 \text{Q}e7 7 \text{Q}g7! transposes to diag 5b - see Black's fourth move options whilst 5 ... \( \text{Q}b8 6 \text{Q}f7+ \text{Q}d6 7 \text{Q}c4 \) transposes to the main line) 6 \( \text{Q}g6! \text{Q}f4 7 \text{Q}g4! \) (Another key position) (5a)

7 ... \( \text{Q}d2 \) (7 ... \( \text{Q}h2 \) is met by 8 \( \text{Q}g7+ \) - the coming pair of checks is a thematic device that conquers the \( d6 \)-square, allowing the white king to invade - 8 ... \( \text{Q}d6 9 \text{Q}g6+ \text{Q}d7 10 \text{Q}c5 \) bringing \( d6 \) and \( g1 \) under control - mission accomplished) 8 \( \text{Q}g2 \) and:

- b1) 8 ... \( \text{Q}b4 9 \text{Q}b2 \text{Q}a3 10 \text{Q}b3 \text{Q}f8 (10 ... \text{Q}c1 11 \text{Q}e5+-) 11 \text{Q}b7+ \text{Q}d6 12 \text{Q}e4 \) with a mirror win to the main line: 12 ... \( \text{Q}e7 13 \text{Q}b6+ \text{Q}c7 14 \text{Q}a6; \)

- b2) 8 ... \( \text{Q}f4 9 \text{Q}f2! \) again transposing to the main line.

Other first moves for Black are also insufficient:

- a) 1 ... \( \text{Q}h2 2 \text{Q}g7+ \text{Q}d6 3 \text{Q}g6+ \text{Q}d7 4 \text{Q}d4 \) transposes to 1 ... \( \text{Q}b8; \)

- b) 1 ... \( \text{Q}d8 2 \text{Q}g7+ \text{Q}d6 3 \text{Q}g6+ \text{Q}d7 4 \text{Q}e5 \text{Q}c7+ 5 \text{Q}d6 \text{Q}a7+; \)

- c) 1 ... \( \text{Q}b6? 2 \text{Q}g7+ \text{Q}d6 3 \text{Q}g6+ \text{Q}c7 4 \text{Q}xb6 \text{Q}xb6 5 \text{Q}e5+. \)
d) 1 ... \(\text{Qd6}\) 2 \(\text{Ag6+}\) \(\text{Qd7}\) 3 \(\text{Ag4}\) transposes to 1 ... \(\text{Qb8}\).

2 \(\text{Ag7+} \text{Qd6}\)
3 \(\text{Ag6+} \text{Qd7}\)
4 \(\text{Qd4}\) Threatening to accomplish the mission of safely posting the king on c5/e5. Note that d4 is the ideal post, eyeing both key squares, and that White only occupies d4 when Black cannot immediately repel the king with checks.

After 4 ... \(\text{Qd2}\)

After 4 ... \(\text{Qb4}\) 5 \(\text{Ag1}\) \(\text{Qe7}\) 6 \(\text{Ag7}\) \(\text{Qd6}\) leads to another key position. (5b)

Because of the limited room on this flank White must avoid a few tricks:

a) 7 \(\text{Ag6+?!}\) \(\text{Qd7}\) 8 \(\text{Qe5}\) \(\text{Qf8}\) 9 \(\text{Qe6}\) (9 \(\text{d6}\)? \(\text{Qc6+}\)=) 9 ... \(\text{Ag7}\) 10 \(\text{Qf5}\) \(\text{Qf8}\) and surprisingly Black has prevented White from achieving his ideal array;

b) 7 \(\text{Qe4\!}\) \(\text{Qf6}\) (7 ... \(\text{Qf8}\) 8 \(\text{Ag6+}\) \(\text{Qd7}\) 9 \(\text{Qe5}\) \(\text{Qe7}\) 10 \(\text{Ag7}\) 8 \(\text{Ag6}\) \(\text{Qe7}\) 9 \(\text{d6+}\) \(\text{Qf7}\) 10 \(\text{Qxf6+}\) \(\text{Qxf6}\) 11 \(\text{Qd5\!}\).

Instead, 4 ... \(\text{Qe1}\) 5 \(\text{Ag7\!}\) \(\text{Qd6}\) 6 \(\text{Ag2}\) \(\text{Qb4}\) 7 \(\text{Ag6}\) \(\text{Qd7}\) 8 \(\text{Ag1}\) simply transposes 4 ... \(\text{Qb4}\) and 4 ... \(\text{Qc7}\) loses to 5 \(\text{Qc5}\).

5 \(\text{Ag2}\) \(\text{Qf4}\)
6 \(\text{Qf2\!}\) \(\text{Qb8}\)

After 6 ... \(\text{Qg3}\) the procedure is thematic: 7 \(\text{Qf7\!}\) \(\text{Qd6}\) 8 \(\text{Qf6\!}\) \(\text{Qe7}\) (8 ... \(\text{Qd7}\) 9 \(\text{Qc5\!}\)) 9 \(\text{Ag6}\) \(\text{Qd6}\) (9 ... \(\text{Qf2\!}\) 10 \(\text{Qe5\!}\)) 10 \(\text{Ag7}\) \(\text{Qf6}\) 11 \(\text{Qd7}\) \(\text{Qa3}\) 12 \(\text{Qc4}\) and the white king reaches c6.

7 \(\text{Qf7\!}\)

When the bishop is driven behind the \(\text{Qd6}\) (i.e. b8/c7/e7) the lack of coordination in the Black camp spells imminent defeat. Compare with 1 ... \(\text{Qb8}\).

7 ... \(\text{Qd6}\) (5c)
8 \(\text{Qc4}\) \(\text{Qc7}\)
9 \(\text{Qf6\!}\) \(\text{Qe7}\)

Or 9 ... \(\text{Qd7}\) 10 \(\text{Qc5}\).

10 \(\text{Ag6}\) \(\text{Qd6}\)
11 \(\text{Ag7}\)

Also 11 \(\text{Qb5}\) \(\text{Qd7}\) 12 \(\text{Ag7}\) \(\text{Qe7}\) 13 \(\text{Qb6}\) \(\text{Qd6}\) 14 \(\text{Qxe7}\) \(\text{Qxe7}\) 15 \(\text{Qc7\!}\) (JT).

11 ... \(\text{Qf6}\)
12 \(\text{Qa7}\) \(\text{Qe5}\)
13 \(\text{Qa6}\) \(\text{Qf8}\)
14 \(\text{Qe6\!}\) and wins

**Special draws**

In nearly all positions with rook and pawn against bishop White has excellent chances of winning as long as he is not immediately losing back his pawn. Exceptions to this may occur when the pawn is a rook’s pawn (diags 11-16), and the special cases discussed here.

**Averbakh 1978**

A very sad sight - White can do nothing to utilise his extra pawn.
The same pathetic picture,

\[ \text{del Rio 1750} \]

1. \( \text{bxc7} \) \( \text{cxd5} \)  

After 1 ... \( \text{b5} \)? 2 \( \text{f7!} \) \( \text{g7} \) 3 \( \text{f5} \) \( \text{a4} \) 4 \( \text{b7} \) 5 \( \text{e6} \) 6 \( \text{h5} \) Black is on much too short a diagonal, i.e. 6 \( \text{d7} \)  

\[ \text{Elekes (end of study) 1936} \]

1. \( \text{b4} \) \( \text{d7} \) 2. \( \text{a5} \) \( \text{d8} \) 3. \( \text{e1} \) \( \text{c7} \) 4. \( \text{c3} \)  

This is a positional draw - the black king cannot relieve the rook of guard duty. The white king can always shoulder it out.  

This shows that caution must be used when the king is separated from the pawn, even when defended from the rear. (Compare with exceptional \( \text{b} \) vs \( \text{e} \))

\[ \text{Averbakh, from praxis, 1978} \]

1. \( \text{c6} \)?  

Instead, White should play 1 \( \text{c6} \) 2 \( \text{g7} \) 3 \( \text{h4} \) 4 \( \text{f7} \) 5 \( \text{g8} \) 6 \( \text{b4} \) 7 \( \text{c3} \) 8 \( \text{g6} \) with a winning rook against bishop position) 8 \( \text{g8} \) 9 \( \text{g5} \) 10 \( \text{g6} \) wins 9 \( \text{g8} \)  

White draws with ... \( \text{g7} \). This positional drawing theme is worth noting. Moral: a pawn with a rook behind it cannot be surrounded like this.
Rook v Bishop

Dangerous Corner

Averbakh 1978, after Guretzky-Cornitz 1863

The win is normally straightforward if the queening square is of the same colour as the bishop.

1... f5 g2

Safe Corner

The ending of rook and wrong rook’s pawn presents considerable technical difficulties and is only winning by force if the pawn has not advanced past h4 or if the defending king can be cut off.

Averbakh 1978

Even with the ‘right’ bishop for the corner the position is still an easy win if the king can be cut off.

1... g5! g6
2... h4 g3
3... h5

There is no fear about advancing now that the black king is cut off.

13... h6 h7
4... g7 h6
5... g3 f7

If Black moves the bishop then 6... h7-a7 and h7 is decisive.

6... g4! f6
7... h6 f7
8... a7!

Otherwise ... f7 crawls back to safety.

8... g6
9... e5 xh6
10... f6

With one of the basic... winning positions (rotated).

Cozio 1766

1... c7 e4

This highlights the importance of the safe corner. White’s extra pawn is meaningless - Black’s king cannot be evicted from the corner so the position is a draw. As always, the pawn rushing ahead of the king is a mistake.
Rook v Bishop

**RB Lequesne 1858**

1. **Qb7!**

The only move, since the rook's pawn is again too far advanced to win by "normal" means. So, if 1. **Qc7** **Qg8** 2. **Qg7+** **Qf8**! and White cannot make progress: 3. **Qg4** **Qc2** 4. **Qd4** **Qb1** 5. **Qd8+** **Qf7** 6. **Qd2** **Qe4** 7. **Qf2+** **Qg8**. (Compare with the rook's pawn on the fourth rank.)

1. **Qa2**
2. **Qg5**
3. **Qg7**
4. **Qb7+**
5. **Qg6**

**RB Guretzky-Cornitz 1863**

1. **Qh6** **Qg8**

1... **Qd5** leads to methodical death by Lequesne: 2. **Qd7** **Qe6** 3. **Qd8+** **Qg8** 4. **Qg5** **Qg7** 5. **Qd7+** **Qh8** 6. **Qg6** **Qb3** 7. **Qh7+** **Qg8** 8. **Qe7** **Qb8** (8... **Qf8** 9. **Qg7** and cutting by one file with the black king out wins easily) 9. **h5** **Qd5** 10. **Qh7+** **Qg8** 11. **Qe7** **Qh8** 12. **h6** **Qa2** 13. **h7**.

2. **Qg7+**
3. **Qf8**

2... **Qh8** 3. **Qe7** leads to Lequesne.

3. **Qg5**

Now White needs to extract his king. He threatens 4. **Qh5** **Qf3+** 5. **Qg6** since 5... **Qg8** 6. **Qh6+** and 7. **Qf5** wins. If 3. **Qg3** **Qc2** 4. **Qh5** **Qf7** we reach diag 16 with White to move. This is a problem, as we shall see.

3. **Qf7**
4. **Qg3**

With the idea of 5. **Qg5** since 5... **Qg7** fails to 6. **Qf4+**.

4. **Qc2**
5. **Qh5**

Zugzwang! See comments to diag 16 below. This appears to be a helpful clarification point that has not been noted before. Here, with Black to move, the win is achieved after:

5. **Qd1+**

Alternatively: 5... **Qf8** 6. **Qg5** **Qd1+** 7. **Qg6** **Qg8** 8. **Qc3!**
9. **Qf8** 10. **Qc8+** **Qe7** 10. **h5**; 5... **Qd1+** 6. **Qg5** **Qg7** 7. **Qc3! (a key point is that Black cannot get onto the b1-h7 diagonal before the h-pawn crashes through) 7... **Qe2** 8. **h5** **Qb5** 9. **h6+** **Qh7** 10. **Qc7+** **Qh8** 11. **h7**; 5... **Qa4** 6. **Qg5** **Qg7** 7. **Qc3** and again there is no way back to the b1-h7 diagonal in time; or 5... **Qb1** 6. **Qg5** and Black can no longer hinder with successful extraction.

6. **Qg5**
7. **Qf5** is the only other method of preventing but after 7. **Qh6** **Qc2** 8. **Qg2** and 9. **Qf2(+)** Black will cede the f-file.

7. **Qh6** **Qf7**

Otherwise the rook retreats with tempo on the bishop and
Rook v Bishop

then checks on the f-file.

8 \( \text{Ag7+} \rightarrow \text{Af6} \)

The difference now is that Black must guard \( g6 \) with his king since the bishop has left the diagonal. After 8 ... \( \text{Af8} \)

9 \( \text{Ag1} \rightarrow \text{Ae2} \)

10 \( \text{Ag2} \rightarrow \text{Ad3} \)

11 \( \text{Af2+} \)

This is a key position. The best policy for White is to put Black into zugzwang.

1 \( \text{Ag5} \rightarrow \text{Ad1+} \)

2 \( \text{gh6} \rightarrow \text{Ac2} \)

3 \( \text{Ag7+} \rightarrow \text{Af8} \)

4 \( \text{Ag3} \rightarrow \text{Af7} \)

a) 4 ... \( \text{Qe4/Qf5} \rightarrow \text{Qg5}; \)

b) 4 ... \( \text{Qd1} \rightarrow \text{Qg6} \rightarrow \text{Qg8} \)

6 \( \text{Ag3} \rightarrow \text{Qg4} \rightarrow \text{Qb3} \)

c) 4 ... \( \text{Qa4} \rightarrow \text{Qg5} \)

This is a key position. The threatening \( 6 \text{gh5} \) and now if

c1) 5 ... \( \text{Af7} \rightarrow \text{Ag7+} \rightarrow \text{Af8} \)

(6 ... \( \text{Af6} \rightarrow \text{Ag4} \)

7 ... \( \text{Ag6} \rightarrow \text{Ag8} \)

5 ... \( \text{Qf5} \)

White has transferred the move to Black. This is now

diagram RB15 after 5 \( \text{Qf5} \).

Rook and Pawn v Bishop and Pawn

RB Enevoldsen 1949

1 \( \text{Af7} \rightarrow \text{Af2+} \)

2 \( \text{Qe1} \)

2 \( \text{Qg1?} \)

loses immediately

after 2 ... \( \text{Af7} \rightarrow \text{Qe6} \rightarrow \text{Af7} \)

2 ... \( \text{Qg2} \)

3 \( \text{Qd7} \rightarrow \text{Af7} \)

The beginning of an inevitable hunt and drive process against the white king.

4 \( \text{Qg4} \rightarrow \text{Qe7+} \)

5 \( \text{Qd2} \rightarrow \text{Qf2} \)

6 \( \text{Qd3} \rightarrow \text{Qe5} \)

7 \( \text{Qc8} \rightarrow \text{Qe3+} \)

8 \( \text{Qd4} \rightarrow \text{Qf3} \)

9 \( \text{Qd7} \rightarrow \text{Qf4} \)

10 \( \text{Qg4} \rightarrow \text{Qg3} \)

RB D Cramling - Winsnes

Stockholm open 1988

A practical example of an Averbakh position. The weakness of the \( g5 \)-pawn disallows the freedom necessary to mount threats.

71 \( \text{Qh2+} \rightarrow \text{Qg6} \)

72 \( \text{Qd4} \rightarrow \text{Qb8} \)

73 \( \text{Qf3} \rightarrow \text{Qb3+} \)

74 \( \text{Qe3} \rightarrow \text{Qf6} \)

75 \( \text{Qe4} \rightarrow \text{Qb5} \)

76 \( \text{Qf3} \rightarrow \text{Qe6} \)

77 \( \text{Qe4} \rightarrow \text{Qe5+} \)

78 \( \text{Qf3} \rightarrow \text{Qd5} \)

79 \( \text{Qe1} \rightarrow \text{Qc4} \)

80 \( \text{Qb2} \rightarrow \text{Qb5} \)

Note that even if we place

the white king on \( f3 \) and the black king on \( c2 \) in diag 18

White draws by 1 \( \text{Qxg5!} \rightarrow \text{Qxg5} \)

357
An interesting ending with adjacent pawns. First White prepares the advance of the g-pawn.

68 ... \(g3\)
69 \(f8+\) \(d4\)
70 \(g7\) \(b8\)
71 \(g6\)

Obviously not 71 \(xf6??\)

71 ... \(e5+\)
72 \(e8\) \(c3\)
73 \(g3+\) \(e4\)
74 \(g4+\) \(d3\)
75 \(c4\) \(d2\)
76 \(g4\) \(c5\)
77 \(f5\)

The first stage is complete. Now White manoeuvres to combine pressure against \(f6\) and drive the black king from attacking \(g4\).

77 ... \(g3\)
78 \(e8\) \(d2\)
79 \(g8\) \(c3\)
80 \(d8!\)

The bishop proves surprisingly vulnerable on the long diagonal.

80 ... \(h4\)
81 \(d3\) \(b2\)
82 \(d1\)

Preventing 82 ... \(c1\) and getting checking room.

82 ... \(c3\)
83 \(h1+\) \(g3\)
84 \(c1+\) \(b2\)

Also possible is 84 ... \(d2\)

85 \(g1+\) \(f2\) 86 \(d1\) \(g5\)
86 ... \(e2?\) 87 \(xd2+\) \(xf2\)
88 \(xf6\) or 86 ... \(c3\) 87 \(d3\)
81 88 \(a3\) \(d4\) 89 \(a4\) \(c3\)
90 \(a6\) \(g3\) 91 \(a3\) 87 \(d8\)
92 \(g3\) 88 \(g8\) \(h4\) (88 ... \(h4\)
89 \(g6\) 89 \(g7\) \(f3\) (89 ...
93 \(h3\) 90 \(h7\) \(g3\) 91 \(h5\)
93 \(h3\) 92 \(f4\) 90 \(h7\) and now:

a) 90 ... \(e1\) 91 \(h6\) \(c3\) 92

b) 90 ... \(f2\) 91 \(h6!\) (91

92 ... \(f2\) 93 \(d3\) and wins as in earlier notes) 93 \(a3\) and the bishop on \(d4\) will not be able to maintain the diagonal;

c) 90 ... \(g3\) 91 \(h3\) \(g2\) 92

\(h6\);

d) 90 ... \(g3\) 91 \(h5\) and wins as in the note above.

85 \(c2\) \(d4\)
86 \(d2\) \(c5\)

Or 86 ... \(a1\) 87 \(a2\) \(d4\) 88

\(a3+\) and:

a) 88 ... \(f2\) 89 \(a4!\) \(c3\)
(98 ... \(e5\) 90 \(g5\) 90 \(a6\) \(g3\)
91 \(a3\);

b) 88 ... \(h4\) 89 \(a4\) and 90

\(g5+.\)

87 \(d5\) \(e7\)
88 \(d3+!\) \(h4\)
89 \(d4\) \(g3\)
90 \(e6\)

Now the \(f\)-pawn falls: 90 ...

\(a3\) 91 \(a3+\).

1-0
**Rook v Bishop**

**RB Groszpeter - Inkiov**

*Palma de Mallorca 1989*

Another adjacent pawns ending with Black attempting counterplay against White's pawn. White wins smoothly here.

\[50 \text{d}6 \text{c}3\]

50 ... \text{d}6+\text{c}3

52 \text{d}4 \text{e}4 53 \text{b}4 \text{e}3 54 \text{d}5+ \text{e}2 55 \text{d}5+..

\[51 \text{d}6+ \text{c}4\]

52 \text{d}4 \text{e}5 \text{d}3

53 \text{b}2 \text{c}6

This defensive diagonal is no better than a6-f1.

\[54 \text{c}5 \text{e}8\]

55 \text{c}5 \text{e}6

56 \text{b}3 \text{d}2

57 \text{c}5 \text{e}8

58 \text{d}5+ \text{c}1

59 \text{e}5 \text{c}6

60 \text{c}5 \text{e}8

61 \text{e}5 \text{c}6

62 \text{b}4 \text{c}2

63 \text{e}2+! \text{d}3

Or 63 ... \text{c}1 64 \text{c}5 \text{d}7 65 \text{e}7.

\[50 \text{f}4\]

Better is 12 ... \text{g}1 and White cannot prevent ... \text{f}1, the rook taking the f-file and winning as in Fischer's intended solution. (White will be obliged to play g4 when ... h4 really does win.)

\[13 \text{f}2?\]

Both 13 g4! h4 14 g5 h3 15 g6 and 15 \text{g}4 are drawn.

\[14 \text{f}3\]

15 \text{f}2 \text{h}2

16 \text{f}1 \text{a}8

17 \text{f}2 \text{a}2+

18 \text{f}1 \text{a}3

19 \text{f}2 \text{f}3+!!

20 \text{f}x3 \text{g}1

21 \text{e}3+ \text{f}1 and wins

\[67 \text{h}2\]

Or 67 \text{g}2 h4 68 g4 \text{xg}4+ with a straightforward win (see diag 11).

\[67 \text{f}2\]

68 \text{h}3 \text{xg}3+

69 \text{h}4 \text{g}7

70 \text{c}6 \text{h}7

71 \text{d}5

Not 71 \text{e}8 \text{f}3 72 \text{xh}5+ \text{f}4+..

**RB Fischer 1969**

This position could have arisen in Reshevsky - Fischer, Los Angeles 1961.

\[1 \text{f}4\]

Not 1 \text{f}4 \text{a}5! 2 \text{d}2 \text{f}5+ 3 \text{e}4 \text{f}6 4 \text{f}4 \text{a}5 and Black's king reaches f5 after ... \text{a}4+.

\[1 \text{f}5\]

2 \text{d}6 \text{b}2

3 \text{f}4 \text{b}3+

4 \text{g}2 \text{g}4

5 \text{d}6 \text{h}2+

6 \text{g}1 \text{h}3

7 \text{e}5 \text{b}4!

8 \text{c}7

Or 8 \text{f}4 h4.

\[8 \text{g}4\]

9 \text{f}2 \text{h}2

10 \text{e}5 \text{h}1

11 \text{f}3 \text{g}8

**RB Ftacnik - Murey**

*New York open 1987*

\[60 \text{c}2+\]

61 \text{g}1??\text{f}3 draws.

\[61 \text{f}3\]

61 ... \text{e}4

62 \text{g}2+ \text{e}3

63 \text{d}5 \text{h}6

64 \text{b}7 \text{h}5

65 \text{d}5 \text{e}5

66 \text{b}7 \text{g}5

67 \text{h}2

Or 67 \text{g}2 h4 68 g4 \text{xg}4+ with a straightforward win (see diag 11).

359
Rook v Bishop

RB

22a

71 ... ♕e3
72 ♕g8 ♙h8
73 ♤f7 ♤f4
74 ♤h3 ♤d8

Not 74 ... ♤f5? 75 ♤c2+ ♤f6 76 ♦d1!
75 ♤c4 ♤d8
76 ♤e6 ♤d6
77 ♤d5?

Instead, 77 ♤f7 ♤e5 78 ♤g8! transposes into a 1924 study by Vancura, with colours reversed. (22a)

Black wants this position with White to move.

a) 78 ... ♤e5(!!) is given by Ftacnik: 79 ♤b3 (79 ♤f7 ♤f5 80 ♤xh3 ♤f4 81 ♤g6 ♤g5 82 ♤d3 ♤f5 83 ♤f6 84 ♤g6 ♤d8++) 79 ... ♤a5 80 ♤g8 ♤e5(1 reaching the desired position) 81 ♤b3 (81 ♤e6 transposes to variation c below, whilst 81 ♤h7 ♤c7 82 ♤d3 ♤d7+ JT 81 ... ♤f5+ 82 ♤xh5 ♤e3);

b) 78 ... ♤f5? 79 ♤xh5 ♤e8 80 ♤h7++;

c) 78 ... ♤a5 79 ♤b3 ♤e5 80 ♤g8 ♤e5! 81 ♤e6 ♤e5 (22b):

cl) 82 ♤f7 ♤c7 83 ♤e8 (83 ♤xh5 ♤f4 84 ♤g6 ♤e8+) 83 ... ♤f6 84 ♤e8 ♤e7 85 ♤xh5 (85 ♤a4 ♤g6++) 85 ... ♤h7++;

c2) 82 ♤d7 ♤c7 (82 ... ♤f6?! 83 ♤e8 ♤e8! 84 ♤xh5 ♤h8 85 ♤g4 and Black is in zugzwang!). 83 ♤h3 (83 ♤e8 ♤f5!) 83 ... ♤h7 84 ♤g2 (84 ♤f1 ♤e6!) 84 ... ♤f5! 85 ♤f1

½f6! This critical position is mutual zugzwang:

c21) 86 ♤d3 ♤d7 87 ♤e2 ♤f5+ will lead to main line;

c22) 86 ♤g2 is not considered by either Ftacnik or Vancura but is no simpler than other tries, it seems to me, after 86 ... ♤g7 and:

c221) 87 ♤c6 ♤g5 (intending ... ♤g6-h6) 88 ♤f5 ♤f5 89 ♤f7 (89 ♤h3 ♤g8+ intending ... ♤g5) 89 ... ♤g4+ 90 ♤xh5 ♤g7;

c222) 87 ♤f3 ♤f5 88 ♤c6 (88 ♤e2 ♤d7 89 ♤f3 ♤d2 transposes and 88 ♤d1 is met by 88 ... ♤c7 89 ♤e2 ♤d7) 88 ... ♤g5 89 ♤e8 ♤g8 90 ♤c6 ♤d8+ JT;

c23) 86 ♤a6 ♤a7 87 ♤e2 (22c) (87 ♤d3 ♤a5 and ... ♤g6-h6, whilst 87 ♤b5 loses to 87 ... ♤a1! 88 ♤c6 (88 ♤g6 ♤e8+ ♤h6+).

This is one of the main positions Black is aiming for. 87 ... ♤e7! 88 ♤d1 (88 ♤xh5 ♤h7 89 ♤g4 ♤h8! - now White is in zugzwang! - 90 ♤h4 ♤f5) 88 ... ♤d7 89 ♤e2 ♤f5 90 ♤f3 ♤d2 91 ♤c6 ♤b2+ 92 ♤g3 ♤c2 and ... ♤g5 finally wins.

77 ... ♤f2
78 ♤f3 ♤g5
0-1

RB

22b

22c

B

W

Eingorn - Zaichik
Riga 1980

59 ♤e4

Again the critical factor in this ending will be White's ability to penetrate with the king.

59 ... ♤e7
60 ♤c7 ♤d4
61 ♤b7 ♤d2

62 ♤b5 ♤c1
62 ... h5 must be tougher, although White's g-pawn is less vulnerable so probably White should win: 63 ♤b8 ♤c3 (or 63 ... ♤h6 64 ♤h8+ ♤h7 65 ♤g3 ♤d2 66 ♤f5 ♤e1 67 ♤e3 ♤f2 68 ♤e2 ♤g3 69 ♤g5 h4 70 ♤e7+ ♤g8 71 ♤g6 ♤f8 72 ♤e4) 64 ♤g8+ ♤f7 65 ♤e8

360
and now White invades as Black has no counter target with the pawn on g2 instead of g3.

63 $\text{d}5$ $\text{a}3$
64 $\text{f}4$ $\text{c}1+$
65 $\text{g}4$ $\text{f}6$
66 $\text{h}5$ $\text{g}5$
67 $\text{a}5$ $\text{d}2$
68 $\text{a}6+$

Black is hopelessly lost: 68 ...
$\text{g}7$ (68 ...
$\text{f}5$ 69 $\text{g}4+$ wins)
69 $\text{g}6+$ $\text{h}7$ 70 $\text{d}6$ $\text{e}3$ 71 $\text{d}7+$ winning.

1-0

Rook and Two Pawns v Bishop and Two Pawns

Fine 1941
This is a typical winning position.

1 $\text{d}6$ $\text{b}8$
Black must keep the white king out of c7. (Not 1 ...
$\text{b}6$
2 $\text{b}3+$.)

2 $\text{h}8+$ $\text{a}7$
3 $\text{c}7$ $\text{d}5$
4 $\text{a}3$ $\text{c}6$

Not 4 ...
$\text{b}5$ 5 $\text{d}6$ $\text{f}3$ 6
$\text{c}5$ $\text{e}4$ 7 $\text{e}8$ $\text{f}3$ 8 $\text{e}7+$
$\text{b}7$ 9 $\text{g}7$ $\text{b}8$ 10 $\text{b}6$.

5 $\text{h}6$ $\text{f}3$
6 $\text{b}6$

White has achieved maxi-

mal grip. Now follows the deci-

sive pawn storm.

6 ...
$\text{e}4$
7 $\text{b}4$ $\text{f}3$
8 $\text{a}4$ $\text{e}4$
9 $\text{b}5$ $\text{a}x\text{b}5$
10 $\text{a}x\text{b}5$ $\text{d}5$
11 $\text{d}6$ $\text{c}4$

Or 11 ...
$\text{e}4$ (other moves on the diagonal fail to other forks) 12 $\text{d}4$.

12 $\text{a}6+$! $\text{b}xa6$
13 $\text{b}6+$ $\text{a}8$
14 $\text{b}7+$ $\text{a}7$
15 $\text{b}8\#$ mate

Fine 1941
Another typical winning posi-

tion, this time with a bishop which does not control the corner square.

1 $\text{c}3$ $\text{c}7$
2 $\text{c}4$ $\text{a}6$
Or 2 ...
$\text{c}6$ 3 $\text{g}6$ $\text{b}5+$ 4
$\text{d}4$ $\text{c}7$ 5 $\text{d}5$ $\text{f}8$ 6 $\text{f}6$
$\text{e}7$ 7 $\text{f}7$ $\text{d}7$ 8 $\text{e}7+$
$\text{x}e7$ 9 $\text{c}5$ $\text{d}7$ 10 $\text{a}x\text{b}5$
$c7$ 11 $\text{a}6$ winning.

3 $\text{g}5$ $\text{f}4$
4 $\text{f}2$ $\text{e}3$
Or 4 ...
$\text{g}3$ 5 $\text{f}7+$ $\text{b}6$ 6

$\text{e}6$ $\text{c}6$ 7 $\text{f}3$ $\text{h}2$ 8 $\text{c}3+$
$\text{b}6$ 9 $\text{h}3$ $\text{f}4$ 10 $\text{d}7$ and

wins as in main line.

5 $\text{f}7+$ $\text{b}6$
6 $\text{d}6$ $\text{d}4$
7 $\text{b}3$ $\text{c}5+$
8 $\text{d}7$ $\text{b}5$
9 $\text{c}7$ $\text{b}6$
10 $\text{f}4$ $\text{e}3$
11 $\text{e}4$ $\text{c}5$
12 $\text{b}7$ $\text{g}1$
13 $\text{a}3$ $\text{c}5$

Else 14 $\text{e}5+$ and 15 $\text{b}4$.

14 $\text{a}6$ and wins
Rook v Bishop

Fortress position No.1
Averbakh 1978

However, it is possible to establish fortress positions in this endgame, as the next few examples show:

1 $g7+$ $b8
2 $d6 $f3
3 a4

3 a3 looks more testing, planning:

a) 3 ... $e4?! 4 b4 axb4 5 $g4 $d3 6 $xb4 $a7 7 $c6 with winning chances;

b) 3 ... $h1 4 $g4 (4 b4 $xb4 $a7 $a5 and Black succeeds in drawing.

1 $g7+$
2 d6
3 $f3
4 $c5 a4 5 $b6 $c8 6 $c7 $d8 7 $d6 $e7 with a fortress) 4 ... $g7 5 b4 axb4 6 $xb4 $f3 7 $f4 $g2 8 $f7+ $a6=

3 ... $h1
Or 3 ... $e4 4 b4 axb4 5 $g4 $f3 6 $xb4 $a7 7 $c7 $a6 8 $xb6+ $a5 and Black succeeds in drawing.

4 b4 axb4
5 $g4 $a7
6 $xb4 $a6
7 $c7 $a5

And the pawns are soon exchanged with a draw.

Fortress position No.2
Averbakh 1978

1 $b6?

Better is 5 $g4!.

With the idea of 4 a6.

2 a4 $e4
3 a5!

See diag 17.

Nor 1 ... $a7?? 2 $g7+ $b8 3 $xa7 $xa7 4 $c8+.
2 $g7+ $b8
3 b3 $f2
4 $c6 $e3
5 b4

And b5 +-. 

With the idea of 4 a6.
Rook v Bishop

RB  Nikolic - Kasparov
  Niksic 1983

30

61 ... \(\text{Ke2}\)
62 h5
Otherwise ... f6, ... \(\text{Kg7}, ...\) g5.

62 ... gxh5
63 \(\text{Kf3}+\) \(\text{Ke3}\)
64 \(\text{Kxh5} \text{Ka2}+\)
65 \(\text{Kh3}\)
After 65 \(\text{Kg1} f6:\)
a) 66 \(\text{Kg4} \text{Kd4} 67 \text{Kh5} f5\)
68 \(\text{Kh1} (68 \text{Kg6} \text{Kf3}) 68 ...\) \(\text{Ke3} 69 \text{Kg1} \text{Kb2} and Black's

RB  Kholmov - Tseshkovsky
  USSR Ch S-F 1973

31

1 ... \(\text{Kc2}+\)
2 \(\text{Ke3}\)?
Better is 2 \(\text{Kg1}\) trying to reach Kholmov's analysis in diag 32 (which may be difficult due to the incessant danger of ... \(\text{Kxg2}+\) and a winning pawn ending).

2 ... f5!
3 \(\text{Kf1} \text{Kd5}\)
4 \(\text{Kd4}\)

RB  Kholmov 1973

32

The insertion of ... h5 considerably complicates the winning process, since the simple plan of playing ... g5 to expose the weakness at g3 is no longer decisive.

2 \(\text{Kf1}\)
2 \(\text{Ke3}\) is again hazardous due to pawn endings, e.g. 2 ... \(\text{Kb2}\) and now:

a) 3 \(\text{Kxe2} \text{Kxe2}+ 4 \text{Kxe2}\)
\(\text{g4} 5 \text{Kf2} \text{Kh3} 6 \text{Kf3} (6 \text{f5}\) \(\text{gxf5} 7 \text{Kf3} f6 8 \text{Kf4} \text{Kg2}) 6\) ... f5 7 \(\text{Kf2} \text{Kh2} 8 \text{Kf3} \text{Kg1};\)
b) 3 \(\text{Kd5} \text{Kg4} 4 \text{Kxf7} \text{Kg2}\)
5 \(\text{Kxg6} \text{Kxg3}+ 6 \text{Kxe4} \text{Kxh4}\) and:

b1) 7 \(\text{Kxf5} \text{Ka3} 8 \text{Ke8} \text{Ka8} 9\)
\(\text{Ke6} (9 \text{Kd7} \text{Kf8}+ 10 \text{Kxe5}\)
\(\text{g3} 11 \text{f5} \text{g4} 12 \text{Ke6} \text{g5}\)
13 \(\text{Ke4} h4 14 \text{Kf3} \text{Ka8} 15\)
\(\text{g2} \text{Ka3} 16 \text{Kh2} \text{Ke3} 17 \text{Kd7}\)
h3 18 \(\text{f6} \text{Kh4} 19 \text{f7} \text{Kxe2}+ 20\)
\(\text{Kg1 h2}+) 9 \text{Kf8}+ 10 \text{Ke5}\)
\(\text{Kg3} 11 \text{f5} \text{g4};\)
b2) 7 \(\text{Ke8} \text{Kg8} 8 \text{Kd7} \text{g3}\)
9 \(\text{f5} \text{Kf8} 10 \text{Ke6} (10 \text{Ke5}\)
\(\text{g4}) 10 \text{h4} 11 \text{Kd5} h3 12 \text{f6}\)
h2 13 \(\text{Kd5} \text{g4};\)
c) 3 \(\text{Kd1} \text{Ag2} 4 \text{Kf3} \text{Kd2} 5\)
\(\text{Ka4} \text{Kd3}+\).

2 ... \(\text{Kd6}\)
3 \(\text{Kd4}\)
4 \(\text{Kg1}\)
5 \(\text{Kf1}\)
6 \(\text{Kf3}\)
7 \(\text{Ke6}\)
8 \(\text{Kd5}\)
9 \(\text{Ke6}\)
10 \(\text{Kg1}\)

363
Rook v Bishop

11 Qh7 g5!! (32a)
12 hxg5
Or 12 fxg5 f4 13 gxf4 Qxf4
14 Qf2 Qf2+! 15 Qe1 Qh2! 16
g6 Qxh4 17 Qe8 Qf3! (17 ...
Qh2! 18 Qg4!!) 18 Qe2 Qd4+
19 Qe3 (19 Qe1 Qe4+ 20
Qd2 Qe5) 19 ... Qd1.
12 ... h4
13 gxh4
Alternatively, 13 Qg2 hxg3
14 Qxg3 Qd4 15 Qh4 Qxf4

16 g6 (16 Qh5 Qd3 17 Qh6
Qh3+ 18 Qg6 Qg3) 16 ... Qd8.
13 ... Qxf4
14 Qe8
14 Qg2 Qd2+ 15 Qh3 Qd3+
16 Qh2 Qg4 17 Qc8 Qd2+ 18
Qg1 Qg3 19 Qf1 f4 20 g6 f3
21 Qe1 f2+.
14 ... Qg3
15 Qf1 f4
and wins

Averbakh 1978
The active position of the
black king enables him to win
quickly.
1 ... Qd3
2 Qf1
If 2 Qf3 then 2 ... Qf6+ 3
Qf4 h6 5 Qg2 Qxf4 6 gxf4
Qe4 7 Qg3 f5 with a won
pawn endgame.

Rook v Bishop and Two Pawns

Connected Pawns
Averbakh 1978,
after Cheron 1926
1 Qd8!
When the pawns have
reached the fifth rank, the
rook must take accurate and
decisive action from the rear.
The text is the only defence
against 1 ... d3+ 2 Qe3 Qc5+
3 Qd2 Qd4 4 Qd8+ Qc4 5
Qe8 e3+ and the (centre)
pawns on the sixth must win.
Or 3 ... Qc5 4 Qe8 Qd5 5
Qd8+ Qc4 6 Qe8 d3+ 7 Qe3
Qc5+ 8 Qxe4+.
4 Qd2 Qb5
5 Qe8! Qb4+
6 Qe2 d3+
7 Qe3 d2
8 Qd8 Qc6
9 Qxd2! with a draw
Not 9 Qxe4?? Qd6.

Klausen 1963,
after Von der Lasa 1843
1 ... Qd5
2 Qe8+ Qd4
3 Qd8 Qc5
4 Qd1!
Klausen. Not 4 Qe8? d2+ 5
Qe2 Qf3+ or 4 Qe8+? Qb4 5
Qb8+ Qc3 6 Qc8+ Qc4 and

RB
33
Averbakh 1978
+ W
B

RB
34
Averbakh 1978,
after Cheron 1926

RB
35
Klausen 1963,
after Von der Lasa 1843

364
Rook v Bishop

7 ∂d6 ∂b3!+
Not 7 ... d2 8 ∂d3+! = or 7 ... e2+ 8 ∂e1=.
8 ∂e1
This is a key position which could be reached with the rook on d8 or d7. See next diag: 36 and 37.
8 ...
The winning idea is to place the bishop so that it has two routes that influence the advance of the pawns. Now the threat of transfer to h5 - d1 is decisive. (Not 8 ... ∂c2 9 ∂d7 ∂b2 10 ∂d8 ∂c1 11 ∂xd3=.)
9 ∂c6+
For 9 ∂d8 ∂e6 see diag 36 and for 9 ∂d7 ∂e6 see diag 37.
9 ...
∂c4 and wins

\[ \text{RB} \]
\[ \text{Klausen 1963} \]

\begin{align*}
1 & \quad \ldots \quad \partial e6 \\
2 & \quad \partial d6 \quad \partial g4 \\
3 & \quad \partial c6+ \quad \partial d4 \\
4 & \quad \partial d6+ \quad \partial c4 \\
5 & \quad \partial d8
\end{align*}

\[ \text{RB} \]
\[ \text{Klausen 1963} \]

\begin{align*}
1 & \quad \ldots \quad \partial e6 \\
2 & \quad \partial c7+ \\
2 & \quad \partial d8 \quad \partial g4 \text{ transposes to the previous example.} \\
3 & \quad \ldots \quad \partial c4 \\
\end{align*}

White has prevented the transfer to h5 - d1 but loses due to his king position. If the king were on d1 then ∂d7 would defend as before. The point of ... ∂b3+! is that Black threatens both the transfer of the bishop and the array ∂c3/∂c4.

\[ \text{RB} \]
\[ \text{Klausen 1963} \]

\begin{align*}
1 & \quad \partial c7 \quad \partial d5 \\
2 & \quad \partial c8 \quad \partial d4 \\
3 & \quad \partial c7 \quad \partial e4 \\
4 & \quad \partial c8 \quad \partial d3 \\
5 & \quad \partial c7 \quad \partial e3+ \\
7 & \quad \partial d7+ \quad \partial e2 \\
8 & \quad \partial c7 \quad \partial d3 \\
9 & \quad \partial c6 \quad \partial d4 \\
10 & \quad \partial e1! \text{ drawing}
\end{align*}

Black’s inability to combine threats prevents him from making progress. So defence from the rear holds against all but centre pawns on the sixth rank.

\begin{align*}
6 & \quad \partial b1 \quad \partial d2 \\
7 & \quad \partial e2 \\
8 & \quad \partial c7 \quad \partial d3 \\
9 & \quad \partial c6 \quad \partial d4 \\
10 & \quad \partial e1! \text{ drawing}
\end{align*}
### Rook v Bishop

#### Von der Lasa 1843

* After 1... a2 2 b2 b5 3 b8+ b6 4 a8! Black cannot progress. *

#### Fine 1940

* The weakness of the knight's pawn/rook's pawn duo means that Black cannot mount threats to advance from both sides of his pawn phalanx. Here White can draw even with his passive rook. *

#### Averbakh 1978

* With two isolated pawns, the key is whether or not the side with the pawns can move his king across to the pawn which is being stopped by the rook. *
Rook v Two Knights

Rook and One Pawn v Two Knights

RNN Rinck 1923

1 This time the rook dominates the two knights.
   1 \( \text{f1} \)
   Threatening \( \text{f3} \) winning the \( \text{h3} \).
   1 \( \text{e7?} \)

Alternatively:

a) 1 \( \text{b6} \) 2 \( \text{f3} \) and \( \text{g3} \) next, skewering;

b) 1 \( \text{h6} \) 2 \( \text{h1} \).
   2 \( \text{f3} \) \( \text{g5} \)
   Or 2 \( \text{g1} \) 3 \( \text{g3} \) \( \text{e2} \) 4 \( \text{e3} \).
   3 \( \text{g3} \)
   Now White forces a skewer winning a piece: 3 \( \text{e6} \) 4 \( \text{e3} \); 3 \( \text{e4} \) 4 \( \text{e3} \); 3 \( \text{f7} \) 4 \( \text{g7} \); 3 \( \text{h7} \) 4 \( \text{g7} \).

Rook and Two Pawns v Two Knights

RNN Gavrikov - Peshina

USSR 1981

A rare example of this material balance in pure form.

52 \( \text{g4} \) \( \text{d7} \)
53 \( \text{a6} \) \( \text{e6}+\)
54 \( \text{h4} \) \( \text{e7} \)
55 \( \text{g3} \) \( \text{f1+} \)
56 \( \text{g2} \) \( \text{e3}+\)
57 \( \text{f3} \) \( \text{c4} \)
58 \( \text{h4} \) \( \text{e5+} \)
59 \( \text{g3} \) \( \text{f6} \)
60 \( \text{a1} \) \( \text{c4} \)
61 \( \text{e1} \) \( \text{d6} \)

Here 61 \( \text{e5} \) 62 \( \text{g5+} \) \( \text{f5} \)
63 \( \text{f1+} \) \( \text{e4} \) 64 \( \text{f6} \) clears a path for the pawns.

62 \( \text{f1+} \) \( \text{g6} \)
63 \( \text{d1} \) \( \text{f7} \)
64 \( \text{d5} \) \( \text{f6} \)
65 \( \text{f5+} \) \( \text{g6} \)
66 \( \text{f1} \) \( \text{g7} \)
67 \( \text{f3!} \)

Black has an ideal defensive position, so White manoeuvres to drive the black king away from in front of the pawns.

67 \( \text{f6} \)
Or 67 \( \text{e5}+ \) 68 \( \text{e4} \)
\( \text{xe4} \) 69 \( \text{g1} \).
68 \( \text{e4+} \) \( \text{g6} \)
69 \( \text{b1} \) \( \text{f6} \)

70 \( \text{b6} \) \( \text{e7} \)
71 \( \text{b7+} \) \( \text{f6} \)
72 \( \text{b1!} \) \( \text{e7} \)

Alternatively, 72 \( \text{g6} \) 73 \( \text{f6} \) 74 \( \text{g5+} \) \( \text{e7} \) 75 \( \text{f5} \) \( \text{d6+} \) 76 \( \text{g4} \) and the pawns will advance successfully.

73 \( \text{f1!} \)

Now that Black has reacted to threatened pressure on the sixth rank, White switches to cut off the black king from frontal defence. (Not 73 \( \text{b6} \) \( \text{d6+} \) 74 \( \text{d5} \) \( \text{f4+} \) 75 \( \text{e5} \) \( \text{g6+} \).)

73 \( \text{e5} \)
74 \( \text{d5} \) \( \text{e7}+\)
75 \( \text{e6} \)
76 \( \text{e1} \) \( \text{f7+} \)
77 \( \text{d5} \) \( \text{d8} \)

This clumsy knight array spells the end of defensive cohesion.

78 \( \text{g5} \) \( \text{f7} \)
79 \( \text{f1+} \) \( \text{g7} \)
80 \( \text{e5} \) \( \text{f8} \)
81 \( \text{f5} \) \( \text{f7} \)
82 \( \text{d1} \) \( \text{g6} \)
83 \( \text{h5} \) \( \text{f8} \)
84 \( \text{a1} \) \( \text{h7} \)
85 \( \text{g6} \) \( \text{h6+} \)
86 \( \text{e5} \) \( \text{f8} \)
Rook v Two Knights

Rook and Two Pawns v Two Knights and Two Pawns

RNN Witt - Radulov

Hamburg 1974

The passed pawn and knight pair win easily. The knights can simply 'gang up' on White's pawns.

44 ... g5
45 a5 h5
46 a6 d3
47 a3 e5
48 a6 f5
49 a5
Or 49 d6 h4+ 50 g2 f4+ and the f3 pawn falls.

RNN Averkin - Bronstein

USSR 1974

When both sides have passed pawns great tactical complications may arise.

51 ... c4

52 f3

Or 52 h7 c3 53 a7 xa7 54 xa7 c2 55 a1 (55 c7 c4) 55 ... d4 56 f2 c3 57 e3 b2 58 h1 e1+ 59 xcl xcl 60 d4 d2 61 e5 f7+ 62 f6 e3 63 xf7 f4+.

52 ... c3
53 e2 e4
54 d1 c4
55 e6+

55 b6? is a tricky defensive try and probably best: 55 d4 56 a7 c2+ 57 c1 c5 (57 c3 58 c6+) 58 c6 (58 d2 d3) 58 ... xc6 59 a8 60 c8 (60 g8+ c3) 60 ... d3 61 b2 and now:

a) 61 ... a4+ 62 a3 b6 63 a6+ c4+ 64 a2 c1w (64 ... c1h 65 g6+ and 66 d3+) 65 g6+ c3 66 d3+ b4 67 b3+ c5 68 b6+ d5 69 d6+ e4 70 e5+ d3 (70 ... f3 71 g3+ e2 72 e1+) 71 e4+ c3 72 d3+;

b) 61 ... cb3! 62 c+ 63 c4+ 64 f2 65 a2! and White has stalemate defences if the c-pawn queens, though ... c1?! should win.

52 ... c3
53 e2 e4
54 d1 c4
55 e6+

55 b6? is a tricky defensive try and probably best: 55 d4 56 a7 c2+ 57 c1 c5 (57 c3 58 c6+) 58 c6 (58 d2 d3) 58 ... xc6 59 a8 60 c8 (60 g8+ c3) 60 ... d3 61
Rook v Two Knights

Rook v Two Knights: many pawns

RNN Kasparov - Seirawan
Thessaloniki 1988
This complex ending illustrates how two knights can succeed in or fail to coordinate properly.

Note that, in general, knights work best side by side, and the array where the knights protect each other is the clumsiest.

23 ... \(\text{c}6\)??
Better was 23 ... \(\text{c}6\)!! Kasparov analyses 24 \(\text{b}4\) (24 \(\text{b}8\)?? may be most accurate, as it is harder for the \(\text{b}8\) to come into play, e.g. 24 ... \(\text{b}6\) 25 \(\text{ab}7\) \(\text{ad}7\) 26 \(\text{b}3\)) 24 ... \(\text{d}7\) and now:

a) 25 \(\text{g}8\)!! (In principle one of the rook’s main weapons in this type of ending is a foray on the flank opposite his outside passed pawn, to force either gains on this side or to coerce the black king to abandon the fight against the passed pawn. But here the white rook gets tied up) 25 ... \(\text{e}8\) 26 \(\text{d}3\) \(\text{ac}7!!\) 27 a4 \(\text{e}6\) 28 g3 (28 \(\text{c}4\) \(\text{d}6\)+ 29 \(\text{b}3\) a6 30 \(\text{a}8\) \(\text{c}7\)) 28 ... \(\text{g}5!!\) 29 f4 \(\text{f}7\) intending 30 ... \(\text{f}6=;\)

b) 25 \(\text{b}8\) \(\text{b}6\) 26 \(\text{d}3\) \(\text{e}8\) 27 b5 \(\text{d}6\) 28 a4 \(\text{e}6\) 29 \(\text{c}3\) \(\text{c}7\) 30 \(\text{g}8\) (30 \(\text{h}8\)?? \(\text{c}8\)), keeping an edge.

Better is 27 ... \(\text{d}7\) 28 \(\text{b}7\) \(\text{c}4\)+ 29 \(\text{d}3\) \(\text{xa}3\) 30 \(\text{xa}7\) (30 \(\text{c}3\) \(\text{d}6\)) 30 ... \(\text{b}5\) 31 \(\text{a}5\), with drawing chances.

28 \(\text{e}2\) \(\text{d}7\)
29 \(\text{g}8\)!!- \(\text{g}5\)
30 \(\text{a}4\) \(\text{a}5\)
31 \(\text{b}xa5\) \(\text{xa}5\)
32 \(\text{a}8\)!!
Here White goes astray. He should play 32 \(\text{g}7+\) \(\text{e}6\) 33 \(\text{xh}7\) \(\text{c}6\) 34 \(\text{g}3\) \(\text{b}6\) 35 \(\text{h}4\) \(\text{xh}4\) 36 \(\text{g}xh4\) \(\text{xa}4\) 37 \(\text{h}5\) \(\text{d}8\) 38 \(\text{c}7\)!! \(\text{f}7\) 39 \(\text{c}4\)!! \(\text{b}2\) 40 \(\text{b}4\)+-.

32 ... \(\text{c}6\)
33 \(\text{a}5\) \(\text{d}6\)
34 \(\text{g}3\) \(\text{h}5\)
35 \(\text{h}4\) \(\text{g}xh4\)
36 \(\text{g}xh4\) \(\text{c}5\)
37 \(\text{a}6\) \(\text{c}7\)
A better try was 37 ... \(\text{e}6\)!! 38 \(\text{h}8\) \(\text{c}7\) (38 ... \(\text{f}4\)+ 39 \(\text{f}2\)) 39 \(\text{xh}5\) \(\text{xa}6\) 40 \(\text{h}7\)!! \(\text{e}6\) 41 \(\text{h}5\) \(\text{d}8\) 42 \(\text{a}7\).

38 \(\text{a}7\) \(\text{d}7\)?
A blunder, but Black would also lose after 38 ... \(\text{b}7\) 39 \(\text{c}8\)!!- or 38 ... \(\text{b}6\) 39 \(\text{h}8\) \(\text{xa}7\) 40 \(\text{h}5\)+-.

39 \(\text{c}8\) 1-0
Analysis based on Kasparov’s notes.
Rook v Bishop and Knight

Rook and Two Pawns v Bishop and Knight

An interesting and rare theoretical position. I would imagine that this must be the worst connected pair for the rook. First the rook is restricted to one side since the pawns are not central, and second, the rook and a5-pawn against bishop is drawn. White manages to get even less.

41 ... $e5
42 $c5 $b6
43 $d5 $g7
44 $g5 $f6
45 $h5 $g7
46 $a3 $f8
47 $c2 $a6
48 $d3 $b6
49 $g5 $e7
50 $f5 $d6
51 $c4 $e7
52 $f6 $c6
53 $b4 $c8
54 $h6

White is so intent on doing nothing that the game is eventually drawn by repetition. There are (at least) three approaches:

a) advancing $b5;

b) advancing first with $a4;

c) cutting Black's king on the $c$-file and achieving $a4$ or $a5$. Even worse is 54 $b5+? $b6 55 $a4 $a5 56 $b3 $b6 57 $h6 $a5 58 $h7 $b6 59 $d7 $g3 and White cannot lift the blockade.

54 ... $e6+
55 $b3 $d5
56 $g6 $f4
57 $g4 $d5
58 $g5 $e7
59 $h5

Here 59 $a4 is slightly more dangerous since Black's pieces are rather loose, but the pawns will also become blockaded or overextended with correct defence: 59 ... $d5 (59 ... $b7 and ... $c6) 60 b5+ $c5 and now:

a) 61 b6 $c6 62 b7 $b8!= intending ... $c7 (not 62 ...
$b6? 63 $g6 $d7 64 $a5 $c5+ 65 $c4 $xb7 66 $a6+);

b) 61 $a5 $f4 62 $f5 $xb5
63 $xd5+ $a6 is a theoretical draw - cf RB13.

59 ... $d5
60 $c4 $e3+
61 $b3 $d5
62 $h6 $b6
63 $h1!

Ermenkov considers the threat of $c1, and the occupation of the $c$-file in general, to be winning. However, he does not analyse the ending at all. As noted earlier, if this is lost, then all rook and two connected pawns v bishop and knight should win. 63 ... $d5
Or 63 ... $b5. 64 $c1+ $b6
65 $c4 Ermenkov suggests 65 $c2? intending 65 $c2 $d6 66 $a4 winning. (Even here 66 ... $b6+ simply drives the white king back.) But the basic idea of using $a4 to help advance the pawns is the most threatening, and makes it difficult for Black to maintain piece coordination: 65 ... $e7 66 $a4 $f8 67 $d2 and now:

a) 67 ... $c7 68 $f2 $e7!
(68 ... $d6?! 69 $f6 $c6 70 $a5 and Black is in danger of having to misplace his king on the $d$-file) 69 $f7 $h4 70
Rook v Bishop and Knight

\[ \text{Rb7 Kg5 71 Kg7 Ke3 72 Kg6+ Bb7 73 Ka5 when Black has again regrouped efficiently. This array takes much of the punch out of the white king advancing on the a-line;} \]

b) 67 ... c3+ (keeping the king from a4/a5 seems safest, though not essential) 68 Bb3 a5 69 a4 (69 Kb2 Ke7 70 Kf2 d6 71 Kf6 c7 72 a4 d4+ 73 c4 c6 74 b5 a5+ 75 d5 Bb4) 69 ... c7 70 Bd8 Ke7 71 Bd7 Kh4 72 Bd6+ Bd7 73 Kc4 Bb4 and Black has reorganised his defence. White is sorely handicapped by the fact that the advance a5 allows the knight to sacrifice itself for the b-pawn. The advance of the b-pawn invites a blockade, and has little punch since the a5-advance is then difficult to achieve.

65 ... c3+ 66 Bb3 c5 67 Ke2 Ke7 68 Ke1 Bd6 69 Bb2

Another interesting theoretical position. Black has established a blockade. White finds no way to mobilise the pawns, or approach them with his king.

48 Kh5 Bd6 49 Be3 Bc6 50 Bf4

This is safer than 5 Bb3+! and now:

a) 5 ... Bf6 6 Bf2 Bc3+ 7 Be2 Bg5 (7 ... Be7 8 Bb7 and White can threaten f5 from c8 or h3 etc. which makes the idea of ... Bd4 impractical) 8 Bb7 (White tries to maintain the option of either sacrificing on e4 or blockading if ... f4. Not 8 Bc6 Bb4 9 Bb3 e4 10 Bc5 Bb3 11 Bxe4 Bxe5 9 ... Bh4 9 ... Bf2 10 Bf2+ Bf4 11 Bc3 Bb4 12 Be3=)

b1) 8 ... Bb3 9 Bb3 e4 10 Bc5 Bc3 11 Bxe4 Bxe5 9 ... Bf3 10 Bf3 Bg5 11 Bb3 and Black has not made progress;

b2) 8 ... Bb3 9 Bb3 e4 10 Bb3+ Bb4 11 Bc3+ Bb3 12 Be3=

b3) 8 ... f4! 9 Be4+ Bb2 10 Bb5! (This is clearly a most dangerous ... f4 position, but White can still organise a defence. Not 10 Bb3 f3+ 11 Bc2

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f2-+ or 10 ♜d2 ♞e3+ 11 ♣d1 ♜f2 12 ♜d5 ♝d3 13 ♛c4 ♞d4 14 ♛c2 e4+ 10 ... ♞e3+ 11 ♣d2 ♜f2 12 ♣d5 ♛e3 12 ♜d5 and White has organised a blockade. (But not 12 ♝h3+? ♝xh3 13 ♝xh3 e4+-.)

5 ... ♝f4+
6 ♝e2 ♝a2+
7 ♝f3 ♝a3+
8 ♝g2 with a draw

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Szymczak - Sznapik
Polish ch 1983

Here the pawns are split, and Black’s king is distant, so White has chances to erect a piece barrier similar to the one in diag 6, or to cross with his king.

45 ... ♝d4

This cuts the king.

46 ♛c2 ♝d7

Instead 46 ... ♝d6 47 ♜xe3 ♝f6 48 ♛c2 transposes into the game.

47 ♜e1 ♝g6?!

Much better was: 47 ... ♝f6! and now:

a) 48 ♛c2!? (trying to build a bridge to cross with the king looks the best idea) 48 ... h5 (48 ... ♝g5 49 ♜f3+ ♝f4 50 ♝h4=) 49 ♛d3 h4 (49 ... ♝g5 50 ♛d2 ♝g4 51 ♜e2 f4 52 ♝f2 and White will achieve ♜e2 and ♛f3, when he should hold) 50 ♛d2 h3 51 ♜f3 ♝h7 52 ♝h2 ♝h7 53 ♜f1 ♝f3 (53 ... ♞e5 54 ♝xh3 ♝h7 55 ♜f3+ ♝f4 56 ♝xf5=) 54 ♝e2 ♞e5 55 ♝el ♝e4 (55 ... ♝f4 56 ♝f2 mutual zugzwang?!) and:

a1) 56 ♝e2 ♝g1+ 57 ♝f1 (57 ♞h1 h2; 57 ♛d2 ♝g2=) 57 ... ♞h1;

a2) 56 ♝f2? ♝f4 57 ♛e2 ♝g1 58 ♝xh3 (58 ♜f3 ♝xf1) 58 ... ♞h1+-;

b) 48 ♜f3 h5 49 ♜c2 (this is reminiscent of the defensive tries in diag 6) 49 ... f4 (49 ... ♝d5 50 ♝h4 will force ... f4) 50 ♛d1 ♝d3 51 ♜e2 ♝d8 (51 ... ♝d6 52 ♛d2 ♝d5 53 ♜d1) 52 ♝h4 ♝g5 53 ♜f3+ ♝g4 54 ♛d2+ ♝h4 55 ♛d1 ♝e8 56 ♝e1 ♝g3 57 ♝f1 h4=+. White does not succeed in using the king in defence.

48 ♜f3 ♝d6?

48 ... ♝f6 still looks better, aiming for the previous note.

49 ♛c2 ♝f6
50 ♛h4 ♝f4
51 ♛f5 ♝d5
52 ♛xh6 ♝g5
53 ♜f7+ ♝h4
54 ♝h6 ♝h5
55 ♛f5 ♝g5
56 ♛e7 ♝e5
57 ♛d2 ♝d3
58 ♛e4

Here the players agreed a draw since 58 ... ♝f4 (58 ... ♝f2 59 ♛e2 ♝e5 60 ♜xf2 ♝xe4 61 ♜d5=) 59 ♜xf3 ♜xf3 60 ♛d3 and in both cases the knight regains contact with the king.

½-½
Rook v Bishop and Knight

Rook and Two Pawns v Bishop, Knight and One Pawn

**RBN Tal - Geller**

Moscow 1967

88 ... \texttt{\textsection}d6(?)

88 ... \texttt{\textsection}e5! makes it harder for White to organise a defence. In fact, I do not see how the white king can get back in time to isolate the a-pawn from the black king: 89 \texttt{\textsection}e3 (89 \texttt{\textsection}h4 \texttt{\textsection}e6) 89 ... \texttt{\textsection}d6 90 \texttt{\textsection}f7 (90 \texttt{\textsection}f5 \texttt{\textsection}d5 and White does not get his king back) \texttt{\textsection}d5 91 \texttt{\textsection}e8 \texttt{\textsection}d4 and now:

a) 92 \texttt{\textsection}h3 \texttt{\textsection}c3 93 \texttt{\textsection}d8 (93 \texttt{\textsection}h4+ \texttt{\textsection}d3 is impossible) 93 ... \texttt{\textsection}xb3 94 \texttt{\textsection}c7 \texttt{\textsection}c4 95 \texttt{\textsection}b6 \texttt{\textsection}b4 and ... \texttt{\textsection}d4++;

b) 92 \texttt{\textsection}g3! \texttt{\textsection}c3 93 \texttt{\textsection}g4+ \texttt{\textsection}d3 94 \texttt{\textsection}d8 \texttt{\textsection}xb3 95 \texttt{\textsection}c7 \texttt{\textsection}d4 (95 ... \texttt{\textsection}d4) 96 \texttt{\textsection}b6 \texttt{\textsection}c4

97 \texttt{\textsection}g5 \texttt{\textsection}b3 and:

b1) 98 \texttt{\textsection}g4+ \texttt{\textsection}d4+ 99 \texttt{\textsection}a6 \texttt{\textsection}b4 100 \texttt{\textsection}g5 \texttt{\textsection}c5+!+ (100 ... \texttt{\textsection}xa4?? 101 \texttt{\textsection}xa5++);

b2) 98 \texttt{\textsection}b5 and:

b21) 98 ... \texttt{\textsection}d2 99 \texttt{\textsection}b7 \texttt{\textsection}c5++;

b22) 98 ... \texttt{\textsection}b4 99 \texttt{\textsection}h5;

b23) 98 ... \texttt{\textsection}f6! 99 \texttt{\textsection}xb3 (99 \texttt{\textsection}h5 \texttt{\textsection}d4+ and ... \texttt{\textsection}b4 -- or 99 \texttt{\textsection}a6 \texttt{\textsection}d8 100 \texttt{\textsection}b8 \texttt{\textsection}c5+ 101 \texttt{\textsection}a7 \texttt{\textsection}f6+--) 99 ... \texttt{\textsection}d8+

89 ... \texttt{\textsection}f5 \texttt{\textsection}c5

90 \texttt{\textsection}e8!

The b3-pawn is doomed so White prevents a black king invasion. (Not 90 \texttt{\textsection}e3 \texttt{\textsection}d5 91 \texttt{\textsection}h3 \texttt{\textsection}d4 and ... \texttt{\textsection}c3 will win the b3-pawn.)

89 ... \texttt{\textsection}xb3

Not 90 ... \texttt{\textsection}d5 91 \texttt{\textsection}d8+.

91 \texttt{\textsection}e4 \texttt{\textsection}c5+

92 \texttt{\textsection}d4 \texttt{\textsection}xa4

93 \texttt{\textsection}c4 \texttt{\textsection}b6+

94 \texttt{\textsection}b5

In this position, Black has no chance of creating a coordinated unit to advance the pawn - his king is unable to participate. The result now is a trivial draw.

94 ... \texttt{\textsection}c7

95 \texttt{\textsection}e6 \texttt{\textsection}d5

96 \texttt{\textsection}a6 \texttt{\textsection}c3+

97 \texttt{\textsection}c4 \texttt{\textsection}b7

98 \texttt{\textsection}e6 \texttt{\textsection}b1

99 \texttt{\textsection}b5 \texttt{\textsection}c8

100 \texttt{\textsection}a6 \texttt{\textsection}c3+

101 \texttt{\textsection}b6

Agreed drawn in view of

101 ... a4 102 \texttt{\textsection}xa4 \texttt{\textsection}xa4+ 103 \texttt{\textsection}b5=.

Rook v Bishop and Knight: many pawns

**RBN Arshansky - B. Gruzman**

corr 1969

White’s (marginal) hopes are based on a lack of entry squares for the black king and a vague resemblance to diag. 4.

51 ... d5

52 \texttt{\textsection}f1 f4

53 \texttt{\textsection}e1 d4

Selling the d-pawn to get access to e5.

54 \texttt{\textsection}xd4 \texttt{\textsection}e5

55 \texttt{\textsection}f3+ \texttt{\textsection}e4

56 \texttt{\textsection}d2+

56 \texttt{\textsection}e6!? offers better chances to coordinate a defence. White’s resources are certainly greater than shown by the game, where Black is...
Rook v Bishop and Knight

allowed to improve his king position without a struggle.

56 ... $g2 and now:

a) 57 $f1 $b2 (White has lost the checking circuit with $d2) 58 $h4 (58 $g5+ $e3 59 $d5 $b5) 58 ... $f3 59 $d7 (Not 59 $f7 $h2,+ or 59 $c8 $e3 60 $f5+ $f4 61 $h4 $h2 62 $c5 $c2 63 $e7 $f2++, when Black either achieves ... $g3, or drives the bishop from the defence of the knight on f5, as in the main variation) 59 ... $e3 60 $f5+ $f4 61 $g1 $d2 62 $c8 $d8 and:

a1) 63 $e6 $d1++; (63 ... $e5 64 $g7 $f6 65 $xh5+ $xh6 66 $f2 $f8 67 $g3 $e5 68 $e3 and White should reach a drawn rook and one pawn vs knight ending - cf RN7. This illustrates that Black should always beware of decentralising the king, even if this involves winning a piece. This kind of variation is White’s main hope.) 64 $f2 $d2+ 65 $f1 $e5 66 $c8 (66 $g7 $f6 67 $xh5+ $xh6++) 66 ... $d8 67 $a8 $e6++;  

a2) 63 $e7 $e8 64 $d5+ $g3;

b) 57 $d2+ $d3 and:

b1) 58 $c4+ and now:

b11) 58 ... $c3?! (this looks in the wrong direction) 59 $e2 $h4 (59 ... $e2 60 $f3 and White threatens $f1-f2, maximising his defensive position - the king aids in the fight against the pawns and Black’s king has been walled out. This is White’s ideal position.) 60 $f3 $h3 (60 ... $g4) 61 $f1 $g3 62 $f2 (6a). A mutually clumsy position.

Black’s pawns are too exposed to win so an ending with rook against minor piece and no pawns looks inevitable, e.g. 62 ... $b4 63 $e5 $h2 64 $g2 $c3 65 $g4 $c2+ 66 $f1 $c1+ 67 $f2 $h1 68 $xh1 $xh1 69 $f3 $f1+ 70 $e4 and $f3 draws;

b12) 58 ... $e3 (in general, Black aims at maintaining a central king and rook on the seventh, which should ensure the advance of the pawns without allowing White to reach problematic endings with minor piece against rook) 59 $f1+ $d4 60 $e2 $h4 61 $d2 $h3 62 $f1 (62 $f3 $e3) 62 ... $e3 63 $c4+ $f3 64 $d2+ $xd2 65 $xd2 $h2 66 $b5 $f2 67 $c6 $f3++;  

b2) 58 $f5+ $e3 59 $f1+ $d4 60 $d2 $h4 61 $d7 $e3 62 $f1+ $d3 63 $b5+ $e3 64 $c6 $h3 65 $e4 64 $d4 66 $c6 $e2 67 $b7 $h2 68 $f3 $e5 69 $b7 $f5 70 $f3 $g5 $g5 71 $e4 $g4 and Black will arrange ... $f3.

56 ... $e3 57 $f1+ $f3 58 $d2+ $g3 59 $e6 $a5  

Now after 60 $f1 $f3 61 $e4+ $f4 62 $d2 $b5 Black wins by combining the advance of the a-pawn with threats to the minor pieces, e.g. 63 $b3 (63 $c4 $g3 64 $d2 $e5 65 $c4 $f2 66 $e2 $h4--) $h4 64 $f2 $h3 65 $d1 $b2++.
According to Kasparov, the pawn is as safe here as on a4 and is obviously one move closer to promotion. "Black’s only chance is to break into White’s rear with his rook, threatening to attack the knight on a2 and the kingside pawns” (Kasparov).

51 ... f6
52 e4 f5
53 de3 b8
54 ed2 d8+
55 fc4 d1
56 de3 a5 4

Or 58 gxh5=.

58 ... a1
59 db3 h1

Not 59 ... h4?? 60 ac1 trapping the rook.

60 gxh5 axh3+
61 cd3 f3
62 de1! xf5
63 h6 g6

63 ... g5 also leads to a draw:
64 de4 de6 65 h7 f3+ (65 ... xh7 66 xf6+ xf7 67 xg5=) 66 de4 de3 67 xf6! xf6 68 h8+ df8 69 de2 b2 ½-½

Due to 65 ... f5 66 h7=!.

White is handicapped by a wrong rook’s pawn. Once the black king reaches the corner the rook can hunt the knight forever.

62 db4 dd7
63 db5 dc7
64 cb3 ce1
65 de4 hl
66 ca5+

White’s handicap is best illustrated by the variation 66 a4 dh5+ 67 cc5 db7 68 a5

69 cb3 dh4 70 cd5
71 cb4 dh4 72 ca6
73 cb6 dh5+ 74 cc6
75 cb5 dh5+ 76 cc4
77 cb4 dh5 78 cc5
79 cb4 (79 cc7+ db7 80 de8 ef6=) 79 ... dh4+ 80
dd4 db5 81 db6 dh4+ 82
dd4 db5 83 a6 da5 84 cc3 (84 cb3 db5) 84 ... da4=.

66 ... db8
67 cb6 db1+
68 cc6 da1

And a draw was agreed due to 69 cc3 de1.
Rook v Two Bishops

Rook and One Pawn v Two Bishops and One Pawn

Tal - Fernandez Garcia
Malaga 1981

Tal had spent a long time manoeuvring before reaching this position. The fact that White's king has been allowed across the fifth rank gives him excellent chances.

96 ... b7
97 Qf5?

Missing a chance to reach the basic winning position, though the fifty move rule would have thwarted him anyway: 97 Qd3! b8 (97 ... b6+ 98 c5 b7 99 c2 b6 100 c7 b7 101 d6), 98 c7 b6+ 99 c5 b7 100 d6.

97 ... b8!

This resource makes it clear that Black is not to be driven easily from the defence of the b-pawn.

98 c5

Alternatively:

a) 98 x b8 stalemate;

b) 98 c7 b7+ 99 d8 g7 100 c8+ (100 c5) 100 ... b6 101 c5+ c6 102 f5 b7.

98 ... d8
99 c7 h8
100 c6 h6+

Drawn by the fifty move rule. Tal's only comments about this ending were that Black should not have allowed White's king to cross the d-file (56 ... d5!), and that the final position is winning for White. He does not give any clues as to why, but I suggest:

1 d6 h8 102 c7 a7 103 c8 h7+ 104 c6 h6 105 g4! a6 106 c2+ and the b-pawn finally falls.

Black has other possibilities on move 100:

a) 100 ... f8 101 d3 b8 102 c2 b6+ 103 c5 b7 104 d6 and wins as in the above line;

b) 100 ... b8 (This is the basic nut White has to crack in order to prove a win.) and now:

1) 101 d6 g8 (101 ... b6+ 102 c5 b7 103 d7 a6 104 c7+) 102 c7 (again intending c8+, c5+ winning) 102 ... g7+ 103 d7 h7 (103 ... a7 104 c6 g6 105 f5 f6 106 d3) 104 c6 h8 is less than convincing for White (but not 104 ... h6 105 c8+ a7 106 g4+);

b) 101 d3 b6+ 102 c5 b7 103 d6! a7 (103 ... a7 104 e4 104 e4+) 104 d4+.

c) 100 ... g8 101 d3 g5 (101 ... b8 102 c2 and wins as in other lines) 102 d6 h5 103 f4+.

Diagram 1a

Tisdall 1993
(by analogy to this game)

1 e6 c6+

2 d5 c7

3 c2 c6

4 d7 c7

5 d6 and wins
Rook v Two Bishops

Rook and Two Pawns v Two Bishops and Two Pawns

**RBB Basman - Gligoric**

Hastings 1973

47 ... a4

White's pawns are more advanced but frustrated by the domination of both vital diagonals. The best White can reach is an ending with rook against bishop and pawns in which the passed pawns win handily.

48 b6+ d5
49 g6 a3

**RBB Balashov - Tukmakov**

USSR ch 1977

61 e4
62 e6 g3
63 hxg3 hxg3
64 c4 1/2

Black's passed pawn ties up White just enough to allow the black king to approach the b-pawn. (Also drawn is 64 d7 d5 and ... c4=.) The finish might have been 64 c4 d4 65 f1 b3 66 c6 (66 c7 e3 67 c6 d6 b3) 66 ... d5 67 a3 c5 68 f2+ b4 and ... a5=.

56 b8 d3
57 b6+... d2
58 c4 a2
59 c7 a7+
60 d6 a7
61 e8 a7

Another try is 62 g4!? hxg4 (62 ... a3 63 gxf5 xfx3 64 f6 a3 65 f7 a8+ 66 e7 a7+ 67 f6 a6+ 68 g5 d7+ 69 f7 a5+ 70 g4 d2 a8 69 d6+) 63 hxg4 fxg4 (63 ... a3 64 gxf5! and Black can choose between a lost ending after 64 ... xfx3 65 f6 and wins as in the previous note, or 64 ... gxf5 reaching di-

Rook v Two Bishops: many pawns

**RBB Ljubojevic - V. Kovacevic**

Bugojno 1984

An interesting theoretical position with three against three on the same side.

46 d3 d7
47 e2 d7
48 f3 d8
49 d4 d7
50 d3 c7
51 e5 a7
52 c4 a5
53 b4 a2
54 c5 b2
55 d5

White has no difficulty improving his king position, but he must create a pawn weakness to generate winning chances.

55 ... d1
56 d6 d3
57 e6 a2
58 f3 a7+
59 f7 a7
60 f8 a7
61 f8 a7

White has no difficulty improving his king position, but he must create a pawn weakness to generate winning chances.
Rook v Two Bishops

The f4-pawn is more vulnerable and the black king can become active via h6, and also press against f4.) 64 \( \text{gxg4} \) (Black now faces a difficult defence but has several advantages over the type of ending in diag 2. 65 \( \text{h4?} \) \( \text{xa6}+ \) 66 \( \text{e2} \) \( \text{a7}+ \) 67 \( \text{f3} \) \( \text{a7}+ \) 68 \( \text{f8} \) \( \text{a7} \) 69 \( \text{e5} \) \( \text{a4}+ \) 70 \( \text{f6} \) \( \text{h5} \). The g4-break is an interesting practical try, though I feel a draw is the most likely correct result.

62 \( \text{c6} \) \( \text{d7} \)
63 \( \text{c6} \) \( \text{d2} \)
64 \( \text{e7} \) \( \text{a2} \)
65 \( \text{h4?} \) \( \text{a6} \)
66 \( \text{f3} \) \( \text{a7}+ \)
67 \( \text{f8} \) \( \text{a7} \)
68 \( \text{e2} \) \( \text{a7} \)
69 \( \text{b5} \) \( \text{a8}+ \)
70 \( \text{e7} \) \( \text{h6} \)
71 \( \text{d4} \) \( \text{h7} \)
72 \( \text{e8} \) \( \text{h6} \)

Alternatively, 78 \( \text{f7} \) \( \text{h7} \)
79 \( \text{f6} \) \( \text{h6} \) 80 \( \text{d6} \) \( \text{d8} \)
81 \( \text{f8}+ \) \( \text{h7} \) 84 \( \text{e6} \) and now:

a) 84 \( \text{d2} \) 85 \( \text{e7} \) \( \text{g2} \)
(85 ... \( \text{b2} \) 86 \( \text{f8}+ \));
b) 84 \( \text{a8} \) 85 \( \text{e7} \) \( \text{h6} \)
(Best is 85 ... \( \text{a7}! \) 86 \( \text{f6} \) \( \text{a6} \). The text illustrates a dangerous variation.) 86 \( \text{g5}+ \) \( \text{h7} \) 87 \( \text{g4} \) \( \text{fxg4} \) 88 \( \text{f5} \) \( \text{a7}+ \)
89 \( \text{f6} \) \( \text{xf6} \) 90 \( \text{xf5+} \) \( \text{g8} \)
91 \( \text{g6} \) \( \text{g3} \) 92 \( \text{h3} \) \( \text{f8} \)
93 \( \text{xh5} \) \( \text{a2} \) 94 \( \text{g4} \) \( \text{g2} \) 95 \( \text{e3} \) \( \text{a4}+ \) 96 \( \text{f3} \) (96 \( \text{g5} \) \( \text{a3} \)
97 \( \text{c5}+ \) \( \text{f7=} \) or 96 \( \text{h5} \)
98 \( \text{a5}+ \) 99 \( \text{h6} \) \( \text{a6}+ \) 98 \( \text{h7} \)
\( \text{a4} \) 99 \( \text{h5} \) \( \text{a4} \) 96 ... \( \text{a3=} \).

78 \( \text{d8} \)
79 \( \text{c6} \) \( \text{e8} \)
80 \( \text{b7} \) \( \text{d8} \)
81 \( \text{e7} \) \( \text{d2} \)
82 \( \text{c6} \) \( \text{c2} \)
83 \( \text{d5} \) \( \text{c8} \)

%-%

Rook v Two Bishops and One Pawn

Two bishops and a pawn win easily against the rook.

54 ... \( \text{f5} \)
55 \( \text{a7} \) \( \text{g5} \)
56 \( \text{a5} \) \( \text{g6} \)
57 \( \text{a7} \) \( \text{g4} \)

White is playing without a king. If the rook stops the pawn, the black king assists the pawn and wins easily. A sample line is 58 \( \text{a1} \) \( \text{g3} \) 59 \( \text{f1} \) (to try to force the bishops to yield an approach for the white king) 59 ... \( \text{h5} \) 60 \( \text{e4} \) (60 \( \text{xf4} \) \( \text{g2} \) 60 ... \( \text{c7} \)
61 \( \text{g1} \) (otherwise ... \( \text{b6} \) 61 ...
\( \text{g7} \) 62 \( \text{f5} \) \( \text{f3} \) 63 \( \text{g5} \)
g2 64 \( \text{h4} \) \( \text{h2} \) (64 ... \( \text{b6}?? \)
65 \( \text{g3} \) \( \text{xf3=} \) and wins.

RBB Benjamin - A. Ivanov
Philadelphia 1988

%-%

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Rook and Knight v Rook

Introduction
Like rook and bishop v rook, this ending is generally drawn. However, in marked contrast to the suffering engendered in the former case, it is quite easy to draw against a rook and knight. Indeed, this ending is seldom played on really seriously. Naturally, there are some winning positions. But these tend to involve not only a misplaced king on the edge of the board but also some additional factor: either the defending rook also being misplaced or (and this comes to more or less the same thing) a particularly free hand for the attacker.

It is interesting to speculate why it should be so much easier to draw against a rook and knight. I can identify at least three reasons:

a) There is a considerable risk of stalemate as the attacker closes in: more so, perhaps, than with the other minor piece;

b) If the knight provides shelter for the attacking king, e.g. $\text{d6} \text{d5} \text{vs} \text{d8}$, then:
   b1) Only the three squares on c7, d7 and e7 are covered on the second rank so the defending king, depending on other circumstances, may be able to run in either direction (in contrast a bishop on d5 would cover both b7 and f7);

b2) Without additional support from the rook, the knight cannot block flank checks on the sixth rank (i.e. on b6 or d6), whereas a bishop, supported by the king, can interpose on either c6 or e6.

---

RNR  Centurini 1853

1 $\text{d3!}$

Temporising so as to force the enemy rook to c4 before improving the white rook’s position.

1 ... $\text{c2}$

2 $\text{d1}$ $\text{c4}$

3 $\text{h1}$

Now the rook can get some space since of course if 3 ...

$\text{e8} 4 \text{d6}+.$

3 ... $\text{c2}$

4 $\text{d4!} \text{b2}+$

Not 4 ... $\text{c3} 5 \text{h8}+.$

5 $\text{c6}$

Threatening 6 $\text{h8}+ \text{a7} 7 \text{b5}+$.

5 ... $\text{a8}$

The only move.

6 $\text{h3}$ $\text{b1}$

7 $\text{h2}$

Again waiting to force the black rook to the fourth rank.

7 ... $\text{b4}$

8 $\text{b5} \text{c4}+$

9 $\text{b6} \text{b8}$

Or 9 ... $\text{c8} 10 \text{c7}+ \text{b8}$

11 $\text{a6}+ \text{a8} 12 \text{a2}!$ (not 12 $\text{h7}+ \text{c6}+$). Here we have almost the same position as after White’s third move except that now his rook has more room.

10 $\text{d6} \text{b4}+$

11 $\text{c6} \text{a8}$

12 $\text{h8}+ \text{b8}$

13 $\text{c8}!$ and wins

RNR  Centurini 1850

White’s plan is to transfer the knight to c6 after which mate will quickly follow. Alternatively, if he can get the knight to b6 with the king on a6 then that will suffice. In order to move the knight he must control the sixth rank.

1 $\text{b6} \text{f8}$

Alternatively, 1 ...

If 4 ...

a) 5 ... $\text{a8} 6 \text{a7} \text{b8}+ 7$

b) 5 ... $\text{e8} 3 \text{e5}! 1 ... \text{b8}+ 2$

Or 5 ...

3 $\text{h7} \text{g8}$

4 $\text{f6} \text{d8}$

5 $\text{b8} 5 \text{b5}$ and now:

4 $\text{h7} \text{h8}$

If 4 ...

2 $\text{b8} 5 \text{b5}$ and now:

3 $\text{f6} \text{d8}$

4 $\text{a8}$

5 $\text{a7} \text{b8}+ 7$

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Rook and Knight v Rook

Although the black king is badly placed, his rook is more active than in diag 1. White is unable to transfer his rook from the c-file without freeing the black king and as a result the position is drawn.

The black pieces are both badly placed. White wins by waiting until the enemy rook goes to an even worse square - e8, after which it will have no check on the sixth rank.

In contrast to diag 4, here the black rook is actively placed, pinning the knight. As a result, Black is able to hold.

The stalemate defences make this rather complicated, though in the end White is able to transform it into a less cramped winning position where Black's king has enough air to avoid stalemate, but insufficient space to survive.
rook ends up misplaced on the e-file: 5 \( \texttt{\#f5 \#e5} \) 6 \( \texttt{\#g6} \) 7 \( \texttt{\#g5 \#g2} \) (7 ... \( \texttt{\#e5} \) 8 \( \texttt{\#g4+} \) 8 \( \texttt{\#g4} \) 9 \( \texttt{\#e2} \) 7 \( \texttt{\#g5 \#b5} \) Or 7 ... \( \texttt{\#g2} \) 8 \( \texttt{\#g4} \).

Alternatively, 8 ... \( \texttt{\#g8} \) 9 \( \texttt{\#e5 \#b8} \) (9 ... \( \texttt{\#f8} \) 10 \( \texttt{\#f5+} \)) 10 \( \texttt{\#f6+} \).

Both 9 ... \( \texttt{\#d7} \) 10 \( \texttt{\#e7 \#d6+} \) 11 \( \texttt{\#f7 \#h7} \) 12 \( \texttt{\#g7+} \) and 9 ... \( \texttt{\#e5} \) 10 \( \texttt{\#g4+} \) wins.

Rook and Knight v Rook

It is very interesting that in order to make progress the rook must abandon the seventh rank! (1 \( \texttt{\#c6?} \) fails to 1 ... \( \texttt{\#g7!} \) and 1 \( \texttt{\#b6} \) to 1 ... \( \texttt{\#b8+} \) 2 \( \texttt{\#c7 \#c8+!} \)).

Alternatively: a) 1 ... \( \texttt{\#c6} \) 2 \( \texttt{\#c7 \#c8} \) 3 \( \texttt{\#d8+} \) 4 \( \#f8 \) 5 \( \texttt{\#d8} \) 6 \( \texttt{\#d8} \) 7 \( \#f6 \) 8 \( \#d8 \) 9 \( \#f6 \).

b) 1 ... \( \texttt{\#g1} \) 2 \( \#b6 \) 3 \( \#c7 \) 4 \( \#h5 \) 5 \( \#e5! \) (threatening 6 \( \#c6 \) to meet a rook check by 7 \( \#e7 \) 5 ...)

And White wins; cf diag. 6.

Using his database Nunn has shown that the longest line is:

6 ... \( \#d4 \) \#b1+ 8 \#d5 \#b7+ 9 \#c6 \#b4 10 \#b5 \#c4+ 11 \#b6 \#b8 12 \#h5 \#c8+ 13 \#b5 \#f1\) 14 \#h1 \#c2 15 \#d4 \#b2+ 16 \#c6 \#a8 17 \#g1 \#b4 18 \#b5 \#c4+ 19 \#b6 \#b8 20 \#d6+ \#b4+ 21 \#c6 \#a8 22 \#g8+ \#b8 23 \#c8 etc. (\( \texttt{\#c8+} \))

\( \texttt{\#c4+} \).

Using his database Nunn kindly provided a longest win - it takes 33 moves:

1 \( \texttt{\#a8+} \) 2 \( \texttt{\#a7+} \) 3 \( \texttt{\#d6} \) 4 \( \texttt{\#c6} \) 5 \( \texttt{\#b7+} \) 6 \( \texttt{\#h7!} \)

Not 6 \( \texttt{\#g7? \#c8+ 7 \#b6} \) \#b8+ 8 \( \texttt{\#c5} \) (8 \( \texttt{\#a6 \#b1} \) 9 \( \texttt{\#c4 \#a1+ 10 \#b6 \#b1+} \) 8)

And we have reached diag 7 in which White wins in 24 more moves.
Rook and Bishop v Rook

Introduction

In contrast to most other endings without pawns, rook and bishop against rook frequently arises in tournament play. Most positions are drawn; but they require accurate defence especially against a knowledgable opponent.

When Ken Thompson's database was set loose on this ending, it transpired that unfortunately some positions take more than 50 moves to win; and in fact the maximum is 59. In an act of bureaucratic lunacy, FIDE then decreed that “White” should have 100 moves. This was exceedingly unpleasant for the defender and led to a high percentage of wins. Indeed I remember at 3 or 4 am on the last night of the Dubai Olympiad in 1986, coming back into the playing hall to find two different victims trying to defend, albeit against different coloured bishops: by dawn both had lost.

Now we have passed back via 75 (which was in force for a year or so) to 50 moves. And a competent defender ought to be able to last this fairly easily. Indeed with the return of sanity to the rules, we may well see fewer of these endings in practice since potential torturers will eschew what ought definitely to be drawn, in favour of some less technical winning attempt.

---

**Theoretical Positions**

This is the fundamental winning position. With the enemy king cut off on the back rank in opposition to his king, the attacker wins on every file except for some cases on the b- or g-files.

1. \( \text{f8}+ \text{e8} \)
2. \( \text{f7} \text{e2}! \)
3. \( \text{h7} \)

This waiting move forces the black rook to a worse square. The sixth rank is worst of all so first he tries the eighth.

3. \( \text{e1} \)
4. \( \text{b7} \text{c1} \)

4 ... \( \text{c8} \) leads to a typical winning sequence: 5 \( \text{a7} \text{b1} \) 6 \( \text{h7} \text{b8} \) 7 \( \text{h8}+ \text{a7} \) 8 \( \text{a8}+ \text{b6} \) 9 \( \text{b8}+ \) (cf diag 2).

5. \( \text{b3}! \)

By controlling d1 White forces the enemy rook to the sixth rank.

5. ... \( \text{c3} \)
6. ... \( \text{c8} \) loses somewhat faster: 6 \( \text{b4} \text{d8} \) 7 \( \text{a4} \text{e1} \) 8 \( \text{a4}! \text{c8} \) 9 \( \text{c6} \text{b8} \) 10 \( \text{a4} \text{d1+} \) 11 \( \text{d5} \).

And with the black rook embarrased it is possible to get the white rook to b4 with tempo.

8. \( \text{d7+} \text{c8} \)

If 8 ... \( \text{e8} \) 9 \( \text{g7} \) wins at once.

9. \( \text{h7} \text{b8} \)
10. \( \text{b7+} \text{c8} \)
11. \( \text{b4!} \text{d8} \)

Or 11 ... \( \text{d3} \) 12 \( \text{a4} \).

12. \( \text{c4}! \)

And mate follows.
A typical combination
A very similar position arose in the note starting 4 ... c8 in the Philidor position (diagram 1). White wins since when the black king flees it is hampered by the edge of the board.

1 a8+ White cannot win instantly since the rook is well placed on b4. But it is easy to shift the rook - a waiting move e.g.
1 a2 or 1 a3 would be as good. But not 1 h1? b8 2 

Szen
In contrast to the previous examples, this is a well-known drawing position since the black king has enough space to run to on the queenside.

1 h8+ c8
2 b7
2 f6+ c7 3 e5+ d8 achieves nothing.

RBR
Lolli 1763
The play is similar to the Philidor position but the proximity of the a-file makes for differences.

1 e8+ d8
2 e7
A.
2 h8? loses quickly to 3 d6 d8 4 a7 e8 5 a8+ but 2 g8 is a reasonable defence - see B. below.

1 L. 5 383
Rook and Bishop vs Rook

\[
\begin{align*}
\text{Rook and Bishop vs Rook} & \\
\text{10 a7 10 c5+ } & 9 f8+ a7 10 c5+.
\end{align*}
\]

B.

2 ... 
3 d6!
3 a7 is slightly slower:

a) 3 ... b8 4 b7+ a8 5 d6 c8+ 6 c7 f8 7 b1 f6+ 8 d6 f7 9 e1 g7

B. von Lasa 1843

It turns out that because of stalemate defences White cannot win straightforwardly. Instead he must force transposition to Lolli's position (diag 4) above.

1 e1! If 1 e8+? b8 2 c1 (2 c7 loses time to 2 ... b7! 3 c8+ b8 4 c6!) 2 ... e8 3 c6 f8 (not 3 ... b8? 4 b4 a8 5 d6 d8 6 b6 g8 7 c4) and White cannot arrange to get his bishop to d6 in view of a stalemate defence, viz. 4 b4 b8! and it still takes 26 moves to win since 5 d6?? draws after 5 ... b6+!

Instead, he can belatedly transpose back into the main line with 4 e6 g8 5 c3 c8 6 f6 (6 e5?? b6+!) 6 b8 7 d4 c8 8 c3 b8 9 e4 b7 10 a5 b1 11 e6 etc.

W

RBR

Kling and Kuiper 1846

White is unable to set up the Philidor position, e.g.

1 g7 d8?!

He could equally play 1 ... d6 avoiding line B below - and White could have played 1 e7 to force 1 ... d6.

A.

2 c7+ c8
3 e7 d6
4 e3 d1
5 e2 b1+?

This is still quite okay; but he could also pass with 5 ... d3.

6 c5 d1!
Or 6 ... c7/b8/f1 or

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Rook and Bishop v Rook

\[ \text{Rook} = \text{Bishop} \]

But not 6 ... \( \text{c1+?} \) 7 \( \text{d6} \) and White reaches the Philidor position.

**B.**

2 \( \text{c5} \) \( \text{h5+} \)

Lots of other moves also draw here (2 ... \( \text{c8} \) and \( \text{h4} \) / 1 ... \( \text{d7+} \) \( \text{c8} \) 2 \( \text{d6!} \)

The only move. Now:

A.

2 ... \( \text{b2+} \)
3 \( \text{b5} \) \( \text{b1} \)
4 \( \text{d2} \)

Zugzwang.

4 ... \( \text{b4} \)

Or 3 ... \( \text{b3} \) 4 \( \text{e2} \).
5 \( \text{c2+} \) \( \text{b8} \)
6 \( \text{h2} \) and wins

B.

2 ... \( \text{h8} \)

White can now win by manoeuvring to get his rook to the seventh rank against h3/h2/f6/e6/even h8!).

3 \( \text{b6} \)

But now there is absolutely no latitude. The only drawing move is:

3 ... \( \text{h6!} \)

For instance, if 3 ... \( \text{h2?} \) we reach diag 7.

---

**Centurini 1867**

If diag 6 is moved left one file (i.e. \( \text{c6} \) \( \text{d6} \) \( \text{e7} \) v \( \text{d8} \) \( \text{h6} \)) then it is still a draw. But if we go two files over then the black rook runs out of space. In diag 8, Black, having only one square for his rook on the eighth rank, quickly falls into zugzwang.

1 \( \text{f1} \) \( \text{g6} \)
2 \( \text{f2} \) \( \text{h6} \)

3 \( \text{a2!} \) \( \text{f8} \)
4 \( \text{g2!} \)

Forcing the rook onto the back rank.

4 ... \( \text{h8} \)
5 \( \text{d7} \) \( \text{h7+} \)
6 \( \text{d8} \) \( \text{h8} \)

If 6 ... \( \text{g7} \) 7 \( \text{f2+} \); whilst the “50 percent” 6 ... \( \text{d7+} \) fails to 7 \( \text{x} \) \( \text{d7} \).

7 \( \text{g1} \) \( \text{h2} \)
8 \( \text{g8} \) mate
"The pseudo-Philidor position"

This position was originally examined by Lolli. But from the analysis which follows it is obvious that only with a database can one really hope to make sense of it. Black is able to hold the draw against all winning attempts; but in the play which starts here and continues in diag 10 below he has to find up to 15 ‘only’ moves in a row!

In play analogous to that in the Philidor position proper, White forces the enemy rook to an inconvenient square. But because of the lack of a file to the left of the a-file, he is unable to carry out the winning manoeuvre in diags 1 and 4 and must turn to other ideas.

The database shows that this is the only drawing move:

a) 6 ... $\text{c}4?$, 6 ... $\text{a}1$ and 6 ... $\text{e}1$ all lead to the Philidor position, e.g. 6 ... $\text{c}1+$, 7 $\text{d}6$ $\text{e}1$ 8 $\text{e}4$ $\text{d}1+$ 9 $\text{d}5$ etc.

b) So does 6 ... $\text{c}8$? though in fact this loses several moves faster since after 7 $\text{d}6$ $\text{d}1+$ 8 $\text{d}5$ Black is immediately forced into 8 ... $\text{b}8$ 9 $\text{b}7+$ $\text{c}8$ 10 $\text{a}7$ etc. as in diag 2.

c) The remaining moves are much more complicated. They lose because Black is in the very long term unable to prevent White from setting up the Philidor position. But the database shows that they take: 6 ... $\text{g}1$ 47 moves, 6 ... $\text{d}1$ 45 moves and 6 ... $\text{b}3$ 45 moves respectively!

Rather than get involved in the incredibly complex lines which clearly belong later under the section on database positions, I will deal only with: 6 ... $\text{b}3$? 7 $\text{d}5$ and now after 7 ... $\text{g}3!$ 8 $\text{e}4$ and White can win in 44 more moves; but the attempt to follow the drawing line below with 7 ... $\text{h}3?$ loses immediately to 8 $\text{b}6$ $\text{c}8$ 9 $\text{e}6+$.

7 $\text{d}5$

Or 7 $\text{d}6$ $\text{h}2$! (the only move).

7 ...
8 $\text{b}7+$ $\text{c}8$
9 $\text{e}7$ $\text{b}8$ (9a)

and now:

A.

10 $\text{b}6$

This and all of the following black moves in this variation are unique.

B.

10 $\text{c}6$

Not 11 $\text{e}4$ $\text{c}7$!

11 ...
12 $\text{d}7$
13 $\text{d}2$
14 $\text{d}3$
15 $\text{c}6$
16 $\text{e}6+$ $\text{b}8$
17 $\text{d}8+$ $\text{a}7$
18 $\text{d}7+$ $\text{b}8$

Not 18 ... $\text{a}8$? 19 $\text{d}5$ $\text{b}8$ 20 $\text{d}6$ etc., as in the Philidor position.

19 $\text{d}5$ $\text{c}1+$
20 $\text{d}6$ $\text{c}7=$
Rook and Bishop v Rook

This also poses extremely difficult defensive problems. Except where indicated otherwise, all of Black's moves in the main line of the following variation are forced:

10 ... \textit{h6+}
11 \textit{e6 \textit{h}1!}
The best alternative is 11 ...
\textit{h2} but this loses in 43!
12 \textit{b7 \textit{a}8}
13 \textit{b2}
If 13 \textit{g7} Black can choose between 13 ...
\textit{h6} utilising the fact that the rook has moved from \textit{e7}: 14 \textit{e7 \textit{h}1} or 14 ...
\textit{h2}+; and 13 ...
\textit{b8}
14 \textit{f5 \textit{h}6+} 15 \textit{g6 \textit{h}3+}.
13 ...
\textit{c1+}

Also 13 ...
\textit{a7} and 13 ...
\textit{a1} draw.
14 \textit{b6 \textit{b}8}
15 \textit{f5 \textit{c}4}
16 \textit{b5 \textit{h}4}
Also 16 ...
\textit{a4}.
17 \textit{c6+ \textit{a}7}
Or 17 ...
\textit{a8}=
18 \textit{d3 \textit{f}4}
19 \textit{b7+ \textit{a}8}
20 \textit{g7 \textit{b}8}
21 \textit{g8+ \textit{a}7}
22 \textit{g6 \textit{f}7}
Here \textit{h4}, \textit{d4}, and \textit{f8} also draw.
23 \textit{e4 \textit{c}7+?}=
But 23 ...
\textit{b7/\textit{f}8} are also okay.

Important drawing methods

Cochrane
When the defender has time, this is one of the best set-ups to aim for. White cannot of course play 1 \textit{d6} in view of 1
\textit{e7 6 \textit{b}6+;}
b) 4 ...
\textit{e7}!! is playable but after 5 \textit{b6 \textit{g}7} 6 \textit{e6 \textit{g}8} (the only move) Black can still defend but has had to change defences.
5 \textit{e6 \textit{e}7}
6 \textit{d6+ \textit{c}7}
7 \textit{h6 \textit{e}5+}
8 \textit{d5 \textit{e}7}
9 \textit{a6 \textit{d}8}
10 \textit{a8+ \textit{c}7=}
In the final position if it were Black's move then either 1 ...
\textit{d7} or 1 ...
\textit{d7} would defend.

The second rank defence
This type of position looks very alarming but in fact Black defends without too much trouble. The main point is the stalemate defence:
1 \textit{d6 \textit{d}7+!}
and now if:
2 \textit{e6?? \textit{e}7+}
... is not forced but is consistent with his defensive idea.
So White must try to reset more favourably, e.g.
3 \textit{d6 \textit{d}7+}
4 \textit{c5 \textit{g}7}
Alternatively:
a) Not 4 ...
\textit{c7?? 5 \textit{h}8+}

\textit{RBR}
\textit{10}
Database Positions
It has been shown that the longest win is 59 moves. Moreover, there are 17 fundamentally different positions of mutual zugzwang.

The very long wins appear to me to arise from the fact that the extremely unfavourable diags 9 and 10 are drawn albeit only with absolutely perfect defence. There are various positions, more suitable for machines than people, in which “White” cannot immediately force the Philidor position: but on the other hand, “Black” cannot reach a proper defensive set-up - not even one as unfavourable as diags 9-10. In this case a very lengthy duel ensues.

A longest win - 59 moves found by Thompson
This is one example of a longest win (numbers in brackets indicate how many moves it is to the win):

1 ♕f5! (58)
1 ... ♖h4!
If 1 ... ♖g7? (24), best play goes 2 ♖c6 ♖g3 3 ♖a2+ ♖b8
4 ♖e4 ♖g7 5 ♖f2 ♖c7+ 6 ♖d6 ♖c8 7 ♖a2 ♖d8+ 8 ♖c6

Zytogorsky 1843
Mutual zugzwang! We have reached a position which was first investigated by L. Zytogorsky in 1843. It is in fact mutual zugzwang. The reason for this is that Black has got to abandon the c-file after which White can get in ♖d7. But this is only important with the rook on the fourth rank to support the cut ♖c4 if necessary.

14 ... ♖a3

Instead:
a) if 15 ... ♖c3? (71) 16 ♖e4 ♖b3+ 17 ♖b5 ♖c3 18 ♖c4 ♖c8 19 ♖d4 (3) and wins; and
b) 15 ... ♖a1? (16) is too far away from the king and therefore allows 16 ♖c6!+ (15) ♖a7 17 ♖c7 ♖a6 18 ♖b6+ ♖a5 19 ♖b5 ♖a6 20 ♖c5 (11) etc.
16 ♖h4!
Now 16 ♖c6+? ♖a7 leads to a draw since after 19 ♖b5+ as in b) above Black can play
Rook and Bishop v Rook

White to move could only draw after (numbering from diag 13a) 1 Rb4 Rcl (only move) 2 Rb3 Ra1 or 2 ... Rh1=. But Black to move must leave the c-file in unfavourable circumstances:

33 ... Rd2! (26)

Alternatively:

a) 33 ... Rc7? 34 Rc6+ Rd8 35 Rd5+

b) 33 ... Re3? 34 Rd1;

c) if 33 ... Rh2? - 33 ... Rg2 is even worse - 34 Rc1 and 'relatively best' is 34 ... Rb8 (6) since if 34 ... Rbl+ 35 Rac6 wins instantly; but
d) 33 ... Re2 (26) 34 Rc6+ Rd8 35 Rb1+ Rg7 36 Re4 Rb7+ 39 Rc5 transposes back into the main line.

34 Rc6+ Rd8 35 Rb1+ Rg7 36 Rb5 Rd8 37 Rb1+ Rg7 38 Re4 Rh6+ (21)

38 ... Rh4? (9) 39 Ra1+ Rb8 40 Ra4! Rh3 41 Rd6 (6) etc.

39 Rc5 Rb6!
40 Rh1 Ra6
41 Rh8

The only move.

41 ... Rb5+
42 Rc6 Rg5
43 Rh7+ (16)
43 ... Ra6
43 ... Rb8? (7) 44 Rc6 Rc8 45 Rc6 Rd8 46 Rd7+ Rc8 47 Rc7.

44 Rd5

The only move.

44 ... Ra5
45 Rc5 Rg6 (14)

And the rest is simply the Philidor position: 46 Rh2 Rg4 47 Rb2 Rh4 48 Rb7 Rh6 49 Rf7 Rf6 50 Rc4 f5+ 51 Rd5 Rf6 52 Rb5+ Rd6 53 Rb2
Rook and Bishop v Rook

\( \text{Rook and Bishop } \vdash \text{Rook} \)

\( \text{Rook and Bishop } \vdash \text{Rook} \)

My final example is from the era of 100 moves and is an extremely grim affair. Petursson kept pressing Helgi Olafsson for 86 moves before giving up. In fact, in an exemplary defensive display Helgi kept a drawn position at all times except for one slip on move 98.

Partly to remind the reader of the full horror of the 100 move rule and partly to avoid renumbering so many moves, I am retaining the original move numbers:

```
75 \( \text{h}2 \) \( \text{x}6+ \)
76 \( \text{g}2 \) \( \text{c}4 \)
77 \( \text{h}2 \) \( \text{f}6+ \)
78 \( \text{f}1+ \)
80 \( \text{d}2 \) \( \text{d}4 \)
81 \( \text{e}2 \) \( \text{f}6+ \)
82 \( \text{h}1 \) \( \text{e}2 \)
83 \( \text{f}1 \) \( \text{c}4 \)
84 \( \text{b}2 \) \( \text{h}3 \)
85 \( \text{c}1 \) \( \text{c}4 \)
86 \( \text{f}2 \) \( \text{d}3 \)
87 \( \text{d}2 \) \( \text{c}3+ \)
```

Diagram 14

```
98 \( \text{e}1? \) \( \text{d}4? \)
After 98 ... \( \text{b}8+ \)
```

```
2 \( \text{g}6 \) \( \text{a}8 \)
3 \( \text{f}7 \) \( \text{d}8 \)
Or 3 ... \( \text{a}5+ \) 4 \( \text{f}6 \) \( \text{a}8 \)
5 \( \text{e}7 \) etc.
4 \( \text{e}7 \) \( \text{b}8 \)
5 \( \text{g}6 \) \( \text{f}8 \)
6 \( \text{d}7 \) \( \text{b}8 \)
7 \( \text{e}6 \)

In contrast some sources claim that if the rook's pawn is on the seventh it is a draw: but in fact White can force a win as long as there is no immediate forced draw.

Diagram 14a

```
1 \( \text{e}5! \)
Before undertaking anything else, White must take the a-file as we shall see later.
```

```
Diagram 15
1 \( \text{b}7 \) \( \text{g}8+ \)
```

Endings with pawns

Normally, if the attacker has pawns as well then he should win quite easily. But there are some exceptional positions.

Of course, White cannot exchange rooks due to the wrong rook's pawn. It is well known that with the pawn any further back this ending is winning, e.g. if the pawn is on h6 White wins very easily by putting his rook on e7 and bishop on f7. With the pieces like this there is no stalemate defence and the threat of \( \text{g}6 \) and \( \text{e}6 \) as soon as the black rook vacates f8, can only be averted for a couple of moves.

```
2 \( \text{g}6 \) \( \text{a}8 \)
3 \( \text{f}7 \) \( \text{d}8 \)
Or 3 ... \( \text{a}5+ \) 4 \( \text{f}6 \) \( \text{a}8 \)
5 \( \text{e}7 \) etc.
4 \( \text{e}7 \) \( \text{b}8 \)
5 \( \text{g}6 \) \( \text{f}8 \)
6 \( \text{d}7 \) \( \text{b}8 \)
7 \( \text{e}6 \)

In contrast some sources claim that if the rook's pawn is on the seventh it is a draw: but in fact White can force a win as long as there is no immediate forced draw.
Rook and Bishop v Rook

a) 1 ... g7 2 h8=+ xh8 and White wins quickly after 3 e6! a3 4 f6 f3+ 5 f5 g3 6 c4 etc.

b) 1 ... e8 2 a5 g7 (if Black is going to allow h8=+ then this is the best square for the rook to be on but he still loses with best play in 26 moves - with the rook on f8 it would be 24 (cf diags 4-5) viz.

3 h8=+ xh8 4 h6 f8 5 a6 g8 6 b6 f8 7 d6 g8 8 e4 f8 9 f3 g8 10 d4 g7 11 h5 and now as in diag 5: 11 ... h3 12 d6 g2 13 g6 h2+ 14 g5 g7 15 d7+ f8 16 f6 etc.

2 a5! e8
3 f6 f8+
4 g6 f6+

4 ... e8 5 g5 is one move quicker.

5 g5 f8
6 e6 e8

6 ... xh7 leads to a win in 23: 7 a7+ h8 8 f7 g7 9 g6+ h8 10 h7+ g8 11 e7 d8 12 f5 f8 13 f6 etc.

7 f6 f8+
8 e7!

8 f7? is wrong because although White can force Black to take the h-pawn the resulting ending is only drawn - White needs the bishop on e6 after ... xh7, viz. 8 ... b8 9 g5? b2 10 g8+ (10 e6 f2+ 11 f5 g2!) 10 ... xh7=.

8 ...

Or 8 ... b8 9 a1 (zugzwang) 9 ... d7+ 10 f6 b8 11 h1 b2 12 g8+ xh7 13 a8 and wins.

9 f5 e1+ 10 a7!

Not 10 f7? a1! 11 b5 b1 12 e5 e1 13 a4 f1+ and the battle continues.

10 ...

11 c7 e1+ 12 b7 and wins.

But if the rook were on the b-file then there would be nowhere to hide without blocking the rook.

b) 1 f4 a3+
2 e4 a2

3 g3 e2+
4 d5 e8
5 c4 e7
6 d6 e1
7 c7 e2
8 e7 e7!
9 xe7 f5
10 e6 fxg4
11 e5 h5
12 f4

And a draw was agreed in view of 12 ... h4! 13 gxh4 g5 14 g3 g5!
Queen v Pawn(s)

Queen v One Pawn

**QP 1**

Queen against pawn is normally an easy win. Exceptions can arise when the pawn reaches the seventh rank just a square away from promotion, the other king being distant or the other king and queen obstructing each other.

Stalemate possibilities enable the side with either an a-pawn, a c-pawn, an f-pawn or an h-pawn sometimes to deny the side with a queen a win.

**QP 2**

For the queen to win against a b-, d-, e- or g-pawn poised on the seventh there are three steps: first, with the aid of checks, attacks and pins in the vicinity of the pawn, force the black king onto the promotion square and thus temporarily prevent the pawn's advance; second, use the breathing space gained to bring the other king one square nearer; repeat this until the king is close enough to help to win the pawn or to checkmate.

Step one:

1. \( \text{g}5 \)
2. \( \text{g}4+ \)
3. \( \text{d}5+ \)
4. \( \text{e}3 \)
5. \( \text{d}3+ \)

Step two:

6. \( \text{g}3 \)
7. \( \text{f}4+ \)
8. \( \text{f}4 \)
9. \( \text{e}4+ \)
10. \( \text{e}4 \)
11. \( \text{f}4 \)
12. \( \text{f}4 \)
13. \( \text{d}4+ \)
14. \( \text{e}3 \)
15. \( \text{f}3+ \)
16. \( \text{f}4 \)

The pawn is lost and mate is only two further moves away. It is not easy to shorten this procedure without help from the opponent.

**QP 3**

Endings of king and queen versus king and either a- or h-pawn can be complicated by stalemate factors.

In diag 3 after:

1. \( \text{a}1+! \)

... the black king is in a stalemate; White needs to release this and has no time to bring the king nearer.
Queen v Pawn(s)

After:

1 ... $a1!
2 $xc2 stalemate

The black king cannot be forced in “front” of the pawn; the white queen has to be used to stop promotion, e.g. 2 $c3+; there is no time to bring the white king nearer.

Diagram 4a

In diag 4, the white king was way out of action. In contrast, here it is close at hand and while Black can still draw he must play accurately:

1 ... $a1
2 $e3 $b2
3 $e2

Of course if 3 $d2 $bl is forced but now Black must avoid the natural-looking 3 ...

Instead Black must play:

3 ... $a1!
4 $b4
Or 4 $d2 $bl!

Diagram 5a

With his king close enough to come to b3, White wins by gradually bringing the queen so as to check along the rank from d2, forcing the black king to bl and then allowing the a-pawn to be promoted.

Play could continue 1 $b7+ $c2 2 $g2+ $bl 3 $f1+ $b2 4 $e2+ $bl 5 $d1+ $b2 6 $d2+ $bl 7 $b4 a1$ 8 $b3 and mates.

If we return to diag 5, but place the king on e4, we find it is then near enough to help give mate:

1 ... $c2
2 $c7+ $b2
3 $b6+ $c2
4 $c5+ $b2
5 $f2+ $b1
6 $b3 6 $f6 and 7 $a1 is one way to win.

6 $d3 $a1
7 $c2 mate

Lolli 1763

This is an early published example of the complexities of the a-/h-pawn battle.

1 ... $c2!
1 ... $a1?? loses to the freak line 2 $b6! $bl 3 $c5+ (or 3 $a5+) bringing the king near enough to set up mating threats - see diag 5a.

2 $a6 $b2
3 $b5+ $c2
4 $a4+ $b2
5 $b4+ $c2
6 $a3 $b1
7 $b3+ $a1!

And the stalemate idea enables Black to hold the draw.

Diagram 5a

With his king close enough to come to b3, White wins by gradually bringing the queen.
Queen v Pawn(s)

Provided the white king can be brought to b3, directly opposite the black king on the move immediately after the pawn is queened at c1, this type of king and queen against king and pawn position can be won. This is a lesson learnt from diag 5.

This condition can be fulfilled if the white king is initially on a5, b5, c5, d5 or nearer to b3.

Watch that the pawn cannot be promoted to a knight that forks.

From the diagram play goes:

1. \( \text{Qc4} \) \( \text{c1\#} \)
   If 1 ... \( \text{a1} \) of course not 2 \( \text{b3??} \) \( \text{c1\#} \) but White can win easily with 2 \( \text{d2} \) \( \text{b2} \) 3 \( \text{b4} \) \( \text{b1} \) 4 \( \text{b3} \) etc.

2. \( \text{b3} \) and wins

The white king on e5 is one square too far away from the action. If it were on either e4 or d5 then White would be winning. However, here Black to move can draw.

1. ... \( \text{c3}! \)
   And not 1 ... \( \text{d1??} \) 2 \( \text{d4} \) \( \text{c1\#} \) 3 \( \text{d3} \) and wins.

2. \( \text{a3+} \) \( \text{d2} \)
3. \( \text{b2} \)
3. ... \( \text{d1} \)

Now this is possible since after 4 \( \text{d4} \) \( \text{c1\#} \) White would have no time for 5 \( \text{d3} \).

4. \( \text{d4+} \) \( \text{c1} \)

And, for example:

5. \( \text{d5} \) \( \text{b1} \)
6. \( \text{d3} \) \( \text{b2} \)
7. \( \text{d2} \) \( \text{b1} \)
8. \( \text{b4+} \) \( \text{a2} \)
9. \( \text{c3} \) \( \text{b1} \)
10. \( \text{b3+} \) \( \text{a1=} \)

cf diag 4.

If the black king is badly placed there may be winning chances even with the white king on e5, cf diag KP16 - a superb study by Grigoriev.

Normally with the pawn two squares away from queening White would win easily. For example if we started with the king on f7 the process could go 1 \( \text{h1+} \) \( \text{b2} \) 2 \( \text{h8+} \) \( \text{b3} \) 3 \( \text{h6} \) \( \text{b2} \) 4 \( \text{f6} \) \( \text{b3} \) 5 \( \text{f4} \) \( \text{b2} \) 6 \( \text{b4+} \) etc.

However, with the king on g7, there is no way for White to activate the queen successfully since the a1-h8 diagonal is blocked, i.e.

1. \( \text{h1+} \) \( \text{b2} \)
2. \( \text{b7+} \) \( \text{c1=} \) etc.

If instead 1 \( \text{f6} \) \( \text{c2} \) 2 \( \text{e5} \) \( \text{d2=} \).

Lemaire 1973

1 c4 c1\#

Troitsky 1935

An example of the possible obstruction between the black king and queen.

1. \( \text{e6!} \) \( \text{f4=} \)
2. ... \( \text{d4+} \) 2 \( \text{d7=} \).

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# Queen v Pawn(s)

## Queen v More Pawns

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<td>Berger 1889, based on Walker 1841. Moves by 5 c1.</td>
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<td><img src="image2" alt="Chess Diagram" /></td>
<td>Grigoriev 1932, based on Berger 1889.</td>
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<tr>
<td><img src="image3" alt="Chess Diagram" /></td>
<td>Sometimes it is better for the defending side to have only one pawn rather than two! In diag 12 the b-pawn prevents Black from stalemating himself.</td>
</tr>
<tr>
<td><img src="image4" alt="Chess Diagram" /></td>
<td>J. Kossak - G. Kramer New Jersey 1988. (Benko). With a theoretical draw as</td>
</tr>
</tbody>
</table>

1. Qb4+ c1!!
   - Berger analysed 1 ... a2 2 c3 b1 3 b3+ c1 4 g5 a5 5 f4 a4 6 b4 a3 7 e3 a2 8 c3 b1 9 d2 as winning.
2. g5 a5
3. b6 d2
4. d4+ c1
5. a1+ |

+ W |

1. Qf3+ g1
2. g3+ h1
3. c4 b3
4. f2 b2
5. f1 mate |

+ B |

1. 60 ... f1+ The game went violently 60 ... c5?! 61 b7 c7 62 b8=xb8 stalemate! 61 a7 |
2. If 61 b7 e4 62 a6 d5 63 a7 f7+ 64 a6 e8 65 b7 d7+ 66 b8 c6! 67 a8+ xb6 and Black wins |
3. 61 ... a6! If 64 a6? e5! 65 b7xb8 wins. |
4. 56 a8! xb6 |
5. 66 a7 |

395
Queen v Pawn(s)

Diagram 13a

Pal Benko 1989
With the black king one square closer on e3 rather than f3 a win can be forced.

60 ... $d4
61 $b7 $g6+

Diagram 14

Kling and Horwitz 1851
White wins by means of an elegant manoeuvre.

1 $h6+ $d3
2 $d6+ $e3

Diagram 15

Berger 1914
This is a sample queen against three pawns that should help to form judgements.

1 $b2
Now:
1 ... f3 2 $b8.
1 ... g3 2 $f3 $g5 3 $c2/c3
$g2 4 $f2 $g4 (4 ... f3 5 $g3+) 5 $d2 f3 6 $e3.
1 ... h2 2 $g2 g3 3 $f3 holds up the pawns and con-
tinues $c2, $d2, $e2.
1 ... $g3 2 $h1.
1 ... $g5 2 $d8+ $g6 (2 ...
$h5 3 $f6 f3 4 $f4 paralyses the pawns) 3 $h4
$f5 4 $h5+ and the pawns start to fall.
1 ... $h5 2 $h8+ $g5 (if 2 ...
$g6 3 $h4 as in the last note) 3 $h8+ and again as in the last note.

Diagram 16

Dorogov and Kuznetsov 1970
A positional draw! White's king simply oscillates between cl and c2, while if the queen
goess to the e-file, the king moves instead between dl and d2. This is the end of a study.
Queen v Queen

Queen v Queen: No Pawns

These occur mostly as a result of both sides queening a pawn. They should normally be a draw, but exceptions occur when there are mating possibilities, as in diags 1 and 2.

1. \( Qb2+ Qg3 \)

These occur mostly as a result of both sides queening a pawn. They should normally be a draw, but exceptions occur when there are mating possibilities, as in diags 1 and 2.

1. \( Qb2+ Qg3 \)

Endings with queen and a single pawn against queen arise fairly frequently in practice. Unless the defending king can get in front of the pawn, an immediate perpetual check can be forced, or we are dealing with a “rook’s pawn”, most positions will be winning. However, the nearer the pawn gets to the edge, the harder it will tend to be, since a more advanced pawn provides only limited shelter from checks.

In common with other endings with very limited material, this ending has been put onto a database. As a result, various positions have been discovered in which it takes more than 50 moves to advance the pawn a single square: but happily FIDE has not attempted to modify the fifty-move rule in accordance with this.

We shall deal with the material starting with centre pawns and then moving gradually out towards the “rook’s file”. Mostly, the pawn is already on the seventh rank: but there are a few examples in which it starts further back. And in fact, the most difficult positions to deal with are those with the pawn on the brink of queening; for then it is close to the top (or bottom) of the board and badly placed to shelter the attacking king.
General features

As in most queen endings, the attacking side has to work to avoid checks from the defender. This can be done either by hiding behind shelter - in this case his lone pawn; or by threatening to cross-check (cf diag 8). And in order to escape it is vital to centralise the queen as much as possible so as to dominate the defending queen. Improving one’s pieces is often a higher priority than pushing the pawn (cf diagram 9a Alekhine - Stoltz when e7 is wrong).

The pawn on the seventh rank

When the pawn has reached the seventh rank, then unless the defending king can get to it or there is an immediate perpetual check, we will see a duel between the defending queen and the two attacking pieces.

In this duel, apart from checking the attacking king, the defender’s main weapon is pinning. In general, it is better to pin along a diagonal than along a rank. This is because it is easier to escape successfully from a diagonal, than from a horizontal pin.

If, for example, the e-pawn is pinned along the rank and the attacking queen covers the f-file: then the defender must be able to deal with $\text{Qf7-f8}$ forcing a diagonal pin as the only defence. Whereas if the pin is along the a3-f8 diagonal, then $\text{Qf8-f7}$, as well as allowing a pin along the rank, may expose the king to checks along the bl-f7 diagonal.

Although it may not be easy to prove the win, however, these static positions in which the defender has abandoned checks in favour of pinning will almost always be won in the end.

The pin on a pawn, one square away from promotion, against the attacking king, principally along the longer diagonal, but also along the rank, creates many technical problems. It is not possible to place the supporting queen to oversee all the pinning squares except by being on that diagonal itself.

Other factors like perpetual and harassing checks also have to be guarded against.

Despite sterling analytical work by the Russian grandmaster Yuri Averbakh and the Czech Jaroslav Pospisil, game analyses by Paul Keres and Mikhail Botvinnik and access to computer programs like BELLE these endings are often beyond human capability.

![Diagram](image)

Queen and Centre Pawn v Queen

We concentrate on such endings when the pawn is already advanced to the seventh.

The great majority of such queen and d- or e-pawn versus queen endings should be won. Exceptions arise from the inability to escape perpetual checking or difficulties in pushing the pawn to the eighth because the defending sides king is near.

**BELLE, after Speelman, after Averbakh**

Black perpetually checks by 1...

$c6+$ 2... $\text{Qf7}$ (2... $\text{Qf8}$ $\text{Qf6+}$ 3... $\text{Qf7}$ $\text{Qh8+}$) 2... $\text{Qf3+}$!

(Averbakh had analysed 2...

$c4+$ to a White win after 3

$c8$ $\text{Qc4+}$ 4 $\text{Qf7+}$ $\text{Qh6+}$ 5 $\text{Qg8}$ $\text{Qg5+}$ 6 $\text{Qg7}$ $\text{Qd5+}$ 7 $\text{Qf8}$ $\text{Qf5+}$ 8 $\text{Qf7}$ $\text{Qc5}$ 9 $\text{Qf4+}$ etc.) 3 $\text{Qg7}$ $\text{Qc3+}$! 4
Queen v Queen

Queen 4a

\[
\text{Q} \quad \text{g6} \quad (4 \quad \text{f8} \quad \text{f6}+ \quad 5 \quad \text{f7} \\
\text{h8}+ \quad \text{etc.}) \quad 4 \ldots \quad \text{g3}+ \quad 5 \quad \text{h7} \\
\text{h3}+ \quad 6 \quad \text{g7} \quad \text{c3}+ \quad 7 \quad \text{f7} \\
\text{f3}+ \quad 8 \quad \text{e8} \quad \text{c6}+. \quad \text{Black's} \\
\text{access} \quad \text{to} \quad \text{the} \quad \text{two} \quad \text{tracks} \quad \text{c6, f3,} \\
g3, \text{ h3} \quad \text{and} \quad \text{c6, f6,} \quad \text{h8} \quad \text{assures} \\
\text{the} \quad \text{draw.} \\
\]

Diagram 4a

Averbakh

Averbakh gives 1 \quad \text{f8} \quad \text{f4}+ \\
2 \quad \text{f7} \quad \text{h6}+ \quad 3 \quad \text{g8} \quad \text{g5}+ \quad 4 \\
\text{g7} \quad \text{d5}+ \quad 5 \quad \text{f8} \quad \text{f5}+ \quad 6 \\
\text{f7} \quad \text{and} \quad \text{the} \quad \text{black} \quad \text{queen} \quad \text{is} \\
\text{shunted} \quad \text{onto} \quad \text{an} \quad \text{inferior} \quad \text{net­} \\
\text{work;} \quad \text{after} \quad \text{the} \quad \text{diagonal} \quad \text{pin} \quad 6 \\
\ldots \quad \text{ff} \quad \text{c5} \quad \text{follows} \quad 7 \quad \text{f4}+ \quad \text{and} \quad 7 \\
\ldots \quad \text{d7} \quad 8 \quad \text{g4}+ \quad \text{c7} \quad \text{White} \\
\text{changes} \quad \text{which} \quad \text{player} \quad \text{is} \quad \text{to} \\
\text{move} \quad \text{by} \quad 9 \quad \text{g3}+ \quad \text{d7} \quad 10 \\
\text{h3}+ \quad \text{c7} \quad 11 \quad \text{g4}; \quad \text{now} \\
\text{Black} \quad \text{has} \quad \text{a} \quad \text{choice} - \quad 11 \ldots \quad \text{a3} \\
12 \quad \text{c4}+ \quad \text{b7} \quad (12 \ldots \quad \text{d7} \quad 13 \\
\text{a4}+) \quad 13 \quad \text{d5}+ \quad \text{preparing} \quad 14 \\
\text{f7}; \quad \text{or} \quad 12 \ldots \quad \text{b6} \quad 13 \quad \text{d5}.

Averbakh 1962, BELLE 1985

Here the defending king is too near.

1 \quad \text{f4}+ \quad \text{d7} \\
2 \quad \text{g4}+ \quad \text{c7} \\
3 \quad \text{g3}+ \quad \text{d7} \\
4 \quad \text{h3}+ \quad \text{c7} \\
5 \quad \text{g4} \quad \text{f2}+! \\
6 \quad \text{e8} \quad \text{c5}

If 6 \ldots \quad \text{f6} \quad 7 \quad \text{c4}+ \quad \text{b6} \quad 8 \\
\text{d7} \quad \text{g7} \quad 9 \quad \text{h4} \quad \text{(threatening} \\
\text{d8)} \quad 9 \ldots \quad \text{f7} \quad 10 \quad \text{d4}+ \quad \text{b7} \\
11 \quad \text{d8} \quad \text{wins} \quad \text{(Averbakh).}

Averbakh stopped in his analysis at 8 \text{f7}; Bell Labo­

ratories’ \quad \text{i.e.} \quad \text{Ken} \\
Thompson’s BELLE program \quad \text{advanced} \quad 8 \ldots \quad \text{h5}+. \quad \text{White} \\
\text{cannot} \quad \text{expect} \quad \text{to} \quad \text{win} - \quad \text{the} \\
\text{black} \quad \text{king} \quad \text{is} \quad \text{close} \quad \text{enough} \quad \text{to} \\
\text{help} \quad \text{contain} \quad \text{the} \quad \text{pawn} \quad \text{and} \quad \text{the} \\
\text{black} \quad \text{queen} \quad \text{is} \quad \text{on} \quad \text{its} \quad \text{best} \\
\text{square.}

White can force the win in only a few moves by interpos­

ing on the seventh rank. Both 
1 \quad \text{f7} \quad \text{and} \quad 1 \quad \text{g7} \quad \text{win.} \quad \text{However,} \quad \text{one} \quad \text{of} \quad \text{them} \quad \text{is} \quad \text{much} \\
\text{easier.} \\
1 \quad \text{g7}!

This is correct because 
\text{Black is unable to set up a di­
agonal pin. (If 1 \text{f7}?! \text{h2}+!} \\
2 \quad \text{g8} \quad \text{g3}+! \quad 3 \quad \text{f8} \quad \text{d6} \quad (3 \\
\ldots \quad \text{a3} \quad 4 \quad \text{d5}+ \quad \text{b8} \quad 5 \quad \text{f7} \\
\text{a7} \quad 6 \quad \text{d8}+ \quad \text{and} \quad \text{wins}) \quad \text{is} \quad \text{diag} \\
7. \\
1 \quad \ldots \quad \text{c2}+ \\
2 \quad \text{h8} \quad \text{h2}+ \\
3 \quad \text{g8} \quad \text{a2}+ \\
4 \quad \text{f7} \quad \text{g2}+ \\
5 \quad \text{f8} \quad \text{and} \quad \text{wins} \\
\text{Unfortunately, there is no} \\
\text{square} \quad \text{west} \quad \text{of} \quad \text{a2} \quad \text{so} \quad \text{White} \\
\text{wins immediately.}

A. 
1 \quad \ldots \quad \text{a6} \\
\text{Instead} \quad 1 \ldots \quad \text{c7} \quad 2 \quad \text{f7} \quad \text{d7} \\
3 \quad \text{f4}+ \quad \text{b7} \quad 4 \quad \text{f8}; \quad \text{or} \quad 1 \ldots \\
\text{c8} \quad 2 \quad \text{f7} \quad \text{c7} \quad 3 \quad \text{a8}+ \quad \text{are} \\
\text{easy.} \quad \text{Or} \quad 1 \ldots \quad \text{a7} \quad 2 \quad \text{f7} \quad \text{d7} \\
(2 \ldots \quad \text{c7} \quad 3 \quad \text{a3}+ \quad \text{b7} \quad 4 \\
\text{b4}+ \quad \text{a7} \quad 5 \quad \text{f8}) \quad 3 \quad \text{a3}+ \\
\text{b6} \quad 4 \quad \text{b4}+ \quad \text{a6} \quad 5 \quad \text{c5}

\text{399}
Queen v Queen

(Threatening 6 \( \text{f}8 \)) 5 ... \( \text{b}7 \)
6 \( \text{a}3+ \) etc. And if 1 ... \( \text{b}6 \) 2
\( \text{f}7 \) \( \text{c}7 \) 3 \( \text{b}3+ \) \( \text{a}5 \) 4
\( \text{a}3+ \) \( \text{b}5 \) 5 \( \text{d}3+ \) etc. - see
4 \( \text{d}3+ \) in the column.

2 \( \text{f}7 \) \( \text{c}7 \)
If 2 ... \( \text{d}7 \) 3 \( \text{f}6+ \) \( \text{b}7 \) 4
\( \text{f}8 \).
3 \( \text{a}3+ \) \( \text{b}5 \)
In order to avoid the standard procedure of \( \text{b}4+ \) and
\( \text{f}8 \) after which the black queen is dominated: he is
forced to advance his king (i.e.
if 3 ... \( \text{b}6 \) 4 \( \text{b}4+ \) \( \text{a}6 \) 5
\( \text{f}8 \)).
4 \( \text{d}3+ \) \( \text{a}4 \)
Black is forced onto the fifth
rank since all other moves al­
low an immediate exchange
of queens.
5 \( \text{d}4+ \) \( \text{b}3 \)
6 \( \text{f}8 \) and wins

\( \text{BELLE} \) 1985

In contrast to diag 7, here
White is able to force the win
since he can improve the position
of the queen before run­
ning his king to cover.

1 \( \text{f}5+! \)
BELLE found that strictly
speaking this is best since it
wins in the fastest manner.
The following main line is
BELLE's but we have fleshed
it out with Carbon-based (and
hence possibly fallible) side
lines.

Instead 1 \( \text{e}5+ \) was ana­
lysed by Averbakh in 1962. He
continued: 1 ... \( \text{b}7 \) (1 ... \( \text{d}7 \)
2 \( \text{b}5+! \) 2 \( \text{g}7 \) \( \text{g}4+ \) 3
\( \text{f}6 \) \( \text{f}3+ \) 4 \( \text{f}5 \) \( \text{c}6+ \) 5
\( \text{f}7 \) \( \text{c}7 \) 6 \( \text{e}4+ \) \( \text{a}6 \) 7
\( \text{a}4+ \) \( \text{b}7 \) 8 \( \text{b}4+ \) as in diag
10 above.

After 1 \( \text{f}5 \) there are two
main variations:

A.

1 ... \( \text{b}7 \)
If 1 ... \( \text{d}6 \) 2 \( \text{f}7 \) and there
is no pin and no check, whilst
1 ... \( \text{c}6 \) is wrong since it
runs into a cross-check: 2
\( \text{f}7 \) \( \text{b}3+ \) 3 \( \text{e}6+ \) (the same
objection applies to 1 ... \( \text{b}6 \)).
Or 1 ... \( \text{a}3 \) 2 \( \text{e}5+ \) (planning
3 \( \text{g}7 \)) 2 ... \( \text{c}8 \) (2 ... \( \text{d}7 \) 3
\( \text{d}5+ \) \( \text{c}8 \) 4 \( \text{f}7 \) \( \text{a}7 \) 5
\( \text{d}8+ \)) 3 \( \text{g}7 \) \( \text{a}7 \) 4 \( \text{h}8 \)
and wins.
2 \( \text{f}7 \) \( \text{c}4+ \)
If 2 ... \( \text{b}3+ \) 3 \( \text{g}7 \) \( \text{c}3+ \)
(or 3 ... \( \text{g}3+ \) 4 \( \text{f}8 \) \( \text{d}6 \) 5
\( \text{f}7 \) 4 \( \text{h}7 \) as in the note to
3 ... \( \text{d}4+ \) below.
3 \( \text{g}7 \) \( \text{d}4+ \)
Instead 3 ... \( \text{c}3+ \) 4 \( \text{h}7 \)
\( \text{c}7 \) 5 \( \text{d}5+ \) transposes back
to the main line a move quicker.
4 \( \text{g}6 \) \( \text{b}6+ \)
5 \( \text{h}7 \) \( \text{c}7 \)
6 \( \text{d}5+ \)
6 \( \text{Qf7} \) also wins but slightly slower, viz: 6 ... \( \text{Qh2}+ \) 7 \( \text{Qg8} \) \( \text{Qg3}+ \) 8 \( \text{Qf8} \) \( \text{Qd6} \) (8 ... \( \text{Qa3} \) 9 \( \text{Qd5}+ \) \( \text{Qb8} \) 10 \( \text{Qf7} \) \( \text{Qa7} \) 11 \( \text{Qd8}+ \) \( \text{Qf3}+ \) wins as in diag 10).

6 ... \( \text{Qa7} \)

If 6 ... \( \text{Qb8} \) 7 \( \text{Qd8}+ \); or 6 ... \( \text{Qc8} \) 7 \( \text{Qa8}+ \); or 6 ... \( \text{Qb6} \) (6 ... \( \text{Qa6} \) is the same) 7 \( \text{Qf7} \) \( \text{Qh2}+ \) 8 \( \text{Qg7} \).

7 \( \text{Qd4+} \) \( \text{Qb7} \)

8 \( \text{Qg7} \)

And wins as in diag 6.

B.

1 ... \( \text{Qb8} \)

This turns out to be very slightly less resilient than 1 ... \( \text{Qb7} \) since it's easier to get the white queen to g7.

2 \( \text{Qf7} \) \( \text{Qb3}+ \)

Instead 2 ... \( \text{Qc4}+ \) 3 \( \text{Qg7} \) \( \text{Qd4}+ \) (3 ... \( \text{Qc3}+ \) transposes directly to line B) 4 \( \text{Qg6} \) \( \text{Qb6}+ \) 5 \( \text{Qh7} \) \( \text{Qc7} \) 6 \( \text{Qf8}+ \) \( \text{Qb7} \) 7 \( \text{Qg7} \) is diag 6 again.

3 \( \text{Qg7} \) and now:

a) 3 ... \( \text{Qg3}+ \) 4 \( \text{Qf8} \) \( \text{Qa3} \) (4 ... \( \text{Qd6} \) 5 \( \text{Qf7} \) \( \text{Qc7} \) 6 \( \text{Qb5}+ \) \( \text{Qc8} \) 7 \( \text{Qb4} \) etc. as in diag 7 line B) 5 \( \text{Qe5}+ \) \( \text{Qc8} \) 6 \( \text{Qg7} \);

b) 3 ... \( \text{Qc3}+ \) 4 \( \text{Qh7} \) \( \text{Qc7} \) 5 \( \text{Qf8}+ \) \( \text{Qb7} \) 6 \( \text{Qg7} \).

After 67 ... \( \text{Qgl+?} \)

Keres in Practical Chess Endings criticised this strongly “... ill-considered, purposeless checks ... disastrous ... no way improves the position of Black's queen ... White a useful tempo by forcing his king to go where it wants to go! ... active centralised queens are called for in this kind of ending, and as White has not been able to centralise his own queen, ... Black to take his chance of playing 67 ... \( \text{Qe5}! \)".

As Alekhine himself admitted after the game, 67 ... \( \text{Qe5} \) would have given Black a draw ...

At least White should not win by 68 \( \text{e7} \) because of the carefully positioned checking pattern 68 ... \( \text{Qg3}+ \) 69 \( \text{Qf7} \) \( \text{Qf4}+ \) 70 \( \text{Qe8} \) \( \text{Qb8}+ \) 71 \( \text{Qd8} \) \( \text{Qb5}+ \) 72 \( \text{Qf7/f8} \) \( \text{Qf1}+ \) with a perpetual.

Nor by 68 \( \text{Qa7}+ \) or 68 \( \text{Qc8}+ \) losing the pawn after 68 ... \( \text{Qd6} \). And Black can frustrate efforts for the white king to escape to the queen's wing, viz. 68 \( \text{Qf7} \) \( \text{Qh5}+ \) 69 \( \text{Qe7} \) \( \text{Qh4}+! \).

After 67 ... \( \text{Qgl+?} \):

68 \( \text{Qf7} \) \( \text{Qh1} \)

Or 68 ... \( \text{Qf1+} \) 69 \( \text{Qe8} \) \( \text{Qf4}! \) would attempt to reach a similar draw to that in the last note, but White could preserve winning chances by 70 \( \text{Qa7}+ \) before pushing 71 \( \text{e7} \).

"Black's most stubborn defence is 68 ... \( \text{Qf2}+ \) 69 \( \text{Qh2} \) but after 70 \( \text{Qe7}+ \) and 71 \( \text{Qf6} \) White can advance his pawn when Black would hardly be able to hold the position." - Keres.
Queen v Queen

69 \( Qc7+ \) \( Qb5?! \)
69 ... \( Qb4 \) would allow White to demonstrate a further method of flight from checks after 70 \( Qf4+ \) \( Qa3 \) 71 \( e7 \) \( Qh7+ \) (otherwise 71 ... \( Qd5+ \) 72 \( Qg7 \) \( Qd7 \) 73 \( Qf8 \)) 72 \( Qe6 \) \( Qh3+ \) 73 \( Qd6 \) \( Qd3+ \) 74 \( Qc7 \) \( Qc3+ \) 75 \( Qb7 \) \( Qb2+ \) 76 \( Qa7 \) when after 76 ... \( Qg7 \), 77 \( Qd6+ \) and 78 \( Qa6 \) wins.
70 \( Qe5+ \) \( Qa4 \)

If 70 ... \( Qa6/b6/c6 \) after 71 \( e7 \) \( Qh7+ \) 72 \( Qg7 \) White has a cross-check lined up.
71 \( Qd4+ \)

According to Keres this is needless; the white queen stands no better after this move.
71 ... \( Qf5! \) wins more quickly, e.g. 71 ... \( Qb7+ \) 72 \( e7 \) (9b) and now:

a) 72 ... \( Qa7 \) 73 \( Qf8; \)

b) 72 ... \( Qb3+ \) 73 \( Qf8 \) \( Qb4 \)
(73 ... \( Qa3 \) allows the swap of queens after 74 \( Qd7+ \)) 74 \( Qe5 \) with zugzwang, e.g. 74 ... \( Qb3 \) 75 \( Qg8 \) and queens.

c) 72 ... \( Qa3 \) 73 \( Qf4?! \)
(threat \( Qf8 \)) 73 ... \( Qa7 \) (or 73 ... \( Qd5+ \) 74 \( Qg7 \) \( Qg2+ \) 75 \( Qf8 \)) 74 \( Qe6! \) \( Qa8 \) 75 \( Qd6+ \) \( Qb2 \) (75 ... \( Qa4 \) 76 \( Qd7+ \); 75 ... \( Qa2/b3 \) 76 \( Qd5+ \)) 76 \( Qe5+ \) with either \( Qb5+ \) and \( e8W \) or \( Qd5+ \) coming up;

d) 72 ... \( Qc7 \) 73 \( Qe4+ \) \( Qb3 \), or 73 ... \( Qa3 \) 74 \( Qd4 \) (threat 75 \( Qf8 \)) 74 ... \( Qb7 \) 75 \( Qc3+ \) (covering squares \( b4 \) and \( f3 \)) 75 ... \( Qf8 \) achieving White's strategic aim.

71 ... \( Qa3 \)
72 \( Qd3+ \) \( Qb4 \)
73 \( Qf5! \) (9c)
73 ... \( Qc6 \)

If 73 ... \( Qb7+ \) 74 \( e7 \) when 74 ... \( Qa7 \) allows 75 \( Qf8 \), and 74 ... \( Qc7 \) would follow like the column after 74 ... \( Qc7 \).
74 \( e7 \) (9d)
74 ... \( Qc7 \)
Or 74 ... \( Qc4+ \) 75 \( Qf8. \)
75 \( Qe4+ \) \( Qa3 \)

For the continuation after 75 ... \( Qb3 \) see diag 9e below.
Else 75 ... \( Qa5 \) 76 \( Qf6 \) \( Qd6+ \) 77 \( Qe6! \) when possible cross-checks bring Black's activity to a halt.
76 \( Qd4! \)

Threatening \( Qf8. \)
76 ... \( Qh2 \)
77 \( Qc5+ \) \( Qa2 \)
78 \( e8Q \) \( Qf4+ \)
79 \( Qg7 \) \( Qg3+ \)
80 \( Qf8! \)

This avoids the last trap of 80 \( Qg6 \) \( Qc3+! \) with a stalemate.

1-0

From diag 9e, after 75 \( Qe4+ \) \( Qb3?!: \)

76 \( Qe3+ \)

White creates a safe area for the white king in the \( f3/h3/f1/e1 \) box.
76 ... \( Qc2 \)
Or 76 ... \( Qa2 \) 77 \( Qf6 \) wins.
77 \( Qg6 \) \( Qc6+ \)
If 77 ... \( Qd6+ \) 78 \( Qg5 \) \( Qd5+ \) 79 \( Qh4! \) \( Qc4+ \) (79 ... \( Qf1+ \) 80 \( Qg3! \) 80 \( Qg3 \) \( Qg8+ \) 81 \( Qf2 \) \( Qf7+ \) 82 \( Qe1! \) and the white king has a safe haven on the open board.
78 \( Qg5 \) \( Qg2+ \)
79 \( Qf4 \) \( Qh2+ \)
On 79 ... \( Qf1+ \) again 80 \( Qg3. \)
80 \( Qf3 \) \( Qh5+ \)
80 ... \( Qh3+ \) 81 \( Qf2 \) \( Qh2+ \) 82 \( Qf1 \) \( Qh1+ \) 83 \( Qgl \) wins.
81 \( Qg2 \) \( Qg6+ \)

Other checks are 81 ... \( Qg4+ \) 82 \( Qf1 \) \( Qd1+ \) 83 \( Qe1! \) and 81 ... \( Qd5+ \) 82 \( Qf1 \) \( Qh1+ \) 83 \( Qg1! \) \( Qh5 \) 84 \( Qf2+ \) \( Qd3 \)
Queen v Queen

85 $g3+$ enabling White to shepherd the pawn home in a few moves.

82 $f1$ $e8$
83 $e1l$ (9f)
Black would have no answer

Queen and Bishop’s Pawn v Queen

This is very similar to the ending with a centre pawn.

Pospisil 1955

1 $h7$ $d7$

Pospisil gave 1 ... $h1+$ which is slightly less resilient: 2 $g7$ $a1+$ 3 $g8$ $a2$
4 $e4$ $b6$ 5 $g7$ $a1+$ 6 $h7$ $a3$ 7 $e6+$ $b7$ 8 $d7+$ $b8$ 9 $d8+$ and 10 $f8$ winning.

The analogous position shifted over to the centre file was mutual zugzwang (see diag 5). Here White to move is able to win. But it’s more difficult than Pospisil’s position above since 1 $h7?$ would invite 1 ...

<table>
<thead>
<tr>
<th>$Q$</th>
<th>$W$</th>
</tr>
</thead>
</table>
| 10  |  | 2 $g3+$ $b7$
| 11  |  | 3 $f3+$ $a7$
| 12  |  | 4 $e3+$ $a6$
| 13  |  | 5 $f4+$ $a7$
| 14  |  | 6 $g7$ $b6$
| 15  |  | 7 $e3+$ $a6$
| 16  |  | 8 $e4$
| 17  |  | 9 Threatening 9 $g8$.
| 18  |  | 10 $g8$ and wins

If 9 ... $f6$ 10 $b2+$ $e7$
(10 ... $g6$ 11 $g7+$ $f5$ 12 $h8$; or 10 ... $f5$ 11 $g7$ threatening $h8$ and wins) 11 $b4+$!

10 $f3$ $c7$
11 $g7$ $d4$
12 $h7$ $d7$
13 $f4+$ $b6$
14 $g7$ $a7$
15 $e3+$ $a6$
16 $e4$ $c7$
17 $d3+$ $a7$
18 $g8$ and wins

403
Queen v Queen

Stepushin - Malyshev
1962
1 Qg7 b2+
1... a1+ 2 g6.
2 Qg6 b6+
3 h5 c5+
4 Qg4
Now Black's checks have dried up.
4... f8 (12a)
5 f5 b4+
If 5... g7+ 6 h5 h8+ 7 g6 f8 8 f6 and then af-
ter 8... d7 White wins by 9 h7 c7 10 g7.
Or 5... d8 6 h5 e7 7 g6 and Black must give way.
6 h5 f8
7 f4+
Ensuring no... d6 with check.
7...
moves
8 g6
and White wins (like in the note 5... g7+) by f6, h7 and, in time g7.

Queen and Knight's Pawn v Queen

After the considerable coverage we have given to centre and bishop's pawns we shall only give a fairly cursory treatment to the knight's pawn as the principles are basically the same.

It is still harder to win with a knight's pawn since the pinning diagonal is longer and there is less room to manoeuvre next to the pawn. Nevertheless, most positions are winning in the end.

van Vliet 1888
Louis van Vliet's study lifts Q+P vs Q endings out of their supposed methodical approach.

1 b4
This restricts the black king without leaving a stalemate combination. The black queen must be kept on the h1-a8 diagonal.

White can cleverly win by a cascade of skewer checks.

After 1... d5 (or 1... b3) 2 a4+ b6 3 b3+! sets up a skewer.

On 1... g2 another arises after 2 a3+ b6 3 b2+!

1... h1! puts the black queen further away from these skewers, but after 2 a3+ b6 3 b2+ Black can choose between 3... c6 allowing White a second queen, or 3... a6 4 a2+ b6/b5 leading to a further skewer 5 b1+, or have yet another skewer diagonally after 3... c7 4 h2+!
Averbakh 1959 (corrected by database)

White wins by improving his queen's position and then walking his king to a8 where it can escape the checks.

1 \( \text{Qd2} \) \( \text{a1} \)

If 1 ... \( \text{f7} \) 2 \( \text{d1+} \) \( \text{a2} \) (2 ... \( \text{b2} \) 3 \( \text{d4+} \) \( \text{b1} \) 4 \( \text{h8} \))

3 \( \text{d5+} \) \( \text{a1} \) 4 \( \text{g6 \#8+} \) 5 \( \text{f6} \) wins; or 1 ... \( \text{f7} \) 2 \( \text{d6} \) \( \text{a2} \) 3 \( \text{b6 \#8} \).

2 \( \text{d4+} \) \( \text{b1} \)

3 \( \text{g6 \#c2+} \)

3 ... \( \text{g3+} \) 4 \( \text{f5} \) (Averbakh) 4 ... \( \text{f3+} \) is one move quicker for White.

4 \( \text{g5} \) \( \text{g2+} \)

5 \( \text{f5 \#f3+} \)

6 \( \text{e5 \#e3+} \)

7 \( \text{d5+} \) \( \text{g5+} \)

8 \( \text{c4 \#g2+} \)

9 \( \text{c5 \#g5+} \)

Komissarchik and Futer 1973 (with amendments by BELLE)

This is an example of the longest win. It was originally analysed by a Soviet database but amendments were later made by BELLE.

1 ... \( \text{b4+} \)

2 \( \text{e6} \) \( \text{g4+} \)

3 \( \text{f6} \)

3 \( \text{f7? \#f5} \) draws.

3 ... \( \text{f7} \)

4 \( \text{g6 \#e4+} \)

5 \( \text{g5 \#e3+} \)

6 \( \text{h5 \#f3+} \)

7 \( \text{h6 \#h1+} \)

8 \( \text{g5 \#d5+} \)

9 \( \text{f6 (15a)} \)

10 ... \( \text{d4+} \)

10 \( \text{f7} \) \( \text{d7+} \)

11 \( \text{g6 \#g4+} \)

12 \( \text{h7 \#h3+} \)

13 \( \text{g8} \)

Not 13 \( \text{h6 \#d7+} \).

13 ... \( \text{f5} \)

Finally reaching perfect shelter; but Black can still resist for a couple of moves with a stalemate defence.

19 ... \( \text{b3!} \)

20 \( \text{h1+!} \)

If 20 \( \text{a7+} \) \( \text{b1} \) 21 \( \text{b8 \#a1} \) then White can win with 22 \( \text{g8\#} \) but 22 \( \text{g8\#} \) invites 22 ...

20 ... \( \text{g2+} \)

21 \( \text{g2+} \) \( \text{a1} \)

22 \( \text{g8\#} \) and wins.

The BELLE program produced 33 ... \( \text{c8+} \) which takes one move less.
Botvinnik - Minev  
Amsterdam Olympiad 1954

A famous, deeply-analysed and instructive queen and knight's pawn v queen ending that contributed to, but did not resolve the debate as to where to place the defending king.

The game continued:

73 \( g5 \) \( d8+ \)

Sealed.

74 \( \texttt{w}f6! \)

If 74 \( \texttt{h}6 \) \( \texttt{h}4+ \) 75 \( \texttt{g}7 \) \( \texttt{h}3 \).

74 ... \( \texttt{d}5+ \)

75 \( \texttt{f}5 \) \( \texttt{d}8+ \)

76 \( \texttt{h}5 \) \( \texttt{e}8 \)

76 ... \( \texttt{h}8+ \) 77 \( \texttt{g}4 \) \( \texttt{g}7 \)

(77 ... \( \texttt{d}4+ \) 78 \( \texttt{f}4 \) pins) 78 \( \texttt{f}7 \) \( \texttt{c}3 \) (otherwise White forces an exchange of queens)

79 \( \texttt{g}7 \) \( \texttt{c}8+ \) 80 \( \texttt{f}5 \) \( \texttt{g}8 \) (80 ... \( \texttt{e}8 \) 81 \( \texttt{c}2+ \) \( \texttt{b}4 \) 82 \( \texttt{b}2+ \) \( \texttt{c}5 \) - 82 ... \( \texttt{c}4 \) 83 \( \texttt{a}2+ \) with a skewer - 83 \( \texttt{c}3+ \) \( \texttt{d}6 \) 84 \( \texttt{f}6+ \) \( \texttt{c}5 \) 85 \( \texttt{f}8+ \) wins) 81 \( \texttt{d}7+ \)

\( \texttt{g}5 \) \( \texttt{g}5 \) followed by 83 \( \texttt{g}6 \) and 84 \( \texttt{f}7 \).

77 \( \texttt{f}4+ \)

BELLE gives 77 \( \texttt{g}4! \) \( \texttt{e}2+ \) as winning for White.

77 ... \( \texttt{a}5? \)

77 ... \( \texttt{a}3= \) BELLE.

78 \( \texttt{d}2+ \) \( \texttt{a}4 \)

79 \( \texttt{d}4+ \) \( \texttt{a}5 \)

80 \( \texttt{g}5 \) \( \texttt{e}7+ \)

81 \( \texttt{f}5! \) \( \texttt{f}8+ \)

82 \( \texttt{e}4 \)

Again checks are ended.

The white king is excellently placed in the centre.

82 ... \( \texttt{h}6 \)

83 \( \texttt{e}5+ \) \( \texttt{a}4 \)

84 \( \texttt{g}7 \) \( \texttt{h}1+ \)

85 \( \texttt{d}4 \) \( \texttt{d}1+ \)

86 \( \texttt{c}5 \) \( \texttt{c}1+ \)

87 \( \texttt{d}6 \) \( \texttt{d}2+ \)

87 ... \( \texttt{h}6+ \) 88 \( \texttt{d}5! \)

88 \( \texttt{e}6 \) \( \texttt{a}2+ \)

89 \( \texttt{d}5 \) \( \texttt{e}2+ \)

90 \( \texttt{d}6 \) \( \texttt{h}2+ \)

91 \( \texttt{c}5!! \) (16a)

A memorable final position.
Success in winning this ending is generally through the exploitation of the bad position of the opponent's king. Otherwise these endings are mostly drawn. Most endgame books tend to dwell on exceptions.

Analysis generated by Ken Thompson's BELLE Algorithm in the Bell Laboratories, New Jersey dominates and corrects many of the 37 positions chosen by Encyclopaedia of Chess Endings on this endgame.

The difficulties for possible successful outcomes are shown in two of Roycroft's 5-Man Chess Endgame series. These positions with a white pawn on a2 are shown as needing 16-17 moves to bring about the first effective advance of the a-pawn (a2-a3 or a2-a4). It could really take a long time for the pawn to advance all the way to the eighth rank!

**Averbakh 1962**

In this position White can win because the black king is vulnerable to cross-checks.

1. \( g8+ b7 \)
2. \( f7+ c8 \)
If, for example, 2 ... \( a6 3 \)
3. \( e8+ b7 \)
4. \( g8 g3+ \)

**Staleraytis 1980 and Averbakh 1982**

Again the black king is poorly placed.

1. \( e7+ f4 \)
2. \( e8+ b7 \)
3. \( g7+ d4+ \)
Or 3 ... \( g5+ 4 \)
5. \( f6 g3+ 6 \)

**Staleraytis 1980**

With the black king on the seventh or eighth ranks the white king should go to f8 and g8 to construct cross-checks and pins, e.g. after:

1. ... \( d4+ \)
2. \( f6 g4+ \)
3. \( f7 c4+ \)
Or 3 ... \( h5+ 4 \)
5. \( f8 stops the checks. \)

4. \( e6 f4+ \)
5. \( g7 d4+ \)

5. \( f8 \)

There are no good checks now.

5. ... \( c3 \)
If 5 ... \( h3 6 \)
5. \( g8 \) or 6 ... \( a6 7 \)
6. \( f7+ a6 \)
7. \( g6+ a5 \)
8. \( h5+ b4 \)
9. \( h8+ \) and wins
Staleraytis 1980
With the defending king on a5
White's king should usefully be played to g6 and h6.

1 ... \( \text{We}7 \)
If 1 ... \( \text{Wd}4+ \) 2 \( \text{Wf}6 \) \( \text{Wd}7+ \) 3 \( \text{Wh}6 \) \( \text{Wh}3+ \) 4 \( \text{Wg}6 \) ends Black's checks.

2 \( \text{Wh}6 \) \( \text{Wf}8+ \)
3 \( \text{Wg}5! \) and now:

A.

3 ... \( \text{We}7+ \)
4 \( \text{Wh}5 \) \( \text{Wf}8 \)
If 4 ... \( \text{We}2+ \) 5 \( \text{Wh}6 \).
5 \( \text{We}6! \) \( \text{Wf}3+ \)
Or 5 ... \( \text{Wd}8 \) 6 \( \text{Wg}8 \).

6 \( \text{Wg}5 \) \( \text{Wg}3+ \)
7 \( \text{Wg}4 \) \( \text{We}3+ \)
If 7 ... \( \text{Wb}8 \) 8 \( \text{Wf}5+ \).
8 \( \text{Wf}4 \) \( \text{We}7+ \)
Or 8 ... \( \text{Wg}1+ \) 9 \( \text{Wh}5 \) \( \text{Wd}1+ \)
10 \( \text{Wg}6 \) with cross-checks.
9 \( \text{Wg}6 \) \( \text{We}8+ \)
10 \( \text{Wf}7 \) \( \text{Wc}6+ \)

B.

Belle 1985

1 ... \( \text{Wc}5+ \)
2 \( \text{Wf}6 \) \( \text{Wf}8+ \)
3 \( \text{Wg}6 \) \( \text{Wd}6+ \)
4 \( \text{Wh}5 \) \( \text{Wd}1+ \)
5 \( \text{Wg}4 \) \( \text{Wd}8+ \)
6 \( \text{Wg}3 \) \( \text{Wg}5+ \)
7 \( \text{Wf}3 \) \( \text{Wg}7 \)
8 \( \text{Wf}4+ \) \( \text{Wd}1 \)
9 \( \text{Wg}4 \) \( \text{Wg}3+ \)
10 \( \text{Wg}4 \) \( \text{Wg}7+ \)
11 \( \text{Wh}5 \) \( \text{Wc}3 \)
12 \( \text{Wg}6 \) \( \text{Wc}2 \)
13 \( \text{Wg}5 \) \( \text{Wg}3+ \)
14 \( \text{Wg}4 \) \( \text{Wd}3+ \)
15 \( \text{Wf}6 \) \( \text{Wb}6+ \)
16 \( \text{Wg}6 \) \( \text{Wd}4+ \)

11 \( \text{Wf}6 \) \( \text{We}8+ \)
12 \( \text{Wh}6 \) and wins

17 \( \text{Wg}6 \) \( \text{We}1+ \)
18 \( \text{Wf}7 \) \( \text{Wd}7+ \)
19 \( \text{Wf}7 \) \( \text{Wd}4 \)
20 \( \text{Wf}7 \) \( \text{Wd}5+ \)
21 \( \text{Wf}7 \) \( \text{Wd}4+ \)
22 \( \text{Wf}7 \) \( \text{Wg}6+ \)
23 \( \text{Wf}7 \) \( \text{Wb}6+ \)
24 \( \text{Wf}7 \) \( \text{Wf}6+ \)
25 \( \text{Wf}7 \) \( \text{Wc}6+ \)
26 \( \text{Wf}7 \) \( \text{Wc}4+ \)
27 \( \text{Wf}7 \) \( \text{Wc}4+ \)
28 \( \text{Wf}7 \) \( \text{Wh}5 \)
29 \( \text{Wf}7 \) \( \text{Wc}1 \)
30 \( \text{Wf}7 \) \( \text{Wc}3+ \)
31 \( \text{Wf}7 \) \( \text{Wc}3+ \)
32 \( \text{Wf}7 \) and wins
A key question for the defence is where best to place the king, i.e. where it does not impede the queen’s ability to check and where it is least susceptible to cross-checks. The answer varies according to the progress of the passed pawn. When it is at a7 opinions vary between e1, f1, g1, h2, h3 and h4.

Van der Wiel proposed 99 ... \( \text{g1} \) to go to h2 as better.  

Possibly critical. In his notes to the game van der Wiel considered 109 \( \text{g7} \)? We have not seen BELLE’s reaction.

When the pawn has reached the seventh rank its king has the least shelter and is most likely to be exposed to constant checks.

Both van der Wiel and the BELLE algorithm regarded the diagrammed position after 112 a7 as tenable (=).

The only move according to BELLE.

Another only move (BELLE).

Also 120 \( \text{d4} \) \( \text{g4} \)!

Again the only move (BELLE).

Also possible is 122 ... \( \text{f4} \) despite its dangerous appearance.

Also 125 ... \( \text{h1} \).

Also 129 ... \( \text{e8} \) and 129 ... \( \text{b1} \).

Also 137 ... \( \text{c3} \) +.

Also 139 ... \( \text{b6} \) + and 139 ... \( \text{b4} \) +.

Also 141 ... \( \text{a3} / \text{a5} / \text{d2} \) = (BELLE).

Also 143 \( \text{b2} \) +?

Also 144 \( \text{xb2} \) stalemate
**Queen v Queen**

"Q 23\n
BELLE 1985\nIn diag 23 White needs 71 more moves in the longest line of play to force a winning advance of the pawn from a6 to a7! That's the message from the BELLE program.

**Queen v Queen: Many Pawns**

Pawns all on one Flank

Endings in which all the pawns are on one flank arise frequently. With one extra pawn, winning chances depend on the possibility of activating the attacking king; and the pawn structure particularly of the defender.

If it is possible to move the king into the defender's guts or he has weak pawns which can be attacked; then there are good chances. Otherwise, up to three pawns vs two, the defender ought presumably to be able to draw.

In the case of endings of four vs three, however, an extra pawn even without other additional advantages must afford good winning chances.

*Delaney - Speelman*  
*Bath Zonal 1987*

With his pawn structure intact, White ought to be able to draw. But in the end I forced my way through:

39 \(\text{c3}+\) \(h7\)
40 \(\text{c7}\) \(g5\)
41 \(\text{b8}\) \(\text{d4}\)

Taking control of the long diagonal. White could have resisted this for a while with, e.g. \(\text{c3}\), but obviously not indefinitely.

42 \(\text{c8}\) \(g7\)
43 \(\text{h2}\) \(h5\)
44 \(\text{h1}\) \(\text{e3}\)

Black would like to play ... g4 with the queen on f4. However, if 44 ... f4 at once then 45 \(\text{c3}+\) is annoying. The text move also sets a trap 45 \(\text{f5??}\) \(\text{c1}+\) 46 \(\text{h2}\) \(\text{f4+}\).

Black shouldn't play 44 ... g4 immediately since after 45 hxg4 hxg4 46 \(\text{f5}\) the white queen is extremely inconvenient.

45 \(\text{h2?!}\)

Rather falling in with the opponent's plan. 45 \(\text{c4}\) was possible, preventing ... g4 for the moment. 45 \(\text{a6?!}\) is another option, intending 45 ... g4 46 hxg4 hxg4 47 g3!.

45 ... \(\text{f4+}\)
46 \(\text{h1}\)

Natural, but 46 \(\text{g1}\) would have been a good idea as after 46 ... g4 47 hxg4 hxg4 48 \(\text{c3}+\) \(g6\) White can play 49 g3!.

46 ... g4!?
47 hxg4!

Opening up the h-file, but White is still probably drawing.

47 ... hxg4
48 \(\text{c3+}\) \(g6?!\)
49 \(\text{Wh}d3+ \text{Wh}h6?!)?

Now 50 g3 loses easily to 50 ...
\(\text{Wf}3+\) - hence the advantage
of 46 \(\text{Wg}1\). However, here
White can still probably draw
with 50 \(\text{Wa}6+!\) to be followed
against all replies by 51 g3!
when 51 ...
\(\text{Wx}g3\) will allow
White to draw by stalemate. It
was vital to get the white
queen on a square covering f1,
otherwise g3 would have been
met by ...
\(\text{Wf}1+, \ldots \text{Wh}3+\) and
\(\ldots \text{Wx}g3+\) etc. Presumably this
means that Black should play
either 48 ...
\(\text{Wh}6\) or 49 ...
\(\text{Wg}5\). After getting in g3 safely
White should draw since it
will be almost impossible for
Black to activate his king
while the squares h4, g4 and
f4 are all forbidden territory.

50 \(\text{Wd}8?\) g3

White’s position is now de-
monstrably lost. Black has to
avoid stalemate with his queen
on the a7-g1 diagonal but this
turns out to be fairly simple.

51 \(\text{Wb}6+

If 51 \(\text{Wh}8+ \text{Wg}6\) 52 \(\text{Wg}8+
\text{Wf}6\) 53 \(\text{Wd}8+ \text{Wg}7\) 54 \(\text{Wd}4+
\text{Wf}6\) 55 \(\text{Wg}4+ \text{Wg}6\) 56 \(\text{Wd}4+
\text{Wh}7\) and wins. 56 ...
f6?

would be a serious mistake in
view of 57 \(\text{Wd}7+ \text{Wh}6\) 58
\(\text{Wd}2+ \text{Wg}5\) 59 \(\text{We}3!\) reaching
the position arising in the
game after 52 ...
\(\text{Wg}5\), but
with Black to move. As a re-
result Black is in a most annoy-
ing zugzwang and in analysis
after the game we could see
no way for him to lose a
move; so the position may
well be drawn.

51 ...
\(\text{f}6\)

52 \(\text{We}3! \text{Wg}5!\)

Now it is White who is in
zugzwang and he loses imme-
diately.

53 \(\text{We}5 \text{Wh}5+

Of course 53 ...
\(\text{Wh}4+ 54
\text{Wg}1 \text{Wh}2+ 55 \text{Wf}1 \text{Wh}1+\) also
won, but why not go straight
for the king and pawn ending?

54 \(\text{Wx}h5+ \text{Wh}5+

55 \(\text{Wg}1 \text{Wg}4\)

56 \(\text{Wf}1 \text{Wf}4\)

57 \(\text{We}2 \text{Wd}4\)

58 \(\text{Wd}2 \text{f}5\)

59 \(\text{We}2 \text{f}4\)

60 \(\text{We}1 \text{We}3\)

61 \(\text{Wf}1 \text{Wd}2\)

\(0-1\)

After 62 \(\text{Wg}1 \text{We}2\) 63 \(\text{Wh}1
\text{f}3\) 64 \(\text{gxf}3 \text{Wh}2\) wins.

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Ciocaltea - Unzicker
Moscow 1956

The black king is brought
into the white half with ideas
of mating nets, cross-checks,
the further weakening of the
white pawns, and of being
well-placed to exploit the ex-
change of queens.

59 ...
\(\text{Wf}6\)

60 \(\text{Wh}8+ \text{Wg}6\)

61 \(\text{Wd}8+ \text{Wf}5\)

62 \(\text{Wh}7+ \text{We}4\)

63 \(\text{Wf}7+ \text{Wd}3\)

64 \(\text{Wd}7+ \text{Wc}2\)

---
Queen v Queen

80...\text{c}6+\text{81...c}6+\text{82...c}5+\text{83...c}4 +\text{84...c}3+\text{85...c}2+\text{86...c}1+\text{87...c}0+\text{88...c}g1.

Avoiding stalemate and reaching after 88...c1+\text{f}1+ an easily won pawn ending.

0-1

Zapata - Speelman

After White's first move, Black is forced to exchange down to three pawns vs two.

48...\text{e}6!\text{e}x\text{e}6\text{49...e}4\text{e}2+\text{50...g}3\text{e}5+\text{51...g}2\text{e}3\text{52...b}4\text{e}5\text{53...d}2\text{f}6\text{54...d}8+\text{f}5\text{55...g}7!\text{56...g}8!\text{e}2+\text{57...g}2\text{d}2+\text{58...g}3\text{g}5+\text{59...f}2\text{h}4+\text{60...g}2\text{e}6\text{61...e}7!\text{h}6+\text{g}5\text{b}6!\text{e}2+\text{64...f}2.

61...\text{e}8+\text{Or 61...e}8+\text{e}7\text{62...c}5+\text{f}6\text{63...f}8\text{g}5+\text{64...f}2\text{d}2+\text{65...g}3\text{e}1+\text{66...g}2\text{h}5\text{67...h}4.

61...\text{e}7\text{62...c}6+\text{f}5\text{63...d}5+\text{f}6\text{64...d}4+\text{e}5\text{65...d}8+\text{g}7!\text{66...d}2\text{f}6\text{66...h}5\text{67...h}4!.

67\text{c}4\text{68...f}2\text{g}5\text{69...f}8+., 68...

\text{g}5!?\text{74...h}5?75\text{c}5+!.

75\text{c}4\text{76...d}2+?78\text{h}3\text{f}2\text{79...g}4+!!\text{f}x\text{g}4+80\text{f}x\text{g}4+\text{g}5.\text{78...d}5+\text{g}5\text{78...h}479\text{d}8+\text{g}580\text{d}1\text{h}5?!81\text{c}2\text{g}482\text{d}1!\text{e}582\text{g}x\text{f}3+83\text{f}x\text{f}3\text{xf}3+84\text{f}x\text{f}3=;81\text{h}3??\text{e}683\text{d}2.\text{79...h}3!?!79\text{d}1\text{h}480\text{c}2\text{g}4(80\text{...e}181\text{d}3\text{h}582\text{c}2\text{g}483\text{d}3)81\text{d}1!.

79...\text{e}780\text{f}5\text{e}8!81\text{f}6??
Averbakh - Suetin
USSR Ch Kiev 1954

Here Black has an additional weakness in the e-pawn. Moreover, there is a juicy square on g5 for the white king to target. Averbakh won quite quickly by advancing his king to that square and creating mating threats.

42 g4! "d2
Black cannot play 42 ... e4 43 g3 e3 to expose the white king because of 44 h5+ g8 45 e8+ and 46 xe3.

43 g3 "c3+
44 g4 "d4

The pawn ending after 49 ... xe4+ is calculably won for White.

50 f7+ h8
51 h6!
If 51 f3+ 52 g5 closes the tent door and shuts out the wild elements.

1-0

Sämiscn - Maroczy
Carlsbad 1929

With four pawns against three, White has excellent winning chances. In the end, though, Maroczy, who was extremely good at queen endings, held the draw.

47 f3 "d3
48 e4 "d2
49 h2 b2
50 g3 f7
51 f4 xe2 (28a)
52 b3+

Alternatively:

a) Velickovic analysed instead 52 e5 when:

a1) if 52 fxe5 he gives a win with 53 fxe5 a6 54 f4+ e7 55 e4 f7 56 g3 xe6 57 f4 g4+ 58 d2 xe6 59 g3 e7 60 b7+ d8 61 b8+ d7 62 e4 c6 63 b3 f7 64 c4 d7+ 65 c3 f5 66 e7+ e8 67 d6 f7 68 d4 f2+ 69 e4 a2+ 70 b4 b2+ 71 a5 a2+ 72 b6 and wins;
a2) He claims that 52 e4 holds after 53 f3 e1 54 b7+ g8 55 d5+ g7=;
b) If 52 f5 gxf5 53 exf5 xe5 54 xe5 fxe5 55 g4 hxg4 56 g3 e4 57 xg4 e3 58 f3 f6= (Cabrilio).

52 ...
53 b7+ f8
54 c8+ e7
55 c7+ e6
56 c6+ e7
57 c5+ f7
58 d5+ e7
59 b7+ e8
60 c6+ e7
61 c5+ f7
62 c7+ e6
63 f5+ gxf5
64 c8+ e7
65 xf5 f7
66 h3 d3+
67 f3 d7+
68 h2 b5

0-1
Queen v Queen

Outside passed pawns

Outside passed pawns are especially valuable in queen endings and can often outweigh a material disadvantage. There are two specific reasons for this:

a) A queen cannot blockade a passed pawn against a queen and pawn since one can always arrange to hit her with the other queen supported by the pawn (e.g. in diag 30 Black cannot maintain the queen on c8 in view of \( \text{d}8 \));

b) The option of sacrificing a piece for the monster and then carrying on playing is not normally available since the only piece that one can sacrifice is the queen herself.

Here despite five(!) extra pawns, Black has no winning chances after

1 a6

i.e. the speed of queening outweighs the number of pawns.
Queen v Queen

Marjanovic - Schüssler
Trstenik 1979
White is able to transfer the queen with checks to a better defensive location, after which Black's desperate attempts to create counterplay in the form of checks are much too slow.

1 \( \text{b}8+ \) \( \text{h}7 \)
2 \( \text{b}1+ \) \( \text{f}5 \)
3 \( \text{a}2 \) \( \text{h}5 \)

Q Alekhine - Reshevsky
AVRO 1938
If the pawn had been on f2 then White would have been able to create perfect shelter for his king with 44 \( \text{e}4! \) after which White should win analogously to diags 35 and 36. But with the second rank open, he has to take constant care of his king and Reshevsky managed to save the draw.

44 \( \text{a}2 \) \( \text{g}8 \)
45 \( \text{a}4 \) \( \text{c}6 \)
46 \( \text{a}5 \) \( \text{a}6 \)

And it appears that in this position White can make no progress.

47 \( \text{g}4 \)
The immediate attempt to evict the blockader led to 47

Korchnoi - Anand
Tilburg 1991
This is more difficult than the previous example. But after a certain amount of manoeuvring Anand broke through.

82 \( \text{b}8+ \) \( \text{c}5 \)
83 \( \text{f}8+ \) \( \text{d}5 \)
84 \( \text{f}3+ \) \( \text{d}6 \)
85 \( \text{a}3 \)
85 \( \text{f}8+ \) \( \text{c}7 \) 86 \( \text{e}7+ \)
86 \( \text{b}6 \).
85 \( \ldots \) \( \text{a}1+ \)

3 ... \( \text{f}4 \) \( \text{e}4 \) \( \text{g}4 \) \( \text{c}2+ \) followed by \( \text{c}7+ \) and \( \text{xf}4 \) wins.
4 \( \text{a}6 \) \( \text{h}4 \)
5 \( \text{a}7 \) \( \text{h}xg3+ \)
6 \( \text{fxg}3 \) \( \text{a}8 \)
7 \( \text{xe}6 \) \( \text{xa}7 \)
8 \( \text{xf}5+ \) \( \text{h}6 \)
9 \( \text{f}6+ \) \( \text{h}7 \)
10 \( \text{xg}5 \) 1-0

\( \text{d}5 \) \( \text{g}7 \) 48 \( \text{d}4+ \) \( \text{g}8 \) 49 \( \text{b}6 \) \( \text{e}2+ \). Therefore White decided to improve his pawn structure first.

47 \( \ldots \) \( \text{g}5 \)
48 \( \text{f}2 \) \( \text{d}6 \)
49 \( \text{f}1 \) \( \text{a}6+ \)
50 \( \text{g}2 \) \( \text{g}7 \)
51 \( \text{b}2+ \) \( \text{g}8 \)
52 \( \text{b}8+ \) \( \text{g}7 \)
53 \( \text{e}5+ \) \( \text{g}8 \)
54 \( \text{f}2 \) \( \text{a}7+ \)
55 \( \text{e}2 \) \( \text{a}6+ \)
56 \( \text{d}2 \) \( \text{c}4! \)

Black must block the white king's path.

57 \( \text{f}5 \) \( \text{d}4+ \)
58 \( \text{e}2 \) \( \text{b}2+ \)
59 \( \text{d}3 \) \( \text{b}3+ \)
60 \( \text{e}2 \) \( \text{b}2+ \)

\( \frac{1}{2}-\frac{1}{2} \)

86 \( \text{b}3 \) \( \text{f}6 \)
87 \( \text{d}3+ \) \( \text{e}7 \)
88 \( \text{g}3 \) \( \text{d}6 \)
89 \( \text{h}4+ \) \( \text{f}6 \)
90 \( \text{g}3 \) \( \text{e}6 \)
91 \( \text{c}4 \) \( \text{f}1+ \)
92 \( \text{c}3 \)
92 \( \text{c}5 \) \( \text{b}3+ \).
92 \( \ldots \) \( \text{c}1+ \)
93 \( \text{b}3 \) \( \text{b}1+ \)
94 \( \text{a}3 \) \( \text{a}1+ \)
95 \( \text{b}3 \) \( \text{e}5 \)
96 \( \text{h}4 \) \( \text{d}5 \)
97 \( \text{f}2 \) \( \text{f}6 \)
Queen v Queen

**Diagram 33a**

98  \( \text{Q}e3 (33a) \)
98  ...  \( \text{Q}e6 \)
99  \( \text{Q}f4 \)  \( \text{Q}c5+ \)
100  \( \text{Q}a3 \)  \( \text{Q}d6 \)
101  \( \text{Q}e3+ \)  \( \text{Q}c4+ \)

The black king penetrates with the aid of discovered checks.

102  \( \text{Q}a2 \)  \( \text{Q}d5 \)
103  \( \text{Q}b6 \)  \( \text{Q}c5 \)
104  \( \text{Q}a3 \)  \( \text{Q}d3+ \)
105  \( \text{Q}a2 \)  \( \text{Q}d2+ \)
106  \( \text{Q}a1 \)  \( \text{Q}b4 \)

Chiburdanidze - Gaprindashvili
Tbilisi 1984

Black has excellent winning chances. But Chiburdanidze defends very resourcefully and eventually manages to hold an ending of two pawns against one on the same side.

64  \( \text{Q}g8+! \)  \( \text{Q}f5 \)
65  \( \text{Q}f7+ \)
If 65  \( \text{Q}xb3? \)  \( \text{Q}e2+ \) 66  \( \text{Q}g1 \)  \( \text{Q}g4 \) would win.
65  ...  \( \text{Q}g4 \)
Or 65  ...  \( \text{Q}f6 \) 66  \( \text{Q}d5+ \)  \( \text{Q}g4 \)
67  \( \text{Q}d1+ \)  \( \text{Q}f3 \) 68  \( \text{Q}d7+ \) with perpetual.

On 65  ...  \( \text{Q}e4 \) White should be able to draw after 66  \( \text{Q}xb3 \).
66  \( \text{Q}c4+ \)  \( \text{Q}f3 \)
67  \( \text{Q}f1+ \)!

Not 67  \( \text{Q}xb3+ \)  \( \text{Q}e3 \) and the black king can be wormed further into the vicinity of the white king with threats to exchange queens if not mating.

67  ...  \( \text{Q}e4 \)
68  \( \text{Q}b1+ \)

Black retains good winning chances after 68  \( \text{Q}c4+ \)  \( \text{Q}d4 \)
69  \( \text{Q}xb3 \)  \( \text{Q}f2+ \) (or 69  ...  \( \text{Q}e3 \)).
68  ...  \( \text{Q}f3 \)
If 68  ...  \( \text{Q}d4 \) 69  \( \text{Q}a1+ \).
69  \( \text{Q}f1+ \)  \( \text{Q}e3 \)
70  \( \text{Q}e1+ \)  \( \text{Q}d4 \) 71  \( \text{Q}b4+ \)
72  \( \text{Q}xb3+ \)  \( \text{Q}c3 \) 73  \( \text{Q}e6 \)
\( \text{Q}d2+ \) 74  \( \text{Q}h3 \)  \( \text{Q}e3 \) 75  \( \text{Q}a6+! \)
(not falling into 75  \( \text{Q}xb6 \)  \( \text{Q}g4+! \) 75  ...  \( \text{Q}d2 \) 76  \( \text{Q}a2+ \)
\( \text{Q}e1 \) 77  \( \text{Q}a1+ \)  \( \text{Q}f2 \) 78  \( \text{Q}f6+ \)
(78  \( \text{Q}b2+ \) allows 78  ...  \( \text{Q}e2 \)) with the ability to reach eventually \( \text{Q}g1 \) followed by interpositions \( \text{Q}f2 \) and \( \text{Q}f1 \) 78  ...  \( \text{Q}f3 \) (if 78  ...  \( \text{Q}e2 \)
79  \( \text{Q}a6+! \)  \( \text{Q}d3 \) 80  \( \text{Q}xb6=) \)
79  \( \text{Q}b6+ \)  \( \text{Q}e3 \) 80  \( \text{Q}f6+ \)  \( \text{Q}f3 \)
81  \( \text{Q}b6+ \)  \( \text{Q}e1 \) 82  \( \text{Q}a4 \)  \( \text{Q}f2 \)
83  \( \text{Q}b6+ \)  \( \frac{1}{2}-\frac{1}{2} \)

**Diagram 34**

Flohr - Levenfish
Moscow 1936

Material is level, but the outside a-pawn gives Black serious winning chances.

62  \( \text{Q}d3 \)  \( \text{a5} \)
63  \( \text{Q}a3 \)  \( \text{d2+} \)
64  \( \text{Q}h3 \)  \( \text{d1} \)
65  \( \text{Q}c5 \)

If 65  \( \text{Q}g2 \)  \( \text{Q}b3 \) 66  \( \text{Q}c5 \)  \( \text{Q}d3 \)
will enable Black to advance the outside passed pawn.

65  ...  \( \text{Q}d3 \)
66  \( \text{Q}a5! \)

For if 66  ...  \( a3 \) 67  \( e4! \)  \( fxe4 \) 68  \( \text{Q}f5+ \)  \( \text{Q}g8 \) 69  \( \text{Q}e6+ \)  \( \text{Q}f8 \) 70  \( f5 \) leads to major complications.
Queen v Queen

66 ... \( \text{Qe4!} \)
Zugzwang!? On 67 \( \text{Qh}4 \)
Black has 67 ... \( \text{g5}+ \) 68 \( \text{Qh3} \) \( \text{g6} \) threatening both 69 ... \( \text{Qh5} \) and 69 ... \( \text{g4} \) leading to mate and meeting 69 \( \text{Qc7} \) with 69 ... \( \text{Qf3} \) and another mate!
67 \( \text{Qa7} \) \( \text{Qb4}! \)
68 \( \text{Qf7} \) \( \text{Qa5} \)
White can no longer blockade the pawn and must seek the advance of kingside pawns for counterplay.
69 \( \text{e4} \) \( \text{fxe4} \)

Not 69 ... \( a3 \) 70 \( \text{exf5} \) \( \text{Qa6} \) 71 \( g4 \) a2 72 f6 with a last ditch draw.
70 \( \text{Qe8} \) \( \text{Qf5}+ \)
71 \( \text{Qg2} \) \( \text{Qd5??} \)
71 ... \( a3 \) 72 \( \text{Qa8} \) e3! 73 \( \text{Qxa3} \) \( \text{Qe4}+ \) 74 \( \text{Qf1} \) (74 \( \text{Qh3} \) e2) 74 ... \( \text{Qf3}+ \) led to checkmate.

Now the game ended in a draw after 72 \( \text{Qxa4} \) e3+ 73 \( \text{Qg1} \) \( \text{Qd3} \) 74 \( \text{Qe8} \) \( \text{Qb1}+ \) 75 \( \text{Qg2} \) \( \text{Qc2}+ \) 76 \( \text{Qh3} \) \( \text{Qf5}+ \) (76 ... \( e2 \) 77 \( \text{Qe6} \) 77 \( \text{Qg2} \) \( \text{Qd5}+ \) 78 \( \text{Qh3} \) \( \text{Qf3} \) 79 \( \text{Qe6} \) \( \text{Qf1}+ \) 80 \( \text{Qh4} \) \( \text{Qb5} \)

R. Marie - Quinteros
Vinkovci 1970

Amid the tactical battles White's advanced passed pawn plays the decisive role.

1 ... \( \text{Qc7} \)

The game itself continued instead 1 ... \( \text{h5} \) 2 \( \text{Qe4!} \) \( b3 \) \( \text{Qf3} \) 3 \( \text{Qf5} \) 4 \( \text{Qg4}+ \) \( \text{Qe4} \) 5 \( \text{Qe6}+ \) \( \text{Qd3} \) 6 \( \text{Qb3}+ \) \( \text{Qd2} \) (if 6 ... \( \text{Qe4} \) 7 \( \text{Qb7}+ \) \( \text{Qd3} \) 8 a7 wins) 7 \( \text{Qa2}+ \) \( \text{Qe3} \) 8 a7 f3 9 \( \text{gxf3} \) \( \text{Qc7}+ \) 10 \( \text{Qh1} \) \( \text{Qg3} \) (or 10 ... \( \text{Qc1}+ \) 11 \( \text{Qg2} \) 11 \( \text{Qg2} \) 1-0 (36a)).

2 \( \text{Qe4}! \)
Not 2 \( g3 \) \( \text{Qc2}+ \) 3 \( \text{Qg2} \) d3.

2 ... \( \text{Qh6} \)

Or instead:

a) 2 ... \( \text{f3}+ \) 3 \( \text{g3} \) f2 4 \( \text{Qg4}+ \) followed eventually by \( \text{Qxd4}+ \);

b) 2 ... \( \text{h5} \) 3 \( \text{h4}+ \) \( \text{Qg4} \) (if 3 ... \( \text{Qhx4} \) 4 a7 wins; if 3 ... \( \text{Qh6} \) 4 \( \text{Qxd4} \) \( \text{Qf3} \) 5 \( \text{Qg1} \) \( \text{Qc1}+ \) 6 \( \text{Qf2} \) wins) 4 \( \text{Qb7} \) \( \text{Qe5} \) 5 \( \text{Qf3}+ \) \( \text{Qf5} \) 6 \( \text{Qd3}+ \) \( \text{Qf6} \) 7 a7 and White escapes the perpetuals;

c) 2 ... \( \text{Qb6} \) 3 \( \text{Qe7}+ \) \( \text{Qh6} \) 4 a7 wins easily;

d) 2 ... \( \text{Qc5} \) 3 \( \text{h4}+! \) \( \text{Qhx4} \) 4 \( \text{Qxf4}+ \) \( \text{Qh5} \) 5 \( \text{Qh3} \) \( \text{Qc3}+ \) 6 \( \text{g3} \) \( g5 \) 7 \( \text{Qf7}+ \) \( \text{Qh6} \) 8 \( \text{Qg4}! \)

178 \( \text{Qa7} \) \( \text{Qb4}! \)

White can no longer blockade the pawn and must seek the advance of kingside pawns for counterplay.
69 \( \text{e4} \) \( \text{fxe4} \)

Wc8+ 9 \( \text{Qf5} \) \( \text{Qxf5}+ \) 10 \( \text{Qxf5} \) d3 11 a7 d2 12 a8\# d1\# 13 \( \text{Qf8}+ \) and mates in three.

3 \( \text{h4}! \) (36b)

3 ... \( \text{Qg5} \)

If 3 ... \( \text{Qh5} \) 4 \( \text{Qb7} \) \( \text{Qe5} \) 5 \( \text{Qf3}+ \) and 6 a7 wins. Or 3 ... \( \text{f3}+ \) 4 \( \text{g3} \) \( \text{Qb6} \) 5 \( \text{Qf4}+ \) \( \text{Qg7} \) 6 \( \text{Qe5}+ \) \( \text{Qh6} \) (on 6 ... \( \text{Qg8} \) 7 \( \text{Qd5}+ \) forces the exchange of queens) 7 \( \text{Qg5}+ \) \( \text{Qg7} \) 8 \( \text{Qe7}+ \) and now:

a) 8 ... \( \text{Qh6} \) 9 \( \text{Qf8}+ \) \( \text{Qh5} \) 10 \( \text{Qxf3}+ \) \( \text{Qh6} \) 11 \( \text{Qf8}+ \) \( \text{Qh5} \) 12 \( \text{Qf4}! \) \( \text{b5} \) 13 \( \text{Qh3} \) and mates;

b) 8 ... \( \text{Qg8} \) 9 \( \text{Qb7} \) \( \text{Qa5} \) 10 a7! \( \text{Qa2}+ \) 11 \( \text{Qh3} \) \( \text{Qg2}+ \) 12 \( \text{g4} \) \( h5+ \) 13 \( \text{Qf4} \) with \( \text{Qxf3} \), \( \text{Qg2} \), \( \text{Qg1} \) and \( \text{Qh2} \) as a convenient route to escape checks.

4 \( \text{Qb7} \) \( \text{Qe5} \)

5 \( \text{Qf3} \) \( \text{Qc7} \)

If 5 ... \( \text{Qa5} \) 6 \( \text{Qc6}+ \) \( \text{Qh5} \) 7 \( \text{Qb7} \) gains a critical tempo.

6 \( \text{Qh3} \) \( \text{d3} \)

6 ... \( \text{Qc8}+ \) is met by 7 \( \text{Qg4} \) preparing \( \text{Qxg5} \) mate.

7 \( \text{hxg5}+ \) \( \text{Qxg5} \)

8 \( \text{Qd5}+ \) \( \text{Qh6} \)

Or 8 ... \( \text{Qf6} \) 9 \( \text{Qxd3} \) \( \text{Qb6} \) 10 \( \text{Qg4} \) and with further care wins.

9 \( \text{Qxd3} \) \( \text{Qg7} \)

9 ... \( \text{Qg5} \) allows the clever
Tactics
The queen is a powerful piece and queen endings are naturally full of tactics.

Skewers, Pins, Forks and Cross-Checks
The only normal way for a queen to win another queen is by a skewer. A particularly good example of multiple skewers is diagram 13.

Pinning is one of the main ways of defending against a passed pawn supported by its king. There are countless examples of this in the sections on queen and pawn against queen. A queen cannot, strictly speaking, fork a king and queen though it will frequently fork two or more pawns. However, there is a very important motif: the cross-check, whereby a player in check arranges to interpose his queen with check. Obviously by doing so he is effectively forking the enemy king and queen. Crosschecking is one of the main ways of averting perpetual check. For example:

Diagram 37
This position could arise at the very end of a queen and pawn ending. After 1 ♘h7! White wins at once since 1 ... ♘h1+ and 1 ... ♘b1+ are met by the cross-checks 2 ♘h6+ and 2 ♘g6+ respectively; whilst 1 ... ♘a7 fails to the skewer 1 ... ♘e3+/1 ... ♘g1+.

Cross-checking is in itself an extension of interposition: stopping the checks by putting one’s queen in the way.

Checkmate
Since a queen is such a powerful attacking force, the threat of checkmate is a very common theme in queen endings. A good example of this was diagram 2.

Borisenko - Simagin
Moscow 1955
1 ... ♘f1+
White has an extra outside passed pawn but his king is very exposed and this factor enables Black to hold the draw. For example, after 1 ... ♘f1+ 2 ♘h2 (2 ♘h4 ♘e2! threatens mate and forces a repetition) 2 ... ♘e2+ 3 ♘g1 ♘e1+ 4 ♘g2 ♘e2+ 5 ♘f2 ♘e4+ 6 ♘h2 ♘c4! there is no way White can improve his position. White chooses another plan to try to get his king over to the queenside to support the passed pawn but there is a major defect.

2 ♘g4? f5+!
3 gxf6
Or 3 ♘h4 ♘h1 mate.
3 ... ♘f5+
4 ♘h4 ♘h5
mate
Queen v Queen

Kartanaite - Kutavitshyene
Vilnius 1983

1... g5 allows mate in two.
2... f4
Threatening mate!
2    g5
If 2... e7 3 g4+ h4 4 h3!
intending h6 mate.
3... f7+ h6
4... f6+ h5

5 g4+ h4
Or 5 ... xg4 6 f3+ and mates.
6 f3 e4
To prolong the resistance.
7 e4 d1
8 h3 d7
8 ... h6 9 e5 to play 10
9 f3 1-0
Mate in two.

Perpetual Check

With a queen to check with, the defender can often threaten perpetual check if the stronger side's king is at all exposed.

The threat of perpetual, however, can usually be averted by centralising the queen so as to hinder the defender's own queen. In some cases, the king will then have to walk in order to escape the checks. It can either find total shelter or aim for a square on which it escapes by threatening to interpose the queen either with a pin or a cross-check.

A. Black to move forces immediate perpetual with:
1    c1+
2 h2 f4+
3 g1 c1+
4 h2 f4+
5 g3 xf2+=

B. White to move must not play 1
since the perpetual still works. But he can win in several ways, one of them being 1 b8.

Wheel Checks

"Star" checks going round the twinkling points of a star or "wheel" checks revolving like the spokes of a wheel are shown in diag 41. They are a form of perpetually checking the king and queen. Play could go:

1    a7+
2 c4 a4+
3 c3 a1+
4 d3 d1+
5 e3 g1+
6 e4 g4+
7 e5 g7+ etc.
Queen v Queen

A. Black to move draws with:

1 ... \( g4+ \)
2 \( f1 \) \( d1+ \)
3 \( g2 \) \( g4+ \)

4 \( h2 \) \( h4+= \)

B. With White to move 1 \( c8\) covers \( g4 \).

2 ... \( d8+ \)
3 \( g8\)

\( g8\) is the same; if 3 \( g8\) \( d4=+ 
4 \( g7 \) \( xg7 \).

3 ... \( f6+= \)

Stalemate

Stalemate, or the threat of stalemate, is an extremely common theme in queen endings: after all, a queen can stalemate a king in the corner all by itself.

Sometimes it is necessary to under-promote; see for example QRQ2.

Pilnick - Reshevsky
USA Championship 1942
Reshevsky blundered with:
92 ... \( g4?? \)

This allowed:
93 \( f2! \) \( \frac{1}{2}-\frac{1}{2} \)

Now stalemate cannot be avoided.

Instead of the impatient 92 ... \( g4 \) Reshevsky could have continued 92 ... \( c1+ \) 93 \( g2 \) and then 93 ... \( b8 \) is an idea to explore, e.g. 94 \( e5+ \) \( c7 \) 95 \( h8+ \) (95 \( xg5 \) \( g3+ \) reaches a winning pawn ending) 95 ... \( a7 \) 96 \( d4+ \) \( a8 \) 97 \( h8+ \) \( b8 \) 98 \( e4 \) \( g4! \).
This enables White to parry the stalemate idea that decided actual play - 1 \( \text{g}4? \text{w}xg6 + 2 \text{w}g5 \text{h}8! (3 \text{w}xg6 stalemate) to lead into a "drawable" ending.

White had to advance his pawn since otherwise he would just lose it. If 3 \( \text{b}8\text{w} \text{e}6 + 4 \text{w}g7 \text{h}6 + 5 \text{w}g8 \text{h}8 + 6 \text{w}f7 \text{f}6 + \) is perpetual check or stalemate; hence the knight promotion, but White still has no winning chances.

The game actually continued with 1 \( \text{e}5!? \text{b}6 + ? 2 \text{e}5 + \text{b}7 3 \text{e}7 + \text{a}8 4 \text{e}8 + \text{b}7 5 \text{d}7 + 1 \text{b}8 6 \text{d}6 + \text{a}8 7 \text{c}6 + !\) with a series of checks.

White forces the exchange of queens with a series of checks.
Queen v Queen

Kolchurin - Dryabkin

Kazan Ch 1929

Kolchurin forced the exchange of queens and achieved a winning pawn ending by the precise manoeuvre:

1. Qd4+ Qc2
   Or 1... Qc1 2. c3+ d1 3. Qe1+.

2. Qc5+! Qd2
   On 2... Qd1 3. Qd5+.

3. Qa5+! and wins.

Kasparov - Salov

Dortmund 1992

In contrast to the previous positions, this is an example of liquidation into rather than out of a queen ending. Kasparov forced the exchange of rooks with:

1. Qg7+ xg7

2. Qxe6+ h7

3. Qe7+ h6

4. Qxa7 e1+

5. Qh2 x4

6. Qb8 1-0

Levitt - Watson

London WFW 1990

While we’re on the subject of liquidation, I must stress that it is vital to check the resultant pawn endings. In diag 51, as you can see, there were rooks on the board; but if we changed both pieces to queens then the principle would equally apply. After 38 ... h4?? 39 xc4+ xc4 40 f5 gxf5 41 e6 Black had to resign since the pawn breakthrough forces a queen!

Queen v Queen: Further Examples

Kostic - Capablanca

match 1919

Queen endings don’t have to be long and tortuous. With an extra pawn and a totally sound position Capablanca won easily.

1. ... e8
   Intending ... d7 - c8 - b7 sheltering.

2. a2 e6

3. h5 gxh5

4. Qxh5+ d7

5. Bb1 c6

6. Qc1 e3+

7. d1 f4

8. Qg5 d4+

9. Qe2 e4+

10. d2 e5+

Exchanging queens and winning.

0-1
Black has a big advantage in view of his centralised position and much better pawn structure. Despite protracted resistance Keres was unable to save the game.

30... 

More resistant perhaps is 30... 

Two factors stand out in this position: the dominating position of the black queen and Black's pawn majority on the king's wing.

31... 

Preparing ...

The pawn ending after 33... 

If 32... 

32... 

Preparing ...

33... 

The pawn ending after 33... 

33... 

34... 

35... 

Ink has been spilt over possibilities after 35... 

35... 

36... 

36... 

leaves Black the initiative but not a clear method of winning.

36... 

37... 

38... 

Black has the possibility of ...

If 50... 

Black runs with the g-pawn.

Protecting d6 as a necessary preliminary to pushing the g-pawn.
Queen v Queen

If 60 ... $\text{Qe}5$ 61 $\text{Qf}7+$ $\text{Qg}3$
$\text{Qx}a7$ the win is doubtful.
61 $\text{e}5$ ($3d$)

On 61 $\text{Qg}8+$ $\text{Qg}6$ 62 $\text{Qd}8+$ $\text{Qf}4$ Black wins easily.
61 ... $\text{Qxe}5$
62 $\text{Qxe}5+$ $\text{Qxe}5$
63 $\text{Qe}4$ $\text{Qf}6$
64 $\text{Qe}3$ $\text{Qf}5$
65 $\text{Qf}2$ $\text{g}4$
66 $\text{Qe}2$ $\text{g}3$
67 $\text{Qe}3$ $\text{Qg}4$

Without critical calculation
is the methodical 67 ... $\text{Qe}5$
68 $\text{Qe}2$ $\text{Qd}6$ 69 $\text{Qe}3$ ($69$ $\text{Qf}1$

In the game Black played 2
... $\text{Qa}6+$!? 3 $\text{Qd}3$ $\text{Qb}6$ 4
$\text{Qg}6+$ $\text{Qf}8$ 5 $\text{Qx}h5$ and thus
lost two pawns. White won in
another 16 moves.
3 $\text{Qxb}4$

And the b-pawn should be
enough to win comfortably.

Smyslov - Lilienthal
Moscow 1947
This is an example of
transformation of an
advantage.
1 $\text{e}6$! $\text{fxe}6$
If 1 ... $\text{Qe}7$ 2 $\text{Qd}7$ $\text{Qxe}6+$ 3
$\text{Qxe}6$ $\text{fxe}6$ 4 $\text{Qd}3$ and wins.
2 $\text{Qe}4$! $\text{Qf}7$

Lasker - Capablanca
Moscow 1936
A classic endgame. Despite
Black’s four extra pawns,
White has some swindling
chances in view of the huge
passed a-pawn. But Capablanca
wrapped up the game with
only two more accurate
moves.
53 ... $\text{Qf}2$
53 ... $\text{Qc}8$ 54 $\text{Qa}3$ $\text{Qa}6$ 55
$\text{Qc}5$ $\text{c}3$! 56 $\text{Qxc}3$ (56 $\text{Qb}6$
$\text{Qe}2$) 56 ... $\text{e}4$ 57 $\text{Qd}2$ (57
$\text{Qa}3$ $\text{e}3$!) 57 ... $f5$ overturns
previous thinking and also
wins (Minev).
53 ... $\text{e}4$ 54 $\text{a}6$ $\text{Qc}5$ 55 $\text{Qb}2$
$c3$ 56 $\text{Qb}8+$ (if 56 $\text{Qb}7$ $\text{Qf}2$!
wins) 56 ... $\text{Qh}7$ 57 a7 $\text{Qc}3+$
58 $\text{Qb}1$ $\text{Qd}3+$ 59 $\text{a}2$ $\text{c}2$ 60
$a8\text{Q}$ (60 $\text{Qb}2$ $\text{Qd}2$ 61 $\text{Qh}8+$
$\text{g}6!$ 62 $\text{Qe}8+$ $\text{Qg}5$ 63 $\text{Qb}5+$
$f5$ wins) 60 ... $\text{Qc}4+$ 61 $\text{Qb}3$
$c1\text{Q}+$! wins.
54 $\text{Qa}3$?!
If 54 $\text{Qd}2$, as suggested by
Lasker, 54 ... $\text{Qc}5$!
(zugzwang!) 55 $\text{Qc}3$ $\text{e}4$ takes
control.
Or 54 $\text{Qxc}4$ $\text{Qe}1+$ 55 $\text{Qc}2$
$\text{xa}5$ when Black can give up
two pawns and avoid the
checks after 56 $\text{Qc}8+$ $\text{Qh}7$ 57
$\text{Qf}5+$ 58 $\text{Qg}8$ 58 $\text{Qe}6+$ 59
$\text{Qd}6+$ 60 $\text{Qe}6+$ $\text{d}8$ 61
$\text{Qg}8+$ 62 $\text{Qx}g7+$ $\text{Qe}6$
63 $\text{Qg}8+$ $\text{d}6$ 64 $\text{Qf}8+$ $\text{d}5$
$\text{xf}6$ by 65 ... $\text{Qa}4$!
(planning 66 ... $\text{Qf}4$), thus
winning (Capablanca).
54 ... $\text{Qh}7$?
0-1
If 55 $\text{a}6$ $\text{c}3$! 56 $\text{Qxc}3$ $\text{Qf}1$+.
This ending is an illustration of the skilful use of queen and pawns as an attacking force and incorporates mating and stalemate ideas and careful transitions to pawn endings.

48 \textit{\#h5+} \textit{\#g8}

For 48 \textit{\#g7} see diag 71a below.

\begin{itemize}
\item 49 \textit{\#e6!} \textit{d2}
\item If 49 \textit{\#f6} 50 \textit{\#f7+}.
\item 50 \textit{\#f7+} \textit{\#h8}
\item 51 \textit{\#e7} \textit{\#xe7}
\item Instead of 51 \textit{\#a8+} 52 \textit{\#g5} \textit{\#xd5+} 53 \textit{\#cxd5} \textit{d1\textit{\#}} 54 \textit{\#e8\textit{\#}} 55 \textit{\#e7+} \textit{\#h6} (after 55 \textit{\#g8} perhaps 56 \textit{\#xc5} is simplest) 56 \textit{\#f6+} and now:
\begin{itemize}
\item a) 56 \textit{\#h5} 57 \textit{\#g6+}, 58 \textit{\#g3+} and 59 \textit{\#f3+} wins;
\item b) 56 \textit{\#h7} 57 \textit{\#f7+} \textit{\#h8} 58 \textit{\#g3} with the white king escaping into the black side of the board.
\end{itemize}
\item 52 \textit{\#xe7} \textit{d1\textit{\#}}
\item 53 \textit{\#e5+} \textit{\#h7}
\end{itemize}

Or 53 \textit{\#g8} 54 \textit{\#d5+} reaching a won pawn ending.

\begin{itemize}
\item 54 \textit{\#e4+} \textit{\#h8}
\item 55 \textit{\#f5} \textit{\#d2+}
\item 56 \textit{\#f3} \textit{\#xa2}
\end{itemize}

56 \textit{\#e3+} 57 \textit{\#f4} is another escape.

57 \textit{\#f6} 1-0

\textbf{Diagram 56a}

48 \ldots \textit{\#g7}

Instead of 48 \ldots \textit{\#g8} as played.

49 \textit{\#f5!}

Instead 49 \textit{\#e6} d2 50 \textit{\#f7+} \textit{\#h6} 51 \textit{\#e7} \textit{\#a8+} enables Black to uncover two stalemate ideas, viz. 52 \textit{\#h2} \textit{\#h1!!} or 52 \textit{\#g3} \textit{\#f3+!!}; the other continuation 52 \textit{\#d5} \textit{\#xd5+} 53 \textit{\#cxd5} \textit{d1\textit{\#}} 54 \textit{\#e8\textit{\#}} \textit{\#xd5+} followed by \ldots \textit{\#xa2} arrives at a level ending.

49 \ldots \textit{\#a8+}

If 49 \ldots d2 50 \textit{\#f6+} \textit{\#g8} 51 \textit{\#g6+}, 52 \textit{\#g7+}, 53 \textit{\#f7+} etc.

50 \textit{\#g3} \textit{\#e4}
\item 51 \textit{\#f6+} \textit{\#f8}
\end{itemize}

After 51 \ldots \textit{\#g8} 52 \textit{\#g5+} \textit{\#f7} 53 \textit{\#g7+} \textit{\#e6} 54 \textit{\#e7+} \textit{\#f5} 55 \textit{\#h7+} \textit{\#xe5} White forces an easily won pawn ending by 56 \textit{\#xe4+} \textit{\#xe4} 57 \textit{\#f2+}.

52 \textit{\#h8+}

And wins similarly to previous note.

Analysis based on notes by Sax and Hazai.
Queen v Rook (and Pawns)  

Queen v Rook: No Pawns

The ending of queen v rook without pawns is always winning unless the player with the rook to play can force a draw, or indeed, a win, immediately.

Until the advent of computer databases, this ending was thought to be fairly simple: although "Euclid", a certain Alfred Crosskill Beverley, devoted a whole book of 120 positions to it in 1895.

If the rook defends very accurately, however, the win can be quite difficult. In 1978, the American grandmaster Walter Browne took on a database. He failed to win the first time round and only won the replay on the fiftieth move.

If the defending king can be driven into the corner, the win is easy - see diag QR1. The main problem arises, however, if the defender manages to set up the third rank defence. In order to break this it is sometimes necessary to retreat the queen from an apparently superb position on the seventh rank, in order to switch flanks suddenly and so outwit the rook. The absolutely critical position is diag QR4.

<table>
<thead>
<tr>
<th>QR 1</th>
<th>Philidor 1777</th>
</tr>
</thead>
<tbody>
<tr>
<td>From diag 1 flow a cascade of queen checks forking king and rook dependent on the square the rook is placed to seek safety.</td>
<td></td>
</tr>
<tr>
<td>White, in five moves, wins the rook or mates: If 1 ... $h6 2 $f8 pins and wins.</td>
<td></td>
</tr>
<tr>
<td>1 ... $g8 2 $h5 mate.</td>
<td></td>
</tr>
<tr>
<td>1 ... $b7 2 $e4+.</td>
<td></td>
</tr>
<tr>
<td>1 ... $g2 2 $e4+.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QR 2</th>
<th>Berger 1889</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptions to the winning process occur when there are possibilities for pinning the queen against its king or for stalemating. Play from diag 2 could go 1 ... $h7+ 2 $g2 $g7+ 3 $h3 $h7+ 4 $g4 $g7+ 5 $h5 $h7+ 6 $g5 $g7+ 7 $h6 $h7+ 8 $g6 $h6+ 9 $xh6 stalemate.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QR 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In diag 3 White is intent on driving the rook off its third rank and bringing up the king to confront the black king. After 1 $g5 the black rook has only one &quot;safe&quot; square at $h8. If 1 ... $h2 2 $d6+; 1 ... $h1 2 $c8+; 1 ... $b6 2 $d8+; 1 ... $a6 2 $c8+ - all forks. But after 1 ... $h8 2 $g6 (threatening 3 $d8) 2 ... $g8+ 3 $f6 Black can delay, but not stop, mate.</td>
<td></td>
</tr>
</tbody>
</table>
Queen v Rook (and Pawns)

If we shift all the pieces in diag 3 one square towards the a-file we reach diag 4. The winning process is much more difficult here.

There is still the same need to eject the rook from the third frame (c6 - f6 - f3 - c3) and establish the attacking king thereon. One must find squares from which the queen will dominate and must be prepared to use the whole board.

The first phase is finding such a dominant queen position. Surprisingly the most effective is:

1... Qc4

Already the rook has no further squares on its rank, viz. 1... Qh6 2 Qg8+ and 3 Qg7+; 1... Qb6 2 Qc8+ and 3 Qc7+.

And control is exercised over other rook moves: 1... Qg2 2 Qc6+; 1... Qg1 2 Qa4+ and eventually forking with Qa7+; 1... Qg3 2 Qa4+ Qe7/d8 (2... Qf7/f8 3 Qf4+) 3 Qh4+; 1... Qg5+g7 allows 2 Qf6 threatening mate; 1... Qd7/d8 2 Qd3+ forks.

After 1 Qc4 Black is therefore limited to 1... Qf8 and to 1... Qe7.

A. 1... Qf8

White can continue herding with:

2 Qf5 Qg7

Else:

2... Qd6 allows the pin 3 Qc5 and after 3... Qe7 4 Qe5 loses the rook.

2... Qg1 (or 2... Qb6) 3 Qc5+.

2... Qg2 3 Qc8+ and 4 Qb7+.

2... Qg3 3 Qc8+ and 4 Qc7+.

2... Qg7 (or 2... Qg8) allows 3 Qf6 gaining White’s main objective.

After 2... Qh6 White has a further powerful centralisation by 3 Qd4!, e.g. 3... Qh3 4 Qg6 Qg3+ 5 Qf6 Qf3+ 6 Qe6 Qh3 7 Qf4+ Qg7 8 Qg4+ wins the rook, or if 3... Qf7 White continues encroaching with 4 Qd7+ Qf8 5 Qg5 Qh8 6 Qg6 Qg8+ 7 Qf6, or on 3... Qg8 similarly 4 Qg5 Qh7 5 Qg6.

3 Qh4! Qa6

Or 3... Qh6 4 Qe7+ Qg8 5 Qe8+ Qg7 6 Qg5 Qh7 7 Qe4 Qh8 8 Qe7+ Qg8 9 Qg6 and mate in two.

4 Qd4+ Qb7

5 Qd7+ Qh6

6 Qd8+ Qg7

7 Qc7+ Qh6

8 Qc8! (4a)

White succeeds with a clever blend of threats to the rook and to mate.

8... Qa5+!

9 Qf6

And Black must throw the rook to the lions.

B. Returning to diag 4 Black can play (after 1 Qc4):

1... Qc7 (4b)

Now one winning method is:

2 Qh4+ Qf7

3 Qh7+ Qg7

4 Qf5+ Qg8

After 4... Qe8 5 Qd6 establishes the white king on the “third frame” (c6-f6-f3-c3).

5 Qe6 Qb7

6 Qd5! Qf7

Or 6... Qb6+ 7 Qe7+ Qh7 8 Qd3+ setting up the win of the rook.

7 Qd4! Qb7

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Queen v Rook (and Pawns)

8 f6 g7
9 c8+ h7
10 c8

And White has reached the Philidor position (see diag 1).

There could follow 10 ... c7
11 h5+ g8 12 d5+ h7
13 d3+ g8 14 g3+ or 14
f8+.

A sample line illustrating the gradual 'herding' by the queen and king: 1 f6 c5 2 c7+
6 d8 f7 4 f6 e2 5
e3 f1 6 d3 f6 7 d7+
e6 8 e5 f7 9 g4+ h6
10 e6 g7 11 d4 g5 12

A Practical Example

Kamsky - Ljubojevic
Linares 1991

To win White needs to be able to cross the f-file with his king. Black’s fortress is broken by:

80 h4 f3
81 h5! gxh5

... so that the black rook has no secure post on the f-file.

Play continued:
82 c8+ f8
83 c5 f1
84 xh5 e1+
85 f6 f1+
86 g6 g1+
87 h6 e1 (6a)

Now Kamsky won by 88
g4+ f7 89 c4+ e6+ 90
g5 e7 91 f5 h6 92
f7+ g8 (“Black has managed to reach his best defensive position with the rook on the sixth rank to hold back the white king.” - Benko) 93
f4 c6 94 a4 d7 95
e5 c7 96 a7+ c8 97
d5 h6 98 g7 a6 99
f7 a2 (if 99 ... b6 100
c5 a6 101 b5 wins) 100
e8+ c7 101 c6+ d8
102 c4 h2 103 d4 h6
104 c5+ e8 105 g4+ 1-0.

The same position put on a queen v rook computer base gave the following moves:

88 d5+

White now needs eight more moves to win.

88 ... f8
89 c5 e8

Or 89 g8 90 g5! (90
g6 takes four moves longer after 90 ... e6+ 90 ... e8
90 ... h7 91 c2+ g8 92
c4+ wins the rook) 91 f6
e8+ 92 g6 and wins in four more moves.

90 g7 d7

If 90 ... e6 91 c8+, 92
c7+ and 93 f7+.

91 b5 c8

Or:
91 e6 92 e8+;
91 e7 92 b4+;
91 d8 92 a5+.

92 c4+ d7
93 a4+ c8
94 g4+

With forks on h4, g3 and b4. So White would win much quicker than in the game.
Queen v Rook (and Pawns)

The longest win

Diag 7 illustrates a queen v rook position setting the optimum difficulty to construct a win. White needs 31 moves to force mate or gain the rook. A sample line runs:

1. Qa1 Hf2 2. Hb4+ Qd3 3. Qb1 Ad2 4. Hf4 Qc3 5. Qe3+ Hd3 6. Qc5+ Qd2 7. Qc1+ Qe2 8. Qc2 Ad4 9. Qc3 Add 10. Hg1 Ha5 11. Hbl Ha3+ 12. Qd4 Ha4+ 13. Qe5 Hg4 14. Qc2+ Qe3 15. Qc1+ Qe2 16. Qc3 Hg7 17. Hc4+ Qe3 18. Hf5 Hg2 (7a) (the white pieces are now optimally positioned ready to ease the opposing king back to the rim of the board and keep the rook tamed) 19. Hf4+ Qe2 20. Qe4 Hf2 21. Hc1 Hg2 22. Qc2+ Hf1 23. Qd1+ Qf2 24. Qf4 Hh2 25. Qd4+ Kg2 26. Qg4 Hh1 27. We4+ Qg1 28. Qg3 Hf2 29. We3 Hh1 30. We1+ Hf1 31. Wxf1 mate.

Queen v Rook and Pawn(s)

Except in very exceptional positions, the queen is, of course, trying to win. “Black” can try to defend in two distinct ways:

a) By setting up a fortress;

b) By supporting the pawn far enough up the board to prevent the white king and queen from mounting a successful attack.

In practical play, fortresses predominate so we shall concentrate on them.

Fortresses

For the fortress to withstand siege it is necessary to keep the enemy forces behind the moat. And in practice this means that the queen must be prevented from getting behind the pawn.

Conde, Duke of Olivares collection

The text of a 15th century Spanish manuscript, now in the Library of El Escorial, indicates that White draws by moving the rook between d3 and f3. Since the white rook has two excellent outposts on these two squares there is no way for the queen to get behind the pawn without a treasonous defence. The position is therefore absolutely drawn.

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In contrast, here the pawn is on the third rank and so the white queen is able to infiltrate.

1. \( \text{wa1} \), \( \text{b5} \)
2. \( \text{w}g7+ \), \( \text{d8} \)
3. \( \text{w}f6+ \), \( \text{d7} \)
4. \( \text{w}f7+ \), \( \text{d8} \)
5. \( \text{we6} \), \( \text{c7} \)
6. \( \text{we7}+ \), \( \text{c8} \)
7. \( \text{wd6} \), \( \text{b7} \)
8. \( \text{wd7}+ \), \( \text{b6} \)
9. \( \text{wc8} \), \( \text{d5} \)
10. \( \text{wb8}+ \), \( \text{c5} \)
11. \( \text{wc7} \), \( \text{b5} \)
12. \( \text{wa7} \), \( \text{h5} \)

The next objective is to make Black relax the rook's barrier along the fifth rank so that the white king can cross to behind the pawn.

The remaining analysis stems from Cheron, 1950. 13 \( \text{wd3!} \), \( \text{h3+} \)

If Black has a knight's pawn, there is no room on the flank and with the move it is possible for Black to draw. (White to move can force the win starting with 1 \( \text{wa7+} \), \( \text{c6} \), 2 \( \text{wb8} \) though it is not by any means trivial.)

1. ... \( \text{b7!} \)
And White can make no progress, e.g.
2. \( \text{wf7}+ \), \( \text{b8} \)

Threatening 14 \( \text{wa6} \).

L. I. Kubbel "Archives" Theory tends to concentrate on positions in which the fortress is already built. But of course in practical play there is often a headlong rush to get the rook back into place; or the king or pawn to the right square. In Kubbel's study, Black is very close to the precipice but with exact play he can survive.

1. ... \( \text{fl!} \)

Of course not 1 ... \( \text{h1} \), 2 \( \text{wd8+} \), \( \text{f7} \), 3 \( \text{wd5+} \).
Queen v Rook (and Pawns)

3 ... \( \text{Qf7} \)  
4 \( \text{Qg4} \)  
Or 4 \( \text{Qe6 g6!} \)  
4 ... \( \text{g6!} \)  
5 \( \text{Qg5 Qg7} \)  
6 \( \text{Qd4+ Qh7} \)  
7 \( \text{Qh4+ Qg7} \)  
8 \( \text{Qh6+ Qg8} \)  
9 \( \text{Qg4} \)  
Instead 9 \( \text{Qxg6} \) fails to the

J. Berger 1921
Although in general the defender will prefer to have his pawn as near to the edge of the board as possible, you can have too much of a good thing. Rook's pawns do not make a good foundation for a fortress since there is only one anchor square.

In diag 12 White can easily put Black into zugzwang.
1 \( \text{Qd5+ Qb8} \)  
2 \( \text{Qd7+ Qh6} \)  
Or 2 ... \( \text{Qa8}3 \text{Qc8+ Qb8}4 \)  

Koblenc 1959
White is also winning with his king on h5.
1 ... \( \text{Qg8} \)  
2 \( \text{Qa8+ Qg7} \)  
3 \( \text{Qb7+ Qh8} \)  
3 ... \( \text{Qg8}4 \text{Qe7!} \)  
4 \( \text{Qf7! Qh6+} \)  
5 \( \text{Qg5 Qg6+} \)  
6 \( \text{Qf5 Qg1} \)  
7 \( \text{Qf8+ Qg8} \)  
8 \( \text{Qf6+ Qg7} \)  
9 \( \text{Qd8+ Qg8} \)  
10 \( \text{Qd4+ Qh7} \)  
11 \( \text{Qf6! Qg8} \)  
12 \( \text{Qd8+ Qf7} \)  
13 \( \text{Qh8} \)  
Winning the pawn.

von Guretzky-Cornitz 1864
Leaving aside rook's pawns on the third for the moment, we pass on to diag 14, in which White wins easily by the familiar plan of infiltration from behind.
1 \( \text{Qd5 Qa6} \)  
2 \( \text{Qc6 Qa7} \)  
Or 2 ... \( \text{Qb6 3 Qa8+ Qb5}4 \text{Qb3 Qa6 5 Qd5+ Qb6}6 \text{Qa4} \)  

\( \text{Wc6+ Qb7} 5 \text{Qd6 and the pawn falls.} \)

\( \text{Wc6+ Qb7}5 \text{Qd6 and the pawn falls.} \)

Now on:

a) 5 ... \( \text{Qh5+}6 \text{Qc6 wins.} \)

b) 5 ... \( \text{Qb6 6 Qd7 Qb27} \)

\( \text{Wa4+ Qb7}8 \text{Wd4+ Qa69} \)

\( \text{Qd3+ Qb7}10 \text{Qf3+ Qc711} \)

\( \text{Qf7+ Qb8}12 \text{Qf8+ Qb713} \)

\( \text{Qg7+ and the rook is gone.} \)

c) 5 ... \( \text{Qh3 6 Qf6+ Qb77} \)

\( \text{We7+ will fork the rook.} \)

White wins.
Queen v Rook (and Pawns)

Pawn on the Third Rank
With the pawn further up the board, White is usually still winning. But we’ve never seen an example of this in actual play: whereas the case of the pawn on the third rank (or on the second and able to advance one square) has occurred several times. The defender can hold as long as he prevents the enemy king from settling on f1 or f2. The natural way to investigate this structure seemed to be to look at potential zugzwang positions:

Diagram 15
White can draw with 1... $\text{g}4$, 1... $\text{g}8$ but not: 1... $\text{g}6$? $\text{e}5+$ 2 $\text{h}1$ $\text{h}5$; 1... $\text{g}5$? $\text{d}2+$; or 1... $\text{g}7$? $\text{e}5+$.

Diagram 15a
Here too, White has a choice: either 1... $\text{g}1$, 1... $\text{g}8$ draws but not: 1... $\text{g}5$? $\text{h}4$; or 1... $\text{g}7$? $\text{h}4$ 2 $\text{h}2$ $\text{f}4+$.

Diagram 15b
von Guretzky-Cornitz (with colours reversed) 1864
This is what the defender must avoid. The enemy king can settle on f2 and as a result White falls into zugzwang:
1...
2... $\text{h}2$
Or 2... $\text{g}2+$ $\text{f}1$ 3... $\text{g}4$

A zugzwang position.
9... $\text{g}8$ $\text{f}3+$
10... $\text{h}2$ $\text{f}4+$
11... $\text{h}1$ $\text{e}4+$
12... $\text{h}2$ $\text{e}5+$
13... $\text{h}1$ $\text{d}5+$
14... $\text{h}2$ $\text{x}g8$
and Black wins.

Ghitescu - Badea
Bucharest 1991
White had a choice as to which way to go with his king.

A.
Ghitescu chose:
55... $\text{f}3$?
This looks natural, but as we now know Black was able to defend successfully. 55...
$\text{g}5$! 56 $\text{e}4$ $\text{g}6$ 57 $\text{e}7+$
$\text{g}8$ 58 $\text{f}4$ $\text{f}5$ 59 $\text{f}6$
$\text{h}7$ 60 $\text{f}7+$ $\text{h}5$ 61 $\text{f}5+$
$\text{g}8$ 62 $\text{e}6+$ $\text{h}7$ 63 $\text{e}4+$
3 $\text{h}1$ $\text{h}6$.

B.
55... $\text{h}3$
This would have been correct since the necessity of keeping the white king out of h5 causes Black to fall into zugzwang.
55...
56... $\text{g}5$
56... $\text{d}4+$ $\text{h}7$
57... $\text{h}4$ $\text{g}8$
58... $\text{d}7$ $\text{h}8$

432
Queen v Rook (and Pawns)

With a zugzwang. If 59 ... a5 White zigzags checks to d8/c7/b6 to win the rook.

QR Sande - Bernstein (variation)
Malta 1980

Our final example of fortresses arises from analysis of a game from the 1980 Olympiad. Initially Liberzon thought he had found a nice win in this variation, but Ftacnik realised that White can head for diag 18.

49 g2
Liberzon gave 49 e2 e4 50 d2 f4+ 51 e3 d5 52 h4 c6 53 h5 b6 54 h6 a7 and wins.

The Rook Defends Along the Rank
Khenkin 1962

For Black to draw this and similar positions the king must be within the area b3, c3, c4-g4, g3 and h3 to help the rook maintain some square along the rank c2-h2.

Even the position with black king at c4, rook at c2 and white queen at e3 is lost after 1 ... b4 2 d3 giving zugzwang.

From diag 18:
1 ... e2
2 f4+ d3

Khenkin 1962

Difficulties winning are to be expected when the pawn, supported from behind by a rook, is far advanced and needs to be blockaded by the queen.

With White to play:

/+ +
1 h8+ b7

W/B

59 w7
With a zugzwang. If 59 ... a5 White zigzags checks to d8/c7/b6 to win the rook.

59 ... Ag7
60 w8+ h7 61 e4+ g8 62 h5 and wins the pawn.

Analysis by Liberzon and Ftacnik.
Contrary to published theory, which says that Black to play is able to draw, White wins from the diagram after:

1. \( \text{Qa6+} \)
2. \( \text{Rd7} \)
3. \( \text{Qa7+} \)
4. \( \text{Qb7} \)
5. \( \text{Qb6} \)

Thus far Khenkin's analysis; he continued 6 \( \text{Qb4+} \), 7 \( \text{Qc6} \), 8 \( \text{Qc4+} \), and could not progress further. The database produced:

- Black to move has to give ground in diag 20 after 1 ... \( \text{Fe8} \), 2 \( \text{Fd6+} \), when White loses a move by 3 \( \text{Ff1} \), 4 \( \text{Ff1} \), and Black, in zugzwang, loses the pawn.
- With White to move the black king and rook cannot be forced apart, e.g. 1 \( \text{Ff1} \), 2 \( \text{Ff1} \), 3 \( \text{Ff1} \), 4 \( \text{Ff1} \), 5 \( \text{Ff1} \), and White wins the pawn with a forking check.

- This picks up the pawn and wins.

Corrected by a database:

Cheron believed that it was only with a bishop's pawn on the fifth supported from behind by a rook that a draw could be held giving diag 21 as an example.

Cheron had presumably missed the idea of temporarily blockading the pawn with the queen. The win is exceedingly complex and we give the main line with only minimal notes: 1 ... \( \text{Fe8} \), 2 \( \text{Fe5} \), 3 \( \text{Fb4} \), 4 \( \text{Fb7} \), 5 \( \text{Fa5}+ \), 6 \( \text{Fb5} \), 7 \( \text{Fb6}+ \), 8 \( \text{Fb6} \), 9 \( \text{Fb6} \), 10 \( \text{Fb6} \), 11 \( \text{Fb6} \), 12 \( \text{Fb6} \), and Black, in zugzwang, loses the pawn.
Queen v Rook (and Pawns)

Mutual Zugzwang

Prokop - Chess Amateur 1925

Prokop showed that with Black to move it is an easy win for White.

1 ... \text{\texttt{Af3}}
Or 1 ... \text{\texttt{Ad3}} 2 \text{\texttt{We5}}.

2 \text{\texttt{Wg4+ \texttt{Be3}}}
3 \text{\texttt{We4 \texttt{Af4}}}
4 \text{\texttt{Wd5}}!

We shall look at this position with White to move in diag 25.

4 ... \text{\texttt{Af3}}
5 \text{\texttt{We5+ \texttt{Ad3}}}
6 \text{\texttt{We2+}} and wins

This is all quite simple; but the further claim that the position is mutual zugzwang is infinitely harder to substantiate. I turned for help to John Nunn and his CD-ROM and together we worked through some of the variations which arise.

Since Black is short of room and White can play only with his queen it is not too surprising that there are at least two positions of mutual zugzwang: diags 22 and 23. And some of the tempo play which arises is quite splendid:

If 1 \text{\texttt{We8 \texttt{Id5}}} or 1 ... \text{\texttt{Af5=}}; but not 1 ... \text{\texttt{Af3? 2 We7+!}} with zugzwang (see diag 26).

1 ... \text{\texttt{Ad5}}

Alternatively:

a) 1 ... \text{\texttt{Af5}} is also okay; but not

b) 1 ... \text{\texttt{Af7? 2 Wb2+ \texttt{Be4 3 \texttt{Wb4+ \texttt{Be5 4 Wb8+!}}}} and wins; or

c) 1 ... \text{\texttt{Af8? 2 Wg4+ \texttt{Be3 3 \texttt{We6+ \texttt{Af3 4 Wg6 \texttt{Af4 5 Wg2+ \texttt{Be3 6 Wd5!}}}}}} (see diag 25).

2 \text{\texttt{We7}}

If 2 \text{\texttt{We3 \texttt{Af5}}} or 2 ... \text{\texttt{Af6}} or 2 ... \text{\texttt{Af8}} still keep the draw. But now Black has only one move:

2 ... \text{\texttt{Af5!}}

See diag 24.

B.

1 \text{\texttt{Ad6+ \texttt{Be4}}}
2 \text{\texttt{Wc5 \texttt{Af3}}}
2 ... \text{\texttt{Af3}} and 2 ... \text{\texttt{Af5}} are also sufficient.

3 \text{\texttt{Wg5}}

Of course if 3 \text{\texttt{Wxf2+ \texttt{Be4}}} or 3 ... \text{\texttt{Wg4=}}; while if 3 \text{\texttt{We5 \texttt{Bf4+}}}.

3 ... \text{\texttt{Be4!}}

The only move; but not 3 ... \text{\texttt{Wd3 4 Wd5!}} and wins (see diag 25).

This is also mutual zugzwang. White to play cannot do better than 1 \text{\texttt{We6 \texttt{Af4=}}} (as in diag 22) or 1 \text{\texttt{We8 \texttt{Af5!}}}.

Black to move loses immediately after 1 ... \text{\texttt{Af5 2 Wd6+ \texttt{Be4 3 We6+}}; whilst 1 ... \text{\texttt{Wf4 2 We6}} is diag 22 with Black to move.
Queen v Rook (and Pawns)

However, diag 24 is drawn with either player to move. The critical difference between this and diag 25 is that the black pieces are further away from the e2-square. As we know already, even if he gets driven up one more file into diag 22 Black can draw if it is White to move. But of course, there is no such latitude in diag 22 since g3 and f3 both get forked by e2+.

CD-ROM, Nunn and Speelman

As we have seen already, this position is simple with Black to move, viz. 1 ... f3 2 e5+ and 3 e2+.

With White to move, however, there is only one way to win. White has to triangulate with his queen so as to reach diag 22 with Black to move.

1 w6!!

Thus with Black to move he must play:

1 ... f4!

But not 1 ... d4? 2 d6+ e4 3 e6+.

2 w5+ e4

3 w5

This transposes directly into diag 25 with White to move in line B. Black can draw with 3 ... f3, 3 ... f3 or 3 ... f5.

QR

Timman - Nunn

Wijk aan Zee 1982

An example of a good fortress is Timman - Nunn up to and including move 68.

56 a3 b4+

57 a2 c5

58 b2 g5

59 b3 f4

60 d3 e4

61 a3 a5

62 d3 a4

63 a3 b4+

64 a2 d5

65 d3+ c5

66 a3 c4+

If 1 w7 d4 or 1 ... f3 both draw. However, after 1 a8 only 1 ... d4 is sufficient. The point is that after 1 a8 f3? 2 a4! f4 3 c6 reaches the main line two moves late. With the queen on b7 this was not possible.

1 ... d3

2 w8! d4

3 w6 and wins

67 b2 b4 (26a)

The fortress can be kept intact, e.g. 67 d3 e4 68 a3 e5+ 69 a2 f5 70 b2 g6 71 d3 h6 72 a3.

But tactical advances based on an advance ... a4-a3 have to be carefully monitored.

68 d3 e4

Against the try 68 ... a6 Grigoriev gave 69 a3! holding and avoiding 69 f3? a3+ 70 a2 d4+ 71 b3+ a4 72 a1 f1+ 73 b1 f6+ 74 a2 c3 winning.

69 a2??

69 a3 holds.

69 ...

60-1

If 70 b3+ d4 71 d3 w2 or 70 b1 w1+ 71 a2 c1 72 b3+ a4 winning.
Queen v Minor Pieces

These endings occur exceedingly rarely. There are now databases on all three endings which have demonstrated that: queen vs two bishops and queen vs bishop and knight are usually won; whereas two knights have somewhat better chances to defend themselves. I should like to thank John Nunn for giving me access to his databases - and even more important the knowledge which he has gleaned by working with them. One caveat, however, before we dive into the material. ‘God Chess’, which a database reproduces, is extremely alien and reminds me of nothing so much as solving a Rubik Cube. The pieces gradually become disorganised and suddenly, as if by magic, all is clear. Given the extreme rareness and complexity of these endings, it would take a quite disproportionate amount of time and energy to gain even a slight understanding of the absolute truth which a total analysis encompasses. I do have some vague ideas about what is going on; but really I feel more like an anthropologist investigating some rare species than a chessplayer!

Queen v Two Bishops

**QBB A fortress**

1. I gave this known drawing position to John’s database and we made some obvious winning attempts. It seems that Black should keep his bishop on c6 and play ... a7-b6-a7 or if necessary ... b7-b6.

   | 1 | 2 |
---|---|---|
W/B | W/B |

3. d6+ b7
4. c4 a7
5. b4 b6
6. c4 a7
7. b3 b6
8. b4 a7
9. e7+ b6
10. f7 b8
11. f2+ b7
12. c5 a7=

**QBB Mutual Zugzwang!**

2. White to play must allow Black to set up the fortress, viz.

   | 1 | 2 |
---|---|---|
W/B | W/B |

3. d6+ b7
4. c4 a7
5. b4 b6
6. c4 a7
7. b3 b6
8. b4 a7
9. e7+ b6
10. f7 b8
11. f2+ b7
12. c5 a7=

**QBB Preventing the fortress**

3. White wins only with ...

   | 1 |
---|---|
W/B | W/B |

1. b1+!

   This prevents the fortress - after which we are informed that it takes another 60 moves to win.

   Black to play can draw with either 1 ... c7 or 1 ... b8.
Queen v Minor Pieces

**QBB**

This is a straightforward winning position.

1. \( \text{Qd6!} \)

This is much the quickest though 1 \( \text{Qd7} \) is also sufficient.

1. ... \( \text{a7} \)

If 1 ... \( \text{c7+} \) 2 \( \text{c5} \) and, e.g.

- 2 ... \( \text{d8} \) 3 \( \text{c6}+ \) \( \text{a7} \) 4 \( \text{d7+} \); or 1 ... \( \text{b5} \) 2 \( \text{d5}+ \) \( \text{a6} \) 3 \( \text{a8}+ \) \( \text{a7} \) 4 \( \text{c7} \) etc.

- 2 \( \text{a2} \) \( \text{b7} \)

- 3 \( \text{f7}+ \) \( \text{b8} \)

- 4 \( \text{c6} \) \( \text{a5} \)

- 5 \( \text{e7} \) \( \text{a8} \)

- 6 \( \text{a3} \) and wins

Finally, the longest win - 71 moves: 1 ... \( \text{d5}+ \) 2 \( \text{b8} \)

- \( \text{d6+} \) 3 \( \text{a7} \) \( \text{c5+} \) 4 \( \text{a6} \)

- \( \text{c4+} \) 5 \( \text{a5} \) \( \text{e6} \) 6 \( \text{h2} \)

- \( \text{d5} \) 7 \( \text{f4} \) \( \text{d3} \) 8 \( \text{d2} \) \( \text{e4} \)

- \( \text{c3} \) \( \text{d4} \) 10 \( \text{e1}+ \) \( \text{d5} \) 11 \( \text{b4} \) \( \text{g4} \) \( \text{f5} \) 13 \( \text{c7} \)

- \( \text{d3} \) 14 \( \text{f4} \) \( \text{e4} \) 15 \( \text{g5+} \) \( \text{e5} \) 16 \( \text{g8+} \) \( \text{d4} \) 17 \( \text{c4+} \)

- \( \text{e3} \) 18 \( \text{e6} \) \( \text{d4} \) 19 \( \text{b6+} \)

- \( \text{d5} \) 20 \( \text{b7+} \) \( \text{d4} \) 21 \( \text{a7+} \)

- \( \text{d5} \) 22 \( \text{d7+} \) \( \text{d6+} \) 23 \( \text{c3} \)

- \( \text{g6} \) 24 \( \text{b5+} \) \( \text{a6} \) 25 \( \text{d4} \)

- \( \text{f7} \) 26 \( \text{g5} \) \( \text{d7} \) 27 \( \text{g7} \)

- \( \text{e7} \) 28 \( \text{d3} \) \( \text{e6} \) 29 \( \text{e4} \)

- \( \text{e8} \) 30 \( \text{h6+} \) \( \text{e7} \) 31 \( \text{f5} \)

- \( \text{d7+} \) 32 \( \text{g5} \) \( \text{e5} \) 33 \( \text{b6} \)

- \( \text{e6} \) 34 \( \text{c5+} \) \( \text{d6} \) 35 \( \text{a7}+ \)

- \( \text{d7} \) 36 \( \text{g6} \) \( \text{e5} \) 37 \( \text{a6} \) \( \text{e6} \)

- \( \text{b2} \) \( \text{e8} \) 41 \( \text{g5} \) \( \text{c6} \) 42 \( \text{f6} \) \( \text{d7} \) 43 \( \text{d7}+ \) \( \text{c8} \)

- \( \text{a7} \) \( \text{c7} \) 45 \( \text{f5} \) \( \text{d7} \) 46 \( \text{f6} \) \( \text{d6} \) 47 \( \text{a3+} \) \( \text{d5} \) 48 \( \text{e7} \) \( \text{b5} \) 49 \( \text{b3+} \) \( \text{c5} \)

- \( \text{c3+} \) \( \text{a4} \) 51 \( \text{g7} \) \( \text{f4} \) 52 \( \text{f6} \) \( \text{b5} \) 53 \( \text{e6} \) \( \text{c4+} \) 54 \( \text{e7} \) \( \text{c7} \) 55 \( \text{d7} \) \( \text{a5} \) 56 \( \text{f5}+ \) \( \text{b6} \) 57 \( \text{e5} \) \( \text{b5+} \) 58 \( \text{d6} \) \( \text{b4} \) 59 \( \text{d5} \) \( \text{a6} \) 60 \( \text{f6}+ \) \( \text{b5} \) 61 \( \text{g6}+ \) \( \text{a5} \) 62 \( \text{g4} \) \( \text{f1} \) 63 \( \text{c7+} \) \( \text{a6} \) 64 \( \text{d5} \) \( \text{d3} \) 65 \( \text{e5} \) \( \text{a5} \) 66 \( \text{c6+} \) \( \text{a4} \) 67 \( \text{d5} \) \( \text{h7} \) 68 \( \text{d4}+ \) \( \text{a3} \) 69 \( \text{b5} \) \( \text{c3} \) 70 \( \text{c4} \) \( \text{b2} \) 71 \( \text{b3} \)+.

Queen v Bishop and Knight

**QBN**

A static fortress

Although there are few exceptional positions, this is the only easy draw. Black's fortress is completely impregnable since he can always play either a king move, ... \( \text{g7-h8} \) or ... \( \text{h8-g7} \).

1. \( \text{e6} \) \( \text{g8} \)

2. \( \text{h5} \) \( \text{h8}! \)

3. \( \text{e7} \) \( \text{g7} \)

4. \( \text{h3} \) \( \text{h8} \)

5. \( \text{c8+} \) \( \text{h7} \)

6. \( \text{f8} \) \( \text{g7}+ \)

7. \( \text{e7} \)
Mutual Zugzwang!

This position is mutual zugzwang. White to move is unable to free his king. If 1 \( \text{a3} \) \( \text{c8} \) the position has merely been reflected about the h1-a8 diagonal; and there is no way for White to “lose a move”.

Black to move, however, is forced to release the white king after which a fairly typical winning process ensues. White gradually improves his pieces weaseling his king into position mainly along the black squares (the ones not controlled by the bishop). And eventually Black runs out of squares for his pieces: 1 ... \( \text{e4} \) 2 \( \text{f2} \) \( \text{d5} \) 3 \( \text{a2}+ \) \( \text{c4} \) 4 \( \text{d2}+ \) \( \text{c5} \) 5 \( \text{b7} \) \( \text{d4} \) 6 \( \text{g5}+ \) \( \text{d5}+ \) 7 \( \text{a6} \) \( \text{c6} \) 8 \( \text{e3}+ \) \( \text{d4} \) 9 \( \text{a3}+ \) \( \text{c4} \) 10 \( \text{b6} \) \( \text{e6} \) 11 \( \text{c5}+ \) \( \text{d3} \) 12 \( \text{c7} \) \( \text{g8} \) 13 \( \text{h5} \) \( \text{b3} \) 14 \( \text{d6} \) \( \text{c3} \) 15 \( \text{h1} \) \( \text{b4} \) 16 \( \text{e5} \) \( \text{b5} \) 17 \( \text{e1}+ \) \( \text{c4} \) 18 \( \text{d2} \) \( \text{c5} \) 19 \( \text{f4} \) \( \text{c4} \) 20 \( \text{f8}+ \) \( \text{c6} \) 21 \( \text{f2} \) \( \text{c7} \) 22 \( \text{h4} \) \( \text{a6} \) 23 \( \text{f6}+ \) \( \text{c7} \) 24 \( \text{d6}+ \) \( \text{c8} \) 25 \( \text{e7} \) \( \text{b5} \) 26 \( \text{d6} \) \( \text{c8}+ \) 27 \( \text{c5} \) \( \text{a4} \) 28 \( \text{b6} \) \( \text{d7} \) 29 \( \text{e4} \) \( \text{d8} \) 30 \( \text{h4}+ \) \( \text{c8} \) 31 \( \text{e7} \) \( \text{a4} \) 32 \( \text{a3} \) \( \text{d1} \) 33 \( \text{c1}+ \) and wins.

This is an example of a longest win - 42 moves in all. It is interesting that from moves 19-35 Black is able to operate with a pseudo-fortress of \( \text{g3} \), bishop on the b1-h7 diagonal and king next to the knight.

\( \text{1 ...} \) \( \text{d5}+ \) 2 \( \text{b8} \) \( \text{c6}+ \) 3 \( \text{b7} \) \( \text{b4}+ \) 4 \( \text{a7} \) \( \text{c6}+ \) 5 \( \text{a6} \) \( \text{c4}+ \) 6 \( \text{b7} \) \( \text{d8}+ \) 7 \( \text{b8} \) \( \text{c6}+ \) 8 \( \text{a8} \) \( \text{d3} \) 9 \( \text{b7}+ \) \( \text{d6} \) 10 \( \text{e8} \) \( \text{e4} \) 11 \( \text{f8}+ \) \( \text{d5} \) 12 \( \text{b7} \) \( \text{d4} \) 13 \( \text{b6} \) \( \text{e6} \) 14 \( \text{a8}+ \) \( \text{e5} \) 15 \( \text{a1}+ \) \( \text{f5} \) 16 \( \text{a5}+ \) \( \text{f4} \) 17 \( \text{h5} \) \( \text{f5} \) 18 \( \text{c6} \) \( \text{d4}+ \) 19 \( \text{d5} \) \( \text{f3} \) 20 \( \text{f7} \) \( \text{g5} \) 21 \( \text{c7} \) \( \text{g4} \) 22 \( \text{d6} \) \( \text{d3} \) 23 \( \text{b8} \) \( \text{f5} \) 24 \( \text{c7} \) \( \text{b1} \) 25 \( \text{c6} \) \( \text{d3} \) 26 \( \text{c1} \) \( \text{e4} \) 27 \( \text{e3} \) \( \text{g3} \) 28 \( \text{f6} \) \( \text{b1} \) 29 \( \text{e6} \)

For the moment, Black is successfully defending his pseudo-fortress and over the next few moves White must manoeuvre to expel the bishop from the b1-h7 diagonal.

\( \text{29 ...} \) \( \text{h7} \) 30 \( \text{e7} \) \( \text{b1} \) 31 \( \text{d6}+ \) \( \text{g2} \) 32 \( \text{d1} \) \( \text{h7} \) 33 \( \text{d7} \) \( \text{e2} \) 34 \( \text{b5} \) \( \text{g3} \) 35 \( \text{c4} \) (3a)

Forcing the bishop off the diagonal, after which the rest is quite straightforward:

\( \text{35 ...} \) \( \text{d1} \)

For if 35 ... \( \text{b1} \) 36 \( \text{c6}! \) (zugzwang) and:

\( \text{a} \) \( \text{36 ...} \) \( \text{f4} \) 37 \( \text{c8}+ \) \( \text{g3} \) (37 ... \( \text{h4} \) 38 \( \text{c1} \) 38 \( \text{b8}+ \); 36 \( \text{g2} \) 37 \( \text{b5} \) \( \text{h7} \) 38 \( \text{g7} \);

\( \text{c} \) \( \text{36 ...} \) \( \text{f4} \) 37 \( \text{c1}+ \) or 36 ... \( \text{f2} \) 37 \( \text{b6}+ \) are simple;

\( \text{d} \) \( \text{36 ...} \) \( \text{d2}/\text{e1}/\text{g1} \) 37 \( \text{c1} \) wins quickly;

\( \text{e} \) \( \text{36 ...} \) \( \text{h4} \) 37 \( \text{c1} \) \( \text{e4} \) 38 \( \text{e1}+! \);

\( \text{f} \) \( \text{36 ...} \) \( \text{h2} \) 37 \( \text{e7}+ \) \( \text{h3} \) 38 \( \text{c3}+ \) \( \text{h4} \) 39 \( \text{e1}+! \);

\( \text{36 \( \text{d3} \) \( \text{a4} \) 37 \( \text{e7} \) \( \text{f2} \) 38 \( \text{d8} \) \( \text{g2} \) 39 \( \text{b1} \) \( \text{g3} \) 40 \( \text{e7} \) \( \text{e5} \) 41 \( \text{b8} \) \( \text{f4} \) 42 \( \text{f6} \) and wins.

\[ \text{36} \]
Queen v Minor Pieces

Queen v Two Knights

1. We are told that this is also won for the queen in almost 90% of starting positions. But whereas in the cases above the defender can draw only if he can reach a fortress, I understand from John Nunn that with two knights one will be able to draw some more fluid positions as long as the defender can get properly coordinated.

The important thing seems to be to have the knights, which must obviously be fairly near to the king, on different circuits. If they get stuck defending each other then—the ‘white’ king can wedge himself between them with disastrous results, see diag 1.

Here Black is well enough coordinated to draw. We tried some obvious winning attempts but White is never able to break Black’s dynamic defence since he can neither chain the horses together nor approach with his king: 1...

There are some fortress positions and this is one of them. The white king cannot escape on its own; and since the queen is unable to put Black into zugzwang it is an immediate draw.
Here, for interest’s sake, is an example of a longest win (63 moves). Whilst I find it almost totally incomprehensible, it is clear that at no stage is Black quite able to set up a stable defensive position as in diag 2 above: 1 ... 

[Chess moves follow, involving various pieces across the board, leading to a conclusion of checkmate.]
At the ending stage in a non-critical position two rooks is equal to a queen plus a pawn. This is based on the simple calculation that two rooks lined up against a pawn protected by both its king and queen might well lead to an exchange to a levelish pawn ending.

However, other factors play an important role, and it is these factors on which we concentrate in diags 1-4.

Diag 1 illustrates a transition to a winning king and pawn versus rook ending; diag 2 shows both how the two rooks became tied up and a way for the rooks to be effectively regrouped; diag 3 is an example of two rooks lined up to prevent the advances of connected passed pawns; and diag 4 show the careful preparation and advance of passed pawns.

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**QRR** Yrjölä - Andersson (variation)

1. Finland - Sweden 1991

White wins by 1 âŠf4! âŠg7
2. âŠxf7+ âŠxf7 + 3 âŠe5

eventually forcing Black to sacrifice rook for c-pawn and then White can win the a-pawn.

**QRR** Jansa - A. Sokolov

1. Gausdal 1990

The game continuation was
1 ... âŠc2!
2. âŠxa6 2 âŠa8+ âŠb6 3
4. âŠa5 4 âŠa7+ âŠb4 5
5. âŠf7 (paralysing Black) 1-0.

Also losing were 1 ... âŠc1? 2
6. âŠe7+ âŠxa6 3 âŠa3+ with a fork; and 1 ... âŠxc6 2 âŠd7+ B

2. âŠe7+

Alternatively:
2 c7 âŠbc5= or 2 âŠc8
3. âŠb2=.

2 ... âŠxa6
3. c7 âŠbc5
4. âŠxc5 âŠxc5
5. âŠxg5
6. âŠd6 âŠc8=

**QRR** Portisch - Smyslov

1. Havana 1964

32. âŠe7 âŠxe7
33. âŠxe7 âŠxd1+
34. âŠh2 âŠe1
35. âŠf5+

Concentrating on setting up queenside passed pawns.

35 ... âŠg8
36. âŠd7 âŠe6
37. âŠxb7 âŠxe7
38. âŠxb6 âŠxe7
39. âŠd4 âŠe4
40. âŠd8+ âŠe8
41. âŠd5 âŠe5
42. âŠd8+ âŠe8
43. âŠd3 âŠe2

44 a4 âŠxf2
45 a5 âŠb2!
46. âŠb5 âŠe4
47. âŠb8+ âŠh7
48. b5 âŠeb4
49. b6 âŠb5
50. âŠa7 f5
51. âŠa8 âŠb1
52. âŠg3 âŠb3+
53. âŠf2 âŠb2+
54. âŠg1 âŠb1+
55. âŠh2 âŠb2
56. âŠa6 âŠb1
57. âŠa8 ½-½
Queen v Two Rooks

Petrosian - Geller
USSR Ch, Kiev 1954

Petrosian has queen and two pawns against two rooks. His main asset is the potential two passed pawns by advancing on the kingside. He doesn't hurry. He ensures that the two rooks are tied to defending along the back ranks and do not have time to gang up against the white king's position. Play went:

\[ 4a \]
\[ + W \]
\[ 43. \text{h5!} \quad \text{g5} \]
\[ 44. \text{c3+} \quad \text{h7} \]
\[ 45. \text{c2+} \quad \text{g7} \]
\[ 46. \text{f5} \quad \text{de7} \]
\[ 47. \text{f4!} \quad \text{gxf4} \]
\[ 48. \text{exf4} \quad \text{d6} \]
\[ 49. \text{f3} \quad \text{e1} \]
\[ 50. \text{g4+} \quad \text{f7} (4a) \]
\[ 51. \text{c8} \quad \text{e7} \]
\[ 52. \text{f5+} \quad \text{g7} \]

52 \( \text{g8} \) is an interesting possibility.

52 ... \( \text{g7} \)

The next phase - up to move 70 - seems to be a "marking of time". The moves to then were 53 \( \text{a4} \ \text{el} 54 \text{g4+} \quad \text{f7} \]
\[ 55. \text{c8} \quad \text{e7} \]
\[ 56. \text{b4} \quad \text{d3} \]
\[ 57. \text{g4} \quad \text{g7} \quad \text{(I)} \]
\[ 57. \text{...} \quad \text{e3} 58 \]
\[ \text{xb7+} \quad \text{g8} \quad 59 \quad \text{b8}+ \quad \text{g7} \]
\[ 60. \text{f5} \]
\[ 58. \text{f5} \quad \text{d6} \]
\[ 59. \text{c5} \quad \text{add7} 60 \quad \text{h4} \quad \text{e6} \]
\[ 61. \text{c3} \quad \text{h7} \]
\[ 62. \text{c2+} \quad \text{g7} \]
\[ 63. \text{b2}+ \quad \text{h7} \]
\[ 64. \text{b1+} \quad \text{g7} \]
\[ 65. \text{f5} \quad \text{add6} \quad 66 \quad \text{h3} \quad \text{e7} \]
\[ 67. \text{g4} \quad \text{e6} \]
\[ 68. \text{f3} \quad \text{e7} \]
\[ 69. \text{c2} \quad \text{e6} \quad 70. \text{f5} \quad \text{e8} (4b) \]
\[ 71. \text{h5} \quad \text{xb5} \]
\[ 72. \text{xb5} \quad \text{e7} \]

Now starts the decisive over-running of Black's position.

\[ 73. \text{g4!} \quad \text{f6} \]
\[ 74. \text{a5} \quad \text{e6} \]

If 74 ... \( \text{e7} \)

\[ 75. \text{b2+} \quad \text{g8} \quad 76. \text{h3} \quad \text{h7} \]
\[ 77. \text{d3+} \quad \text{g8} \]
\[ 78. \text{g5} \quad \text{hxg5} \]
\[ 79. \text{fxg5} \quad \text{e5} \]
\[ 80. \text{f4} \quad \text{e6} \]
\[ 81. \text{g6} \quad \text{b6} \]
\[ 82. \text{a6} \quad 1-0 \]
Queen and Piece v Queen

Queen and Knight v Queen

QNQ 1
Working together in endgame positions, queen and knight can be a devastating team. Typical studies which illustrate this theme are diags 1 and 2.

Dehler 1908
This study features forks, skewers, discovered checks, a stalemate in the middle of the board coupled with the herd.

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Joseph 1978
David Joseph’s study illustrates the need to find the right series of squares on which the attacking queen should work and is attractive for its aesthetic effect.

Lengyel - Levy
Cienfuegos 1972
This example was analysed extensively before the advent of databases. Now John Nunn has been able to clear it all up with the aid of a Silicon friend.

A.
In the game, Levy continued with:

67 ... \( \texttt{d6} \)
And in the end he won: though as John Nunn discovered there were several inaccuracies.

68 \( \texttt{d7?} \)
If 68 \( \texttt{c5?} \) \( \texttt{f4+} \) Black can transpose back to B below; but with 68 \( \texttt{e7!} \) to prevent the
Queen and Piece v Queen

This loses one move.
75 b7 d7+
76 b6
Better was 76 a6!!.

76 ... c4+
77 a6 d6+
78 b7 d7+
79 b8 d8+
80 a7 a5+
81 b8 b6+

0-1

B.
Instead, Black should have included his knight in the attack at the first opportunity; and
the database shows that this leads to a forced win with checks: albeit a rather obscure

sequence of them.
67 ... c5+
68 e7 h4+
69 f7

If 69 d6 g3+ 70 e7
g7+ 71 d6 d7 mate.
69 ...
h7+
70 f6 e4+
71 e6 g6+
72 e7 f6+
73 d7 f7+
74 c8 (3a)
74 ...
g8+!
75 b7 c5+
76 a7 a2+

This was the reason for going to g8 on move 74.
77 b8 h2+!

and wins

Dr Nunn, with the aid of his queen and knight v queen database program concocted the position (diag 4), developed out of analysis of the 'mutual zugzwang' position arising from 1 d6+ b6 2 f5. Here, whoever is to move must give ground.

The solution runs:
1 d6+

If 1 c5+? b6 escaping from the gravitational power of the white king.

1 ... a6

The mutual zugzwang position referred to above is reached after 1 b6 2 f5 with Black to move: now if 2 a6 (2 a7 3 c7! e7+ 4 c6 wins) 3 d8 (c6?!) 3 b6 (or 3 b2 4 d3+ forces 4 a7 allowing 5 c8+ and on 5 b8 6 d6+ at least skewering the black queen) 4 d5! a6 5 b7+ a5 6 b3! (such quiet control moves are difficult to

reach in calculations) 6 ... a6 (if 6 ... h5 7 c4+ and mates) 7 c7 e7+ 8 c6 ends Black's good checks; or 2 a6 3 f2+ a5 4 d2+ b6 5 b4+ a7 6 c7 completes the net.

2 h3!

2 f5 b6 arrives at the mutual zugzwang with White to move. Progress is not possible, e.g. 3 d5 g4+.

Now if 2 ... b6 3 f5 is a critical zugzwang.

2 ... a5 3 a3+ b6 would transpose to the main line after 5 b6.

2 b2 3 d3+ a7 4 c8+ b7 5 d5+ b8 6 d6+ or 2 e1 3 d3+ a7 4 c8+ or 2 a2 3 d3+ a7 4 b5 would follow

2 ...
3 c8+ a6
4 a3+ b5
5 d6+ b6
6 b4+ a6
7 c3!
Queen and Piece v Queen

Threat 8 ♕c7.

7 ... ♗b6

If 7 ... ♕g4+ 8 ♕c7 or 7 ...

♗h5 8 ♕a3+ ♕a5 (8 ... ♗b6 9 ♕c4+) 9 ♕d3+ ♕a7 10 ♕d4+ ♕a6 11 ♕c6 bags the black king.

8 ♗d8!

Avoids ... ♕g4 with check, while 8 ... ♕g4 without check permits 9 ♕c7+

8 ... ♕h5

If 8 ... ♕a6 (or 8 ... ♕a7) 9 ♕c7; or 8 ... ♕g2 9 ♕b4+ ♕a6 10 ♕b5+ ♕a7 11 ♕c8+, or 8 ... ♕f1 9 ♕c4+ ♕b5 (9 ...

♗b7 10 ♕b4+ ♕a7 - or 10 ...

QNQ Ljubojevic - Hjartarson

Reykjavik 1991

White had just captured a pawn at g5 on move 70. Black now needs to be able to survive until after White's 120th to claim a draw under the 50 move rule. 70 ... ♕f7 71 ♕c5 ♕d3+ 72 ♕h4 ♕d8+ 73 ♕h5 ♕d1 74 ♕g5 ♕d8+ 75 ♕f4 ♕d2+ 76 ♕e4 ♕e1+ 77 ♕f5 ♕f1+ 78 ♕g5 ♕g2 79 ♕d6 ♕e8 80 ♕d3 ♕g1 81 ♕c4 ♕d8 82 ♕f4 ♕h1 83 ♕c5 ♕h4 84 ♕c6 ♕e7 85 ♕d5 ♕e1 86 ♕c5+ ♕d8 87 ♕f5 ♕e7 88 ♕c4 ♕d7+ 89 ♕g6 ♕d6+ 90 ♕h5 ♕d1 91 ♕c5 ♕e2 92 ♕d5+ ♕c7 93 ♕g5 ♕e7+ 94 ♕f6 ♕e3+ 95 ♕g6 ♕gl+ 96 ♕f7 ♕f2 97 ♕b5 ♕f3 98 ♕c5+ ♕b7 99 ♕e7 ♕c6 100 ♕b4+ ♕b6 101 ♕e4+ ♕c6 102 ♕d5 ♕b8 103 ♕a8 - 11 ♕a5+ leads to mate)

10 ♕a5+ ♕c6 11 ♕b6+ and 12 ♕e3+ all win for White.

9 ♕c4+ ♕c6

10 ♕e5++ ♕b5

11 ♕b3+ ♕c5

12 ♕c4+ ♕b6

13 ♕b4+ ♕a6

14 ♕a4+ ♕b6

15 ♕d7+

Also 15 ♕c4+

15 ...

♕b7

16 ♕b4+ ♕c6

17 ♕b6+

and skewers the black queen.

So far until 117 ... ♕b7, Black according to Dr. John Nunn’s ChessBase program for queen and knight v queen endings, has not been in danger of losing. Indeed he claims that the vast majority of these endings should be drawn.

118 ♕d7+ ♕c8 119 ♕e8 ♕c7 120 ♕a5+ ♕d6 1/2-1/2

Black is able to claim a draw under the fifty-move rule despite mates by 121 ♕c5+ ♕e6 122 ♕e5 and by 121 ♕e5+ ♕c6 122 ♕c5.
Queen and Piece v Queen

Queen and Bishop v Queen

QBQ This is normally a draw, since the queen and bishop do not cooperate well enough to create threats of both mate and winning the queen.

For the attacking side to win, the defending pieces need to be unfortunately placed.

QBQ Centurini 1858

1... b2 6 b4 a1+ (6... c2 7 a3+ b1 8 d3 wins) 7 b3 b2 8 g1+ b1 9 a7+ b2 10 a3 mate.

QBQ The Longest Win

Nunn CD-ROM 1993

1... d8 2 b6+ e8 3 e2+ f7 4 e7+ g6 5 e8+ h7 6 e4+ g7 7 d4+ f7 8 e7+ g6 9 e8+ g5 10 e3+ h4 11 e7+ g3 12 e5+ g2 13 b2+ h1 14 b1+ g2 15 g1+ f3 16 f2+ e4 17 f4+ d3 18 d4+ e2 19 b2+ f3 20 f6+ e4 21 d4+ f3 22 f4+ e2 23 f2+ d3 24 d2+ c4 25 c2+ b4 26 c5+ a5 27 a2+ b5 28 b2+ c4 29 b4+ d3 30 a3+ and wins the queen.

QBQ Ivanchuk - Kamsky

Dortmund 1992

1... a3+ d7 2 a4+ c7 3 c6+ d8 4 b6+ d7 5 c6+ d6 6 a4+ e7 7 c7+ f6 8 d6+ xf5 9 d7+ g5 10 f4+ g6 11 f5+ h5 12 f6 13 d4+ xf5 14 xg7 h1 15 g7+ skewering. 16 g4+ h4 17 e6+ 1-0
This position was discovered by the English study composer John Roycroft (actually White's king was on a different square).

1 g8# would be a mistake, for after 1 ... Qc6+ 2 Kb5 Qc2+ 3 Kb5 (3 Kb3 Qc4+ 4 Kb4 Qc7+ 5 Kb6 Qa7+) 3 ... Qc7+ 4 Kb6 Qc3+ and if 5 Kb6 Qc4+ or if 5 Kb5 Qb3+. In each case Black either forces stalemate or obtains perpetual check or wins a queen.

The correct move is:

1 g8#!

When the stalemate possibilities disappear, Black is then able to obtain a barrage of checks, but these will run out if White's king can reach h1. That it can do so can be seen if we invoke some coordinate squares.

What happens if the king reaches h2? To prevent Qh1 Black must check on the h-file, but on which square? If 1 ... Qh5+ 2 Qg3; or 1 ... Qh7+ 2 Qg1; or 1 ... Qh6+ 2 Qg2 Qc6+ 3 Qg3! Qc3+ 4 Qh2 and wins. So the only good square is h4, i.e. Qh2 co-ordinates with ... Qh4+.

Similarly Qg1 must be met by ... Qe4+ and then Qg2 requires ... Qe4+.

What about h3? If 1 ... Qh6+ or 1 ... Qh5+ then 2 Qg2 will win; and if 1 ... Qh7+ then 2 Qg3 Qd3+ 3 Qh2 etc. Only 1 ... Qh1+ remains, but then White has 2 Qh2 Qf3+ (or 2 ... Qf1+ 3 Qg2 Qf5+ 4 Qh2 Qh5+ 5 Qg1 Qc5+ 6 Qf2) 3 Qg3 Qh5+ 4 Qg2 Qd5+ 5 Qf3 Qd2+ 6 Qh1.

So Black cannot fight successfully against Qh3, and it is similarly sufficient for White's king to reach f1. But then Qg2 will clearly win eventually.

It remains to be seen whether Black can keep White's king away from the kingside. It is fairly clear that this will be impossible. For example:

1 ... Qc2+
2 Qb4 Qe4+
3 Qc5 Qf5+
4 Qd4 Qf2+
5 Qe4 Qe2+
6 Qf4 Qf1+
7 Qg3 Qe1+
8 Qh3 Qh1+
9 Qh2 Qf3+
10 Qg3!

It is not surprising that for any initial positions of White's king and Black's queen in diag 1 (apart from the unfortunate Qh8 vs Qh6!) Black will be unable to box in White's king completely. But in order to show that White is winning we needed to find a place where his king could hide and a precise way of getting there.
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