Comprehensive Chess Endings

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Volume 1

Bishop Endings

Knight Endings
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Bishop Endings
YURI AVERBAKH

Knight Endings
YURI AVERBAKH  VITALY CHEKHOVER

Translated by
KENNETH P. NEAT

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Preface to the English Edition

This book, the first in the series *Comprehensive Chess Endings*, covers bishop endings and knight endings. In subsequent volumes there will follow: endings with knight against bishop and rook against minor piece, queen endings, pawn endings, and rook endings. As a whole, *Comprehensive Chess Endings* will be a basic reference work on the theory and practice of the endgame, indispensable for the analysis of adjourned positions and for correspondence play. It will also be useful as a text-book for rated players wishing to raise their standard of endgame play.

I should like to say a few words about how the series *Comprehensive Chess Endings* came into being. In 1946, I, together with David Bronstein, was playing in a USSR Championship Semi-Final in Leningrad. On one of the free evenings David called in to show me the position from his adjourned game with Mark Taimanov. Incidentally, in those distant times we were young masters, merely dreaming about the chess heights.

The position proved to be extraordinarily interesting, and I enthusiastically began analyzing it. We succeeded in finding in it some exceptional, genuinely study-like possibilities. (Incidentally, this analysis will be given in volume two of the series.)

Later I showed our analysis to the well-known master Piotr Romanovsky, who advised me to make a rather broader analysis of such positions, so as to reveal their characteristic features. This work interested and fascinated me. The result was that in 1948 my first theoretical article, devoted to endings of this type, was published in the magazine *Shakhmaty v SSSR*. My interest in the endgame did not wane, and I began systematically analyzing various endings. In the USSR Year Books, starting in 1950, I published a number of theoretical articles, mainly on minor piece endings.

Somewhat later came the idea of creating a reference work devoted to different types of chess endings. I managed to bring together a group of theorists, who like me were fascinated by endgame analysis, consisting of the masters Vitaly Chekhovner, Nikolai Kopayev and Viktor Khenkin, and also the well known theorist Ilya Maizelis. And we enthusiastically set about creating this reference work.

In the course of the work it became clear that the abundance of material would exceed the limits of a single book. The first volume was published in 1956, the second in 1958 and the third in 1962.

The present series *Comprehensive Chess Endings* is a second edition of these books, which have been corrected, revised and expanded. After all, during the past quarter of a century the theory and practice of chess has on the whole made great advances, and account is taken of all this in our new edition.

Regrettably, two of my co-authors have passed away, Chekhovner in 1965, and Maizelis in 1979, so that all the correcting and revising work has had to be done without them.

YURI AVERBAKH
Preface to the First Edition

Out of the vast amount of literature on chess, the number of works devoted to the endgame is relatively small. The point is that the development of endgame theory has taken a rather different path to that of the opening and the middlegame. The reason for this is rooted in the very history of modern chess.

The origin of chess theory dates from the 16th and 17th centuries, when the predominant style was that of the Italian School, typified by sharp gambit openings and swift attacks on the king. Often a game then would simply not reach the endgame, but would conclude in the middlegame, or even the opening, when the enemy king, under a hail of spectacular blows, normally involving sacrifices, would be mated. The endgame was regarded as a tedious, uninteresting phase of the game, so that the playing of it was marked by a lack of inspiration, and elementary mistakes and oversights were committed.

The deeper understanding of chess gradually led to the development of the technique of positional play and defence. It became more difficult to conclude the game in the good old style, and more and more often a game would extend into the endgame. An advantage of one 'worthless' pawn in the endgame often proved decisive, since this pawn would inexorably advance and triumphantly promote to a queen.

"Pawns are the soul of chess"—this saying of the celebrated French player of the 18th century André Philidor shows in the best way possible the growing role of the pawn. And it is no accident that Philidor, who was the first to formulate the principles of positional play, analyzed a number of endings which have not lost their importance right up to the present time.

The number of theoretical researches on the endgame grew, but it was a long time before any generalizing works, encompassing all types of endings, were to appear. This state of affairs was furthered by another factor.

There are different tasks facing researchers into the opening and the endgame. While it will sometimes be impossible (and also unnecessary) to give an exhaustive analysis of some opening system or variation, things are different with regard to the endgame. Here what is often required is a mathematically exact analysis, taking account of all possibilities, without exception, and leading to strictly defined conclusions. While in a game even between two top-class players, who have made a deep study of opening theory and have a mastery of middlegame techniques, the practical or creative element nevertheless predominates, in many endgame positions exact knowledge is of paramount importance.

A generalizing work, devoted entirely to endings, was Berger's book *Theorie und Praxis der Endspiele*. The first edition appeared in 1890, and the second, which was considerably enlarged, in 1922. This edition is regarded as a classic. A significant role in the creation of endgame theory has also been played by the works of Cheron, Euwe, Fine, Gawlikowski and other analysts.

The first endgame guide in Russian appeared during the Soviet era. This was I. Rabinovich's
work Endspiel (first edition 1927, second edition 1938). In 1956 Lisitsin’s book Zaklyuchitel-
naya chast shakhmatnoy partii (The concluding part of the chess game) was published.

In our country a study of the endgame has been made by a number of top-class players. In
the first instance we must give the names of Botvinnik, Smyslov, Keres, Bondarevsky,
Kholmov, Krogius, Rauzer, Grigoriev, Kasparian, Kopayev, Chekhover, I. Rabinovich,
Sozin, Lisitsin, Khenkin and Dvoryetsky. Each of these has made his contribution to the develop-
ment of endgame theory.

In their work on Comprehensive Chess Endings the authors were first faced with the problem
of classifying endings. It is well known that the following types of endings can normally be
distinguished:

1) pawn endings (kings and pawns).
2) knight endings (kings with knights and pawns).
3) bishop endings (kings with bishops and pawns).
4) rook endings (kings with rooks and pawns).
5) queen endings (kings with queens and pawns).

All these types of endings are customarily regarded as simple, since apart from the kings
and pawns there are pieces of only one designation on the board. If there are pieces of different
designations on the board, the endings are usually called mixed, and these include the follow-
ing types:

6) knight against bishop (knight against bishop, as well as kings and pawns).
7) rook against minor piece (rook against bishop or knight, as well as kings and pawns).
8) queen against rook (queen against rook, as well as kings and pawns).
9) queen against minor piece (queen against bishop or knight, as well as kings and pawns).

The work on Comprehensive Chess Endings has proceeded in two directions. In the field
of endings with a small number of pawns, the task has been to collect as much material as
possible. In endings with a large number of pawns (two or more on each side) the authors have
aimed to present the most typical positions, demonstrating the basic ideas, and to give prac-
tical advice on the playing of such endings.

In the creation of Comprehensive Chess Endings the emphasis has not been laid on the collect-
ing and checking of theoretical positions, practical endings and studies, although of course
this laborious and painstaking work had also to be done by the authors. The main task has
been a systematized study of basic types of endings, for which in many cases it proved necessary
to carry out a great deal of independent analysis and to reveal important theoretical positions,
so as to eliminate unexplored territory in theory and to give necessary practical recommenda-
dations.

Of course, we do not consider that we have carried out this task in full.

A systematized study of chess endings is an extremely difficult task, and, in trying to solve it,
it is impossible to avoid analytical mistakes. The authors should like to express their gratitude
to all the readers who helped in discovering and correcting the shortcomings in the first edition
of this book, and hope that this fruitful co-operation will also develop in the future.

YURI AVERBAKH
Introduction—Basic Features of the Endgame

In the course of a chess game the two sides' forces are gradually exhausted, the position becomes simplified, and play goes into the last, deciding stage—the endgame.

Depending on the situation in the game when the endgame is reached, a player is faced with one of three tasks. If he has a material or positional advantage, he must attempt to realize this advantage and win. If the advantage is with the opponent, he must aim to neutralize it by successful defence and to draw the game. And, finally, if in the middlegame the balance has not been disturbed, he can attempt to gain an advantage in this final stage.

The endgame can be divided into two basic groups, depending on the character of the play. In the first of these one side has a quite definite advantage in force, and endeavours to conclude the game by mating the opponent's king, which naturally endeavours to avoid mate. These endings (which we will call technical) were studied a long time ago, and theory has a quite definite opinion on them. The overwhelming majority of endings in this group are elementary, and are studied when a player makes his first acquaintance with chess. We will assume that the reader is already familiar with the technical endings.

The second group of endings, which is immeasurably large, includes those in which it is not normally possible to mate with the existing forces. A different way to win has to be sought. Such an intermediate way will be the advance of the pawns, with the aim of promoting one of them into a queen and of creating an advantage in force sufficient for mate. Such endings constitute the practical endgame.

Let us consider the characteristic peculiarities of the endgame.

We have already established that in the endgame a new strategic goal appears—the queening of a pawn.

If the king is not threatened with mate, it can 'breathe easily', emerge from its shelter, and participate in the struggle. This means that in the endgame the king becomes an active, attacking piece. It can threaten the opposing pieces and pawns, and is often the first to break into the opposing position.

Since in the endgame there are few pieces remaining on the board, the relative value of each of them increases. While in the middlegame it often suffices for victory to create a decisive advantage in force on some part of the board, in the endgame it is normally important not only to activate all the existing forces, but also to co-ordinate them. Playing the endgame correctly means ensuring maximum activation and a precise co-ordination of all the forces.

Since the strategic goal in the endgame is the queening of a pawn, it is clear that the role of the pawns in the endgame must sharply increase. While in the middlegame an advantage of one pawn does not normally play a decisive role, in the endgame an extra pawn is in many cases quite sufficient to give a win.

Moreover, while in the middlegame the two sides' plans are normally determined by the tastes and fantasy of the players, in the endgame the plan is mainly dictated by the peculiarities of the position, and, irrespective of style or taste, every player is bound to choose roughly one
and the same path. This path is most often typical for the given ending, and only it will lead to the desired goal.

And one last point. Since in the endgame there are relatively few pieces and pawns, it lends itself to classification and study more readily than the other stages of the game. During the centuries of chess development, a thorough study and analysis has been made of dozens of endgame positions. In them the final result has been accurately established, and the best plans for both sides have been found. In such positions knowledge becomes of paramount importance, and even the greatest skill will be powerless to change the inevitable result. We can thus conclude that in the endgame, in comparison with the middlegame, a greater role is played by theory, by knowledge. Many endgame positions essentially constitute logical problems with strictly unique solutions.

It is essential to be able to play the endgame. However great an advantage may be, its realization very often proceeds via the endgame, and weak technique may prevent the winning of even a won position. Good technique in realizing an advantage is a sure sign of a strong player. It is no accident, for example, that all leading masters and all the World Champions have been virtuoso endgame players.

Inexperienced players normally try to avoid simplification, assuming that in the endgame the play will become tedious, and will not be as rich in possibilities as the middlegame. This opinion is thoroughly mistaken. In the endgame there is sufficient scope for fantasy, but, in order to acquire a taste for the endgame, it is necessary to know and understand its peculiarities, and to master its technique. And then the endgame will disclose to you its amazing secrets.

Finally, as was pointed out by Capablanca, a study of the endgame is useful not only in itself. It develops positional understanding and a general understanding of chess, and raises the standard of a player as a whole.
PART I

Bishop Endings

Yuri Averbakh
1. Bishop Against Pawns

1.1 BISHOP AGAINST PAWN

The bishop is a long-range piece, and can restrain a pawn from afar, by attacking the square in front of it.

The side with the pawn can win only in two exceptional cases:

1) If the bishop is prevented, either by its own king or the opposing king, from stopping the pawn.

2) If the pawn can cross a square of the colour of the enemy bishop before the bishop can attack that square.

Position 1 shows the conclusion of a well-known study by Otten.


2. Black wins by 1 ... d3+ and 2 ... d2.

Normally the draw is achieved very simply, and only in rare cases is a certain accuracy required.

Kling & Horowitz, 1853

3. After 1 Ka6 the only way to draw is by 1 ... Be4! 2 b7 Ke7.

After other moves Black is unable either to eliminate the pawn, or to stop it.
1.2 BISHOP AGAINST TWO PAWNS

The normal result here is a draw. We will consider the three possible types of pawn formation.

1.21 Doubled Pawns

With doubled pawns it is possible to win if the opposing king is unable to come to the assistance of the bishop, and the bishop can be won for one of the pawns, resulting in a won pawn ending.

Averbakh, 1954

4. White plays 1 Ke7 followed by 2 e7 and 3 Kd8, winning easily.

Black to move can draw by frustrating this plan by 1 ... Kf7 2 Kc7 (or 2 e7 Bc8 3 Kc6 Ke6 4 Kb6 Kd5) 2 ... Ke6 3 Kd8 Kd5, with a draw.

Against doubled rook's pawns, even a very remote position of the defending side's king may not prove fatal, as the following study illustrates.

Nadareishvili, 1951

5. White draws by accurate play: 1 Bc4! (1 Bbl? Kf4 2 Kg7 Ke3 3 Kf6 Kd2 4 Ke5 Kc1 5 Ba2 Kb2, and wins) 1 ... Kf6! (blocking the white king's path, while approaching the pawns) 2 Bg8! (the only way; the bishop is removed from the black king's line of advance, to avoid losing a tempo) 2 ... Ke5 3 Kg7 Kd4 4 Kf6 Kc3 5 Ke5 Kb2 6 Kd4 a2 7 Bxa2 Kxa2 8 Kc3. Draw.

1.22 Connected Pawns

It is natural that, the nearer the pawns are to queening, the more dangerous they are. Thus if two connected pawns have reached their 6th rank, the bishop can stop them only with the help of the king.

Here is a typical example.

6. The bishop is badly placed, and is at present taking no part in the battle against the pawns. White threatens to advance his king to e7, after which the pawns cannot be stopped.

What is Black to do? 1 ... Kd8 does not help after 2 c7+ Kc8 3 Ke7, when White wins, since the bishop is unable to provide assistance.

So let us try bringing the bishop into play: 1 ... Bc3 (also possible is 1 ... Bb2 or 1 ... Bd4, with the same aim). After 2 Ke7 Black has only one reply, but it proves sufficient— 2 ... Bb4!, when by means of the pin he stops the pawn. White also fails to win.
Bishop Against Pawns

after 2 d7+ Kd8! 3 c7+ Kxc7 4 Ke7 Bf6+

If two connected pawns have only reached the 5th rank, a bishop is able to stop them on its own, and the result will depend on the placing of the kings.

7. Black is threatening to queen one of his pawns by 1 ... c3 2 Be4 b3 etc. Determined measures are therefore necessary, and first the pawns must be immobilized.

1 Bd5! c3 2 Bb3 Ke5.

The black king heads for d3, so as to win the bishop after ... c2.

3 Ke7!

White’s king, in turn, aims to reach c5, so as to attack the less advanced enemy pawn.

3 ... Kd4 4 Kd6 Kd3 5 Kc5. Just in time, and thus forcing a draw.

But if in the initial position the kings were at g8 and g6 respectively, White would no longer be able to save the game, since the black king would require only three moves to reach d3, whereas to reach c5 the white king would require four.

If the defending side’s king is a long way from the pawns, victory is possible even with pawns on the 4th rank.

8. White wins by 1 a5! (but not 1 b5? Kd8 2 Kb7 Kd7 3 b6 Ba5! 4 Ka6 Bxb6, with a draw) 1 ... Kd8 2 a6 Bf2 3 Kb7.

Black only lost because he was unable to co-ordinate his forces and stop the pawns.

Henneberger, 1916
(from a study)

9. Black’s king is badly placed, and therefore in the first instance one would like to transfer it for a frontal attack on the pawns. However, this plan is unsuccessful: 1 ... Ke5 2 a5 Ke6 3 a6 Bb8 4 Kc5 Kd7 5 Kb6 Kc8 6 a7, and White wins.

As we see, in this case Black is unable to co-ordinate his forces. It is correct to improve the position of the bishop initially, so that it can combat the pawns more effectively. This aim is met by 1 ... Bf4! (1 ... Bg3 or even 1 ... Bh2 is also possible), when there are two main continuations:

a) 2 Kc5 Be3+ 3 Kc6 Kd4! 4 b5 Kc4 5 a5 (5 b6 Kb4 6 b7 Ba7) 5 ... Kb4 6 a6 Ka5, and the allocation of responsibilities
Bishop Against Two Pawns

is implemented—the bishop deals with the far-advanced pawn, and the king with the less-advanced.

b) 2 a5 Be3! 3 b5 Ke5 4 b6 Kd6 5 Kb5 Kd7 6 Ka6 (6 a6 Ke8 7 Kc6 Bxb6) 6 ... Ke6 (6 ... Ke8 is also possible) 7 Ka7 Bf2, and White cannot improve his position.

When the king has to attack the pawns from the rear, it is extremely important that there should be a definite allocation of responsibilities between the pieces: as we have already seen, it is best for the bishop to tackle the far-advanced pawn, and the king the less-advanced one. If this can be done, the defence has every chance of success.

Here are two further examples of this type.

Kling & Horowitz, 1853

10. The pawns are immobilized, and therefore Black’s king must come to their aid. He threatens in three moves to reach f3 and then to play ... g2. How is this to be prevented?

1 Bg2! The only move. Now the black king has to go to e2, which takes four moves. Let us check: 1 ... Ke6 2 Ke8 Ke5 3 Kf7 Kf4 4 Kf6 Ke3 5 Kf5 Ke2 6 Kg4. White’s king has arrived in time—draw.

The following position reveals some interesting possibilities in the battle between a bishop and two connected pawns.

Grigoriev, 1927

![Diagram](image)

11. The white king is a long way from the pawns, which are mobile. If White immediately rushes to assist with his king, he loses:

1 Kc7 e5 2 Kd6 Kd4! (2 ... e4? 3 Ke5 f3 4 Bf1 f2 5 Bg2) 3 Be6 (if 3 Ba6, then 3 ... e4 4 Ke6 f3 5 Kf5 e3) 3 ... e4 4 Bg4 f3 5 Ke6 f2 6 Bh3 c3 7 Bf1 Kc3! 8 Ke5 Kd2, and Black wins.

Only the following instructive manoeuvre leads to a draw:

1 Be6!! (the pawn must be immobilized) 1 ... f3 2 Kc7 f2 3 Bh3 (3 Be4? c5 4 Kd6 e4 5 Kc5 Kf3 followed by ... e3) 3 ... Kf3!
(if 3 ... e5 4 Kd6 Kd4, then 5 Ke6 e4 6 Kf5 c3 7 Bf1 Kc3 8 Kf4 Kd2 9 Kf3).

This move looks very dangerous for White. Black is threatening to queen his e-pawn.

4 Kc6! (the only move) 4 ... e5 5 Kd5 e4 6 Kd4 e3 7 Kd3 e2. White seems to be too late, but unexpectedly there follows 8 Bg4+! K×g4 9 K×e2 Kg3 10 Kf1 Kf3—stalemate!

1.23 Isolated pawns

Diagrams 12 and 13 show the basic drawing positions, for which the defender should aim if the opponent has isolated pawns. In both positions the actions of the black pieces are co-ordinated.
Bishop Against Pawns

Averbakh, 1954

12. Both pieces are simultaneously battling against the pawns. Black’s king can also be at a6, since on 1 d6 there follows 1 ... B×d6.

Averbakh, 1954

13. Here the functions of the pieces are strictly divided, each dealing with one pawn.

Averbakh, 1954

14. White’s king is a long way from the pawns, but nevertheless he succeeds in co-ordinating the actions of his pieces and in drawing the game.

1 Kg7 (1 Kh7 is also possible, but bad is 1 Bc5 g4 2 Kg7 g3 3 Kh6 Kg4! 4 Kg6 e4 5 Kf6 Kf3 6 Kg5 e3 7 Kh4 g2) 1 ... g4 2 Kh6! g3 3 Kh5! g2 4 Be5 Kf4 5 Kh4 Kf3 6 Kh3 e4 7 Kh2, with a basic drawn position.

In this example Black was unable to prevent the necessary placing of the white pieces. When the pawns are separated by more than two files, it is more difficult for the bishop to exercise simultaneous control over both pawns. In such cases the functions should be divided. The defending side must control one pawn with his bishop, and take his king to the pawn which is not defended by the opposing king.

Averbakh, 1954

15. In this position Black carries out such a plan, and gains a draw:

1 b5.

Or 1 f4 Kd3! 2 Kd5 Bg2+ ! 3 Ke5 Kc4! (the black king goes to the undefended pawn) 4 f5 Bf3 6 f6 Bh5.

1 ... Kd3!

Bad is 1 ... Bc8 2 f4 Kd3 Kd5 (the white king prevents the necessary re-grouping) 3 ... Kc3 (3 ... Bh7+ 4 Ke5 Kc4 5 f5 Kc5 6 f6 Bd5 7 b6) 4 Ke5, and white wins.

2 b6 Bc8, and the f-pawn is lost.
Bishop Against Two Pawns

Rinck, 1935

16. This position differs from the preceding one only in the placing of the bishop. White succeeds in hindering the co-ordinated action of the black pieces.

1 b5 Kd3 2 Kd5! Ke3 3 Ke5! (this gain of tempo is the whole point) 3 ... Be8 4 f4 Kd3 5 f5 Ke4 6 f6, and White wins.

Selezniev, 1917

17. White is in zugzwang—any move leads to a worsening of his position. And even so, thanks to an exact differentiation of the functions of his pieces, he succeeds in drawing.

1 Kd6! Kd4! 2 Ke6! Ke3 3 Kd5! (White has diverted the black king, and now heads for the h-pawn) 3 ... h3 4 Ke4 h2 5 Ba2, and White stops the pawns.

A loss results from 1 Kf6 Kf4 2 Kg6 Kg3 3 Kf5 h3 4 Ke4 h2, since White's king gets in the way of his bishop.

We will now consider a few examples where, for some reason or another, co-ordination cannot be achieved, and the defending side loses.

Otten, 1892

18. If it were Black to move, he would draw after 1 ... Ke6, moving towards the a-pawn with his king and controlling the g-pawn with his bishop, as well as after 1 ... Kg6 2 a5 Bf8 3 Kd5 Bh6 4 a6 Be3, when the bishop stops the a-pawn. But it is White's move, and he manages to win by exploiting the unfortunate position of the black king.

1 a5 Bf8 2 Kd5 Bh6 3 g5+! B×g5 (3 ... K×g5 4 a6), and we reach position 1.

Reti, 1922

(conclusion of a study)

19. The bishop is overloaded by having to stop the two pawns simultaneously. After 1 Kd4! Bd5 2 Ke5! the king occupies e5 with gain of time, and after 2 ... Bf3 3 h5 one of the pawns queens.
20. 1 Ke7! (1 Ke6? Be5!, and White is in zugzwang) 1 ... Be5+ 2 Ke6. But now it is Black who is in zugzwang, and on any move by the bishop there follows 3 b7 Ka7 4 Ke7 Be5+ 5 Ke8 etc.

21. White's king is unable to take part immediately in the battle against the pawns, but if it is his move he stops both pawns by 1 Be3, and draws.

But if it is Black to move, he plays 1 ... f4, and after 2 Bd4 f3 3 Ke6 c3 one of the pawns queens.

One might assume, on reading this chapter, that in such endings the side with the bishop is always the defender. This is not altogether correct.

22. In this conclusion to a well-known study by Troitsky, White wins by 1 Ke6! Kh8 2 Kf7, when mate cannot be prevented. But this is an exception.

1.3 BISHOP AGAINST THREE OR MORE PAWNS

1.31 Connected Pawns

If the pawns are connected, the defending side should aim for one of the following basic drawing positions (diagrams 23, 24 and 28).

23. White's pieces are deployed as actively as possible. His king is attacking Black's one weakness, the d5 pawn, so that the black king is tied to its defence and therefore immobilized. Irrespective of the location of the pawns, the evaluation of the position remains constant.
24. After 1 ... Ke5 2 Ke3 Kf5 3 Kd4 position 23 is reached.

But if position 24 is moved down the board by one rank, the evaluation of the resulting position will depend on who it is to move.

25. White to play draws by 1 Ke2 (or 1 Kc2) 1 ... Ke4 2 Bg2+ Kf4 3 Bf1 Kg3 4 Kd3 Kf3 5 Be2+ Kg2 6 Kx d4 etc.

Black to play wins by 1 ... Ke4 2 Kc2 (2 Bg2+ Kd3 3 Bf1+ Ke3 4 Ke2 Kc2 5 Bg2 d3+ 6 Kx c3 d2) 2 ... d3+ ! 3 Bx d3+ (3 Kd1 Kd4) 3 ... Kf3 4 Kd1 Kg2.

With the leading pawn on its seventh rank, only corner positions will be drawn.

26. After 1 ... Kg4 2 Ke2 f3+ 3 Bx f3+ Kh3 4 Kf1 Black has no possibility of breaking in with his king. Draw.

27. On 1 ... Kb4 there follows 2 Bd2+ Ke4 (or 2 ... Ka3 3 Bc1+) 3 Kb2 Kd3 4 Bh6 Ke2 5 Bg5 Kd1 6 Bf4, with a draw.

As was shown by A. Streltsov (1962), White can also draw by playing for stalemate: 1 ... Kb4 2 Ba3 + Ke3 3 Bb2+ Kd2 4 Bc1+ Kd1 5 Ba3 c1 = Q+ 6 Bxc1 Kxc1 — stalemate.
28. Black can attempt to break through at g2.
   1 ... Kd5 2 Ke3 Ke5 3 Be1 Kf5 4 Bd2 Kg4 5 Be1 Kh3 6 Kf2! (if 6 Bd2?, then 6 ... Kg2 7 Be1 f2 8 B×f2 d2, and wins), and Black has nothing better than to retrace his steps.
   But if the position is moved down by one rank, the evaluation changes.

![Chess Diagram](image)

29. White is unable to regroup his forces, and Black wins by breaking through with his king to g1.
   1 ... Kd4 2 Ke2 Ke4 3 Bh3 Kf4 4 Bg2 Kg3 5 Bf1 Kh2 6 Kd1 Kg1 etc.

   Cheron, 1926

![Chess Diagram](image)

30. It would appear that Black is unable to break through to h1, but this is not so. After 1 ... Ke4 2 Bh2 Kf5 3 Kf2 Kg4 4 Bg1 Kh3 5 Ke1 Kg3 White is in zugzwang, and is forced to allow the black king through to h1.

![Chess Diagram](image)

31. Only in this corner position is there no possibility of a by-pass, and Black is therefore unable to win. It is interesting that, if the king and bishop change places, the evaluation of the position does not change. After 1 ... Kd2 2 Kg2 Ke1 3 Kh1 K×f1 White is stalemated.
   A knowledge of the basic drawing positions enables the remaining examples to be more easily understood.
   We will first consider a position with connected pawns on their third rank.

   Averbakh, 1954

![Chess Diagram](image)

32. 1 Be2 f5 (1 ... Kf5 2 Bd3+) 2 Bf3 Kf6 (if 2 ... h5 3 Bd1 Kf6, then either 4 Be2 Ke5 5 Bf3 Kd4 6 Kf4 h4 7 Bg2 Kd3 8 Kg5 Ke3 9 K×g6, or else the simpler 4 Kh4 Ke5 5 Kg5 f4 6 K×g6 etc.) 3 Kf4 g5+ 4 Kg3 Ke5 5 Bh5 Ke4 6 Bf3+ Ke3 7 Bh5 f4+ 8 Kg2, and we have one of the basic drawing positions.
   White defended by mainly adopting waiting tactics.
But what happens if the position is moved down by one rank?

Averbakh, 1954

33. Suppose that White continues to play as in the previous example.

1 Be1 f4 2 Bf2 h4 (if 2 ... Kf5, then not 3 Kf3 h4!, when Black wins, but 3 Bb6! Ke4 4 Bd8 g4 5 Bh4 or 5 Kf2 g3+ 6 Kg2 Ke3 7 Bg5 with a draw) 3 Be1? Kf5.

It would be wrong to play 3 ... f3+ 4 Kg1!! (the only move!—if 4 Kf2 h3 5 Kg1 Kf4 6 Bd2+ Kf5, then White is unable to set up a drawing position: 7 Ba5 Ke4! 8 Be7 Ke3 9 Kf1 f2! 10 Bb6+ Kf3 11 B×f2 h2) 4 ... Kf5 (4 ... Kf4 5 Bd2+ Kf5 6 Ba5) 5 Ba5 g4 6 Bd8 h3 (6 ... g3 7 B×h4 Kf4 8 Kf1! Kg4 9 B×g3) 7 Bc7 Ke4 8 Kf2, and White has achieved a basic drawing position.

4 Bf2 (the attempt to play actively does not work: 4 Kh3 Ke4 5 Kg4 Ke3 6 Ba5 f3 etc.) 4 ... Ke4 5 Be1 Ke3 6 Bf2+ Ke2 7 Bc5 f3+ 8 Kg1 h3, and Black wins.

Thus after the placing of the pawns on squares of the same colour as the bishop, the by-passing manoeuvre becomes a threat. But perhaps White can attack the pawns, and not allow the by-pass? Let us try doing this on the 4th move.

4 Ba5 g4 (on 4 ... Ke4 there follows 5 Bd8) 5 Bd8 h3+ 6 Kh2 (6 Kf2 g3+ 7 Kf3 h2 8 Kg2 Kg4 9 Bb6 f3+ 10 Kh1 Kh3, or 9 Be7 f3+ 10 Kh1 f2) 6 ... Ke4 7 Bb6 Kf3 8 Bc7 Ke3 9 Bb6+ Ke2 10 Be5 f3 11 Kg1 f2+ 12 B×f2 h2+, and Black wins.

But White can draw if he begins playing actively a move earlier.

On 2 ... h4 he draws by immediately switching the bishop to attack the g- and h-pawns: 3 Bb6! Kf5 (3 ... f3+ 4 Kf2 Kh3 5 K×f3 g4 6 Kf2 Kh2 7 Bc7+ g3+ 8 Kf3 Kh3 9 Bb6 g2 10 Bg1) 4 Bd8!, and Black cannot undertake anything.

Attacking the pawns with the bishop from the rear is an important defensive resource. Even in positions with pawns on their fifth rank it can lead to a draw.

34. The position looks difficult for White, for example: 1 Bb5 f3 2 Bd7 Kf4 3 Bb6 g3 4 Bd7 Ke3 5 Be6 Ke2 6 Bg4 g2! 7 Bh5 h3 8 Bg4 h2+ 9 K×h2 Kf2, and Black wins.

But in 1962 A. Streltsov showed that White's 6th move is a mistake, and that by 6 Bb3! he can achieve a position like No. 27, and thus draw. For example: 6 ... Ke1 7 Bf1! f2+ 8 Kh1!

Also possible is a rather different system of defence, by which Black's king is altogether unable to reach e1: 4 Kf1!! Ke3 5 Bb3! This move is essential, since Black was threatening to win by 5 ... g2+ 6 Kg1 Ke2 7 Bg4 h3!, but now he is unable to improve his position, since 5 ... f2 leads to a basic drawing position.

But perhaps Black could have played more strongly? Let us check: 1 ... h3
2 Bd7 f3 3 Be6! Kf4 (3 ... h2 + 4 Kh1 f2
5 Be4) 4 Bd7 Kc3 5 B×g4 f2 + 6 Kf1 h2
7 Bf3!, again with a draw.

Averbakh, 1970

35

5 Bd3 Kf4 6 Be2.
The simplest, although 6 Bb5 Ke4 7 Bd7!
is also possible, when Black again cannot
pierce his opponent’s defences.
6 ... Ke5 7 Kg3 Ke4 8 Bf1 f4 + 9 K×g4
f3 10 Kg3 e2 11 B×e2 f×e2 12 Kf2 Kd3
13 Ke1 Ke3. Stalemate.

36

35. Berger, and after him Chéron, thought
this position to be won for Black, but this
is not so. White succeeds in maintaining
the balance as follows:
1 ... Kg5 (nothing is achieved by 1 ... 
Ke5 2 Bc8) 2 Bc6 Kh4!
The pawns are ready to advance, and
White is unable to prevent this. But the
battle is not yet over, since White finds
salvation in basic drawing positions.
3 Kg2 (the opposing king must not be
allowed any further) 3 ... e3.
The strongest. White has less difficulties
after 3 ... g3, when he has two ways to
draw:
a) 4 Bd5 Kg4 (4 ... e3 5 Bf3 f4 6 Be2
Kg5 7 Kf3, with a drawing fortress) 5 Bc6
Kf4 6 Bb7 Ke3 7 K×g3 f4 + 8 Kg2 f3 +
9 Kf1, with a draw.
b) 4 Bd7 f4 5 Bc6 f3 + 6 Kg1 f2 + (6 ... 
g2 7 Kh2!) 7 Kf1 e3 8 Bg2 Kg4 9 Ke2, with
a draw.
4 Bb5! (4 ... f4 was threatened, so the
bishop switches to a position from which
it can prevent the further advance of the
f-pawn) 4 ... Kg3.
Nothing is achieved now by 4 ... f4
5 Be2! Kg5 6 Bd1 Kf5 7 Be2 g3 8 Kf3 Ke5
9 Bf1 Kd4 10 Ke2, with a drawing fortress.

36. If in this position it were White to
move, he would lose quickly after either
1 Bh2 Kf1 2 Kf4 Kg2, or 1 Bd4 f4 + 2 Kh2
f3 3 Kg1 f2 + 4 B×f2 h2 +. But it is Black
to move, and in order to win he must give
White the move.*
1 ... Kd2! 2 Bh2 (2 Kf2 Kd3! 3 Bh2
Ke4 4 Kg3 Ke3 5 Bg1 + Ke2, and no better
is 4 Bg3 f4 5 Bh2 Kf5 6 Bg1 g3 + 7 Kf3
h2) 2 ... Ke1! 3 Bg1 Ke2.
1 ... Ke1? would be a mistake, since
after 2 Be3! Kf1 (after 2 ... Ke2 3 Bf4! 
White sets up a drawing position) 3 Bf4
Kg1 4 Be3 + Kh1 5 Bf4 h2 6 Be3 Black
is unable to win.

* Position 36, but with the addition of white and
black pawns at a3 and a4 respectively, occurred in
a game Sozin—Botvinnik (1929). The winning idea
was indicated by Botvinnik.
Bishop Against Three Pawns

Weenink, 1918

37. This position is an exception to the rule. Only because the black king is badly placed is White able to draw.

1 Bg3 d3 2 Bxf2 d2 3 Be1!! c1=R (3 ... c1=Q—stalemate) 4 Ke2 Ra1 5 Bc3 Ra3 6 Bd4 etc.

If the kings are remote from the pawns, the bishop is unable to stop pawns which have crossed the 4th rank.

Averbakh, 1954

38. After 1 c5 it is pointless playing 1 ... Bd7, since White plays not 2 a5? Bb5, but 2 b5 Kf4 3 c6 Bc8 4 a5 Ke5 5 a6 Kd6 6 a7 etc.

Drawing chances lie in the swift march of the king.

1 ... Kf4! 2 a5 (2 b5 Ke5 3 b6 Bd5 4 a5 Bb7 5 c6 Bxc6 6 a6 Kd6 7 b7 Kc7) 2 ... Bc4! (the farthest-advanced pawn must be stopped; if 2 ... Ke5, then 3 a6 Bc8 4 b5 Ke6 5 c6 etc., or 4 ... Kd5 5 a7 Bb7 6 c6 Ba8 7 c7) 3 c6 Ke5 4 c7 Bb6 5 b5 Kd6!! Draw.

Even if the bishop should succeed in blocking the pawns, the result will depend on the placing of the kings.

Tarrasch, 1921

39. With the pawns blockaded, the kings now enter the battle.

1 Kc3 Kf2 2 Kd4 Kf3! 3 Ke5 Kg4 4 Kf6 Kh5 (Black appears to be safe, but bitter disillusionment awaits him) 5 g8=Q! Bxg8 6 Kg7 Kg5 7 h3! Kh5 8 h4, and Black loses due to zugzwang.

1.32 Isolated Pawns

If the pawns are isolated, it is difficult to determine basic drawing positions.

A typical position is shown in diagram 40.

Averbakh, 1954

40
4. Irrespective of who it is to move, White cannot win, for example: 1 ... Be7 2 Kd4 Bf6+ 3 Ke4 K×b5 4 d6 Kc6, or 1 f6 Bd6 2 f7 Bf8 3 Kd4 K×b5 4 Ke5 Kc5 5 Ke6 Bd6.

If the f5 pawn is moved to h5, the evaluation of the resulting position is unchanged.

Averbakh, 1954

41

41. With White to move: 1 Kd4 Bg7+.

The simplest, but also possible, is 1 K×b5 2 Ke5 Kb6! (2 ... Kc5? 3 Kc6 Kb6 4 d6 Kc6 d7 Kc7 6 Kf7 Bh6 7 Ke8 Bg5 8 h6 etc.) 3 Ke6 (3 Kf6 Kc7 4 Kc6 Kd8, with a draw) 3 ... Kc5 4 Kf7 Bd6.

2 Ke4 K×b5 3 Kf5 Kc5 4 Ke6 Bf8.

With Black to move: 1 ... Ka5! 2 Kd4.

If 2 d6 B×d6 3 Kd5, then 3 ... Bf4 4 Ke6 Be3, while if 2 h6 B×h6 3 Ke5, then 3 ... Be3 + 4 Kc6 Bb6.

2 ... K×b5, and subsequently as in the note to the previous variation.

Note that 1 ... Kc7 would have lost, White winning in most instructive fashion: 2 Kd4 Kb6.

If 2 ... Kd6, then 3 b6 Bh6 4 Kc4! (4 Kc4 Bf4! 5 K×b5 K×d5 6 b7 Kc6 7 h6 Kf7, with a draw) 4 ... Bg7 5 Kf5 K×d5 6 b7 Be5 7 h6.

3 Ke5 K×b5 4 Kf6! Kb6! 5 Kf7 Bh6 (5 ... Bb4 6 h6 Ke7 7 h7 Be3 8 Ke7! Be5 9 d6++! B×d6 + 10 Ke6) 6 d6 Kc6 7 Ke7 (7 Ke6 Bg5!, and White is in zugzwang) 7 ... Bg5+ 8 Ke6 Kb7 9 Kd7! Bf4 10 Ke7 Bg5+ 11 Ke8 Kc8 12 d7+ Kc7 13 h6, and White wins.

42. The position differs from the previous one in that the black king has greater freedom of movement, but by exact play White parries the opponent’s threats:

1 Kb5!(bad is 1 K×b7 Kc4 2 Kc6 Kd3 3 Bg1 e3) 1 ... Ke5 2 Kc5 (2 Kb6 Kf5 3 K×b7 Kg4 4 Kc6 Kf3 5 Bg1 e3) 2 ... Kf5 3 Kd5 b5 4 Kd4! (4 Kc5 Kg4 5 K×b5 Kf3 6 Bg1 e3) 4 ... b4 5 Kc4 Kg4 6 K×b4! Kf3 7 Bg1 e3 8 Kc3 e2 9 Kd2 etc.

White also succeeds in co-ordinating his forces in the battle with the pawns in the following example.

Averbakh–Martorelli
Reggio Emilia, 1977–78

43

43. 1 Kf5 c4 2 K×e5 c3 3 Kd4 Kb3! (3 ... Kb2 4 Kc4! a5 5 Kb5) 4 Bb1!

The only move to draw. Bad is 4 Kd3? a5! 5 Ke2 Kb2 6 Kd1 a4.
Bishop Against Three Pawns

4 ... a5 (if 4 ... Kb2, then 5 Kd3!) 5 Kd3 a4 6 Bc2+ Kb4 7 B×a4, with a draw.

In the following elegant study we meet some already familiar devices.

Lewitt, 1933

44. 1 Ke4 Bd8 2 b6!! Ka6 (2 ... K×b6 deprives the bishop of the b6 square, and after 3 Kf5 the h-pawn queens) 3 Ke5! Bg5 4 h7 Bc1 5 Kd6! B×b2, and we have reached a familiar position which is won for White (cf. No. 20).

In exceptional cases the side with the lone bishop can even win. This is possible if the enemy king is restricted by its own pawns, and a mating net can be created around it.

Zakhodyakin, 1932

45. In this conclusion to a study, White gives mate in four moves.

1 Kc7! a3 2 Ba4! a2 3 Kc6 a1=Q 4 Bb5 mate.

Four pawns normally win against a bishop, although there are characteristic drawing positions if the pawns are blockaded.

Averbakh, 1954

46. White's pieces are ideally placed, and Black is unable to win.

1 ... Kf6 2 K×d6 Kf5 3 Kd5 e4 (3 ... Kg4 4 Ke4) 4 B×e4+ Kg4 5 Kd4 f3 (5 ... Kh3 6 Ke5) 6 Ke3, with a draw.

Positions obtained by moving No. 46 to right or left will also be drawn.

Averbakh, 1954

47. This position, obtained by shifting the previous position down by one rank, is also drawn. After 1 ... Kf5 2 K×d5 Kf4 3 Kd4 e3. White loses after 4 B×e3+ Kg3 5 Kd3 f2, but he has the saving intermediate move 4 Bh2+ Kg4 5 K×e3, with a draw.
48. White to play draws by 1 Kc4 b1=Q 2 Bh7+ Kb2 3 B×b1 a4! 4 Ba2l a3 5 Kd3!

Positions can occur in which even a large number of pawns fails to win.

Loyd, 1868

49. After 1 Bd7+ Ka3 2 Bc6! Ka2 3 Kc2!

Black's pawns are immobilized, his king is unable to come to their aid, and White draws. A veritable triumph for the blockade!

1.4 KING, BISHOP AND PAWN AGAINST KING

A king, bishop and pawn fail to win against a lone king only in two exceptional cases:

1) when the opposing king occupies a square in front of the pawn, from which it cannot be dislodged.

2) when the opposing king manages to win the pawn.

52. This is typical of the second case. Neither the bishop, nor the king can defend the pawn.

Sometimes, in order not to allow the above exceptions, exact play is required, and there may be only one way to win.
Bishop and Pawn Against Pawn

Troitsky, 1896

53. Thus in this position White does not allow the black king into the corner.

1 Be6! Ke7 2 h6! Kf6 3 Bh5!! Kf7 4 Bh7! Kf6 5 Kf4 Kf7 6 Kg5 Kf8 7 Kf6, and White wins.

Here the bishop succeeded in cutting off the retreat of the enemy king. This device, called path-severance, is of great importance in bishop endings.

54. Black threatens to win the pawn by ... Kc4, and there is only one way to prevent this: 1 Bd5! Kxd5 2 Kb5, and White wins.

1.5 BISHOP AND PAWN AGAINST PAWN

King, bishop and pawn normally win against king and pawn.

In brief, the winning plan is as follows:

1) If the pawn is passed, one of the pieces supports its advance, while the other deals with the opponent's pawn.

2) If the pawn is not passed, the opponent's pawn must first be won, transposing into an ending with bishop and pawn against a lone king.

Exceptions, when a draw nevertheless results, occur in the following basic instances:

1) The enemy pawn cannot be won, and consequently it is also not possible to obtain a passed pawn.

2) After the winning of the pawn the opponent attains a drawn ending with bishop and pawn against a lone king.

3) The pawns are exchanged.

4) The poor positioning of the pieces prevents the winning plan from being carried out. We will consider these in more detail in the examples.

55. Despite the fact that the corner square is of the same colour as the bishop, there is no win: 1 ... Kc3 2 Kc1 Be3+ 3 Kb1 Kd2 4 Ka1 Kc2 leads to stalemate.

Note that, with his pawn at a4, Black would have played his king to a3, capturing the a2 pawn with an easy win.

In positions 56 and 57 Black is unable to win the b2 pawn, and therefore also the game.
Impregnable positions of this type are called ‘fortresses’.

The construction of a ‘fortress’ is an important tactical device in endings. A knowledge of such positions is very important, enabling many mistakes to be avoided.

59. White wins elegantly in this position.
His bishop is attacked. On 1 Bh7 there follows 1 ... Ke3 2 Kb5 Kd4 3 Kc6 Ke5 4 g6 (or 4 Kd7 g6! 5 Ke7 Kf5 with a draw) 4 ... Ke6! 5 Bg8+ Ke7, and Black constructs a ‘fortress’.

No better is 1 Kb4 Kxc2 2 Kc4 Kd2 3 Kd4 Ke2 4 Ke4 Kf2 5 Kf4 Kg2 6 Kg4 g6!
The solution is 1 Bb1!! Kxb1 (1 ... Ke3 2 Kb5 Kd4 3 Kc6 Ke5 4 Kd7! g6 5 Ke7!, and f5 is inaccessible to the black king) 2 Kb3 Ke1 3 Kc3 Kd1 4 Kd3 Ke1 5 Ke3 Kf1 6 Kf3 Kg1 7 Kg3 Kf1 (7 ... g6 8 Kf4 Kg2 9 Ke5 Kg3 10 Kf6) 8 g6 Ke2 9 Kf4, and wins.

58. How is White to save this position? Using position 56, we easily find the solution—1 Kd4!
The threat is 2 b3! B×b3 3 Kc5, so that Black is forced to reply 1 ... h3. And now that Black has helped White to build a ‘fortress’, the king must immediately be evacuated there—2 Kd3!, with an obvious draw. It would be wrong to play 2 Kc3?? Ke3, when White’s king is driven away from the pawn.

Weenink, 1922
Bishop and Pawn Against Pawn

Queen pawn square is of the opposite colour to that of the bishop, it is not possible to win if the weaker side’s king occupies the queen pawn square of the enemy pawn.

A win is possible if the weaker side’s king is cut off from the queen pawn square.

L. Paulsen–Metger
Nuremberg, 1888

61. White’s task is to play his king to b6 and to win the pawn, without allowing the black king to teach a8. This is achieved as follows:

1 Kd4!!

White must play accurately. If 1 Kc5?, then 1 ... b6+! 2 a×b6+ Kb7. The game actually went 1 Kc4? b5+!, with a draw.

1 ... Kc6.

If 1 ... b6 (1 ... b5 2 a6 Kc6 3 Kc3 Kd6 4 Kb4 Kc6 5 Ka5), then 2 a6 Kc6 3 Kc4 Kd6 4 Kb4 Kc6 5 Bb8 b5 6 Ba7! Kc7 7 K×b5, and White wins.

2 Bb6! (not 2 Kc3 b6 3 a6 Kb5) 2 ... Kd6 (2 ... Kb5 3 Ka6 4 Kd6 Kb5 5 Kc7 Ka6 6 Kb8) 3 Kc4 Kc6 4 Kb4 Kd6 5 Kd5 Kd7 6 Ke5 Ke8 7 Ba7 Ke7 8 Kb5 Kd7 9 Bb8 Ke8 10 Bf4 Kd7 11 Kb6 Kc8 12 Bg3 etc.

The win is more difficult in position 62.

62. Black is threatening to play 1 ... g6 and 2 ... Kg7, with a draw.

Košek, 1930

1 Kh5! g5.

If 1 ... Kf7, then 2 Bd5+ Kf6 3 Bg8 g5 (3 ... Kf5 4 Bh7+ Kf6 5 Bg6 Ke7 6 Kg5 Kf8 7 Bh7 leads to the previous position) 4 Kh6 Kf5 5 h3! Kf6 (5 ... g4 6 Be6+! K×e6 7 h×g4) 6 Bd5 Kf5 7 Kg7! Ke5 (7 ... g4 8 Be6+!) 8 Kg6 Kf4 9 Be6.

2 Kb6 g4!

In the event of 2 ... Kg5 3 h3 Kg6 (3 ... Kg4 4 Kg6!) 4 Bd5 Kf5 5 Kg7 White wins. The move played prolongs Black’s resistance, since White has to win the g4 pawn and not allow the black king to reach h8.

3 Be4 Kf7.

On the active 3 ... Ke5 White wins most quickly by 4 Kg5! Kc6 (4 ... K×e4 5 K×g4 Ke5 6 Kg5 Ke6 7 Kg6 Ke7 8 Kg7 Ke6 9 h4 Kf5 10 h5) 5 Kg6 Ke5 (5 ... Ke7 6 Bf5 Kf8 7 Kh7) 6 Bb7 Kf4 (6 ... Ke6 7 Bc8+) 7 Kf6 g3 8 h3!

4 Bh7!

The black king must not be allowed to reach g8. If 4 Kh7 Kf6 5 Bb5 Kg5 6 Kg7 Kh4 7 Bg2 Kg4 8 Kh7 Kh4 9 Kg6, then 9 ... g3! 10 h3—stalemate!

4 ... Kf6.

On 4 ... Ke6 there follows 5 Bg8+ Kf6 6 Bd5 Ke5 7 Bb7 Kf5 8 Bc6 Kf4 9 Kg6 g3 10 h4, while if 4 ... Kf8, then 5 Kg6 Ke7 6 Bg8 Kd6 7 Kf6 and 8 Be6.

5 Bg6 Ke6.

If 5 ... Ke5, then 6 Kg5 Ke6 7 Bh5 Ke7
8 Kh6 Kf8 9 Kh7, while on 5 ... Ke7 there follows 6 Bf5 Kf7 7 Kh7.

6 Be8 Ke7 (6 ... Kf5 7 Bc6 Kf6 8 Bd7 etc., as already examined) 7 Bc6 Kf8 8 Bd5 Ke7
9 Kg7 Kd6 10 Bb7 Ke5 11 Kg6 Ke6 12 Be8+ etc.

And now an elegant study on the same theme.

Duras, 1908

63. 1 Bb4! Kf7 2 a4 Ke6 (2 ... Ke8 3 a5
Kd8 4 Bd6! Ke8 5 a6, and Black can resign)
3 a5 Kd5 4 a6 Kc6 5 Ba5!!

White has securely cut off the black king
from a8, and the remainder presents no
difficulty. When the white king approaches,
Black runs out of moves with his d-pawn,
and his king is forced to abandon c6.

A classic study on the theme of 'path-
severance'!

Curiously enough, without the d-pawn
Black draws: 1 Bb4 Kf7 2 a4 Ke6 3 a5 Kd7!
4 a6 Kc7 etc. The pawn hinders its own king,
by depriving it of the d7 square.

64. This position is a modification of
a study by Kling and Horwitz (1851).

In order to win, White must win the a4
pawn and not allow the black king to reach
a8.

1 Bc5 Ka5 2 Kb7 Kb5 3 Bb6!

The obtaining of this type of opposition is
an important tactical device in such endings.
Black is forced back by one rank.

3 ... Ke4 4 Kc6 Kb3 (4 ... Kd3 5 Kb5 Ke4
6 Kxa4 Kd5 7 Kb5 Kd6 8 Ka6 Kc6 9 a4
Kd7 10 Kb7 etc.) 5 Bc5 Kc4 6 Bd6.

The continuation given by Kling and
Horwitz is also possible: 6 Be3 Kb3 7 Bc1
Kc4 8 Bb2 Kb3 9 Kb5!

6 ... Kd4 7 Kb5 Kd5 8 Bh2 Ke6 9 Kxa4
Kd7 10 Kb5 Kc8 11 Kc6 etc.

Although the black king was close to a8,
it was unable to reach it.

An analysis of endings with rooks' pawns
was made by the Soviet master Rauser. Here,
in condensed form, we give the results of his
researches.

Let us first examine a classic position
of Kling and Horwitz.

65. Both Kling and Horwitz (1851), and
Berger (1921), thought that White won only
if it was him to move. It was only in 1928
that Rauser demonstrated that White wins
irrespective of who it is to move.

With White to move, the win is achieved
as follows:

1 Bf4! Kg2!

After 1 ... Kf2 2 Ke4 Kg2 3 Kd4 Kf3
Bishop and Pawn Against Pawn

4 Bh2 Kg4 5 Kc4 Kf5 6 Kb4 Ke6 7 Kxa4 Kd7 8 Kb5 Ke8 9 Kc6 White is in time to prevent the black king from reaching a8.

2 Kg4!

2 Ke4? Kh3 3 Kd4 Kg4 is a waste of time, when White does best to return his king to the bishop, since after 4 Bh2? Kf5 5 Kc4 Ke6 6 Kb5 Kd7 it is pointless to capture the pawn; as will be seen later, White can no longer win. For this reason he does not hurry, but first endeavours to drive the enemy king as far away as possible.

2 ... Kf2 3 Bc1!

This bishop manœuvre has the aim of gaining a tempo, and of obtaining the set-up Kg4, Bf4 / Kg2, but with White to move. Then there follows Bg3, and the black king is forced onto the last rank.

3 ... Ke2 4 Kf4.

Now Black has several possibilities:

a) 4 ... Kf2 5 Be3+ Kg2 6 Kg4 Kh2 (6 ... Kh1 7 Bf4 Kg2 8 Bg3 followed by 9 Kf3, as in the main variation) 7 Bf4+ Kg2 8 Bg3 Kg1 9 Kf3 Kh1 10 Bb8! Kg1.

Due to lack of space, Black is unable to begin a by-pass on the right flank. This is White's basic plan.

11 Ke3 Kg2 12 Kd3 Kf3 13 Kc4 Ke4 14 Kb5 Kd5 15 Bh2 Kd4 16 Kxa4, and White wins.

b) 4 ... Kd3 5 Be3! Kc4 6 Ke5 Kd3 7 Bc5 Kc4 8 Kd6 Kb5 9 Kd5 Ka5 10 Kc6 Ka6 11 Bg1 Ka5 12 Kb7 Kb5 13 Bb6, and so on as in position 64.

c) 4 ... Kd1 5 Be3 Ke2 6 Ke5! (if 6 Ke4?, then 6 ... Kb3 7 Bc5 Kc4 8 Be3 Kd3 9 Bc1 Ke4, with a draw) 6 ... Kb3 7 Bc5 Kc4 8 Kd6 Kb3 9 Kc6 Kc4 10 Bd6, again as in position 64.

If in position 65 it is Black to move, White's task is rather more complicated. In order to win, he must gain a tempo and obtain the same position, but with White to move. The winning manœuvre was found by Rauzer.

1 ... Kg3 2 Bf6! Kf3.

2 ... Kh3 3 Kf4 Kh2 4 Kf3 Kh3 5 Bg5 Kh2 6 Kg4 Kg2 7 Bf4 leads to a position already examined.

3 Be5 Ke3 4 Bb2!

The only move to win. Berger considered only 4 Bb8? Kd4 5 Ke6 Kc5 6 Kd7 Kb6 7 Ke8 Kc6 8 Bc7 Kd5 9 Kd7 Ke5 10 Bd8 Kd5 11 Be7 Ke5, when, as we will see below, the black king has reached the drawing zone.

4 ... Kd3.

After 4 ... Kf3 5 Bc1 Kg3 6 Bg5 Kf2 7 Kf4 Ke2 8 Kc4 Kf2 9 Bf4 Kg2 10 Kd4! Kf3 11 Bh2 White wins, as already examined.

5 Ke5 Ke3 (5 ... Kc4 6 Bd4 Kb3 7 Bc5 has already been considered) 6 Bc1+ Kf3 7 Kf5 Kg3 8 Bg5 Kf3, and White has achieved his goal.

Rauzer, 1928

66. The solution of this position no longer presents any difficulty.

With White to move: 1 Bh2 Kd4 2 Kd6 Ke4 3 Kc6 Kb3 (3 ... Kd4 4 Kb5 Kd5 5 Bg3 and 6 Kxa4) 4 Bd6 Kc4 5 Bc5 etc.

With Black to move: 1 ... Kf3! (attempting to go round on the right flank) 2 Kf5 Ke3 3 Bb2!, and so on as in position 65.

In position 64 let us move the black king from a6 to c8, and see how this reflects on the evaluation of the position.
67. White's first move is obvious: the king must not be allowed into the corner.

1 Bd6 Kd8 2 Kb7 Kd7 3 Be7 Ke6.

Black does not allow the immediate driving back of his king, which would happen after 3 ... Ke7 4 Kc6 Ke6 5 Bd6.

4 Kc6 Ke7 5 Bb6 Ke6 6 Bc5 Ke5 7 Bf8.

Here Black has several continuations, one of which we will examine in detail.

7 ... Kd4 8 Bg7+ Ke4!

A loss results from 8 ... Ke4? 9 Be5 Kd3 10 Kd5 Ke3 11 Bh2! Kd3 12 Kc5 Ke4 13 Kb5 Kd4 14 Bg3 and 15 Kxa4.

9 Kd6 Kf5 10 Be5 Kg6! (10 ... Ke4? 11 Ke6! leads to position 66) 11 Ke6 Kg5 12 Bd6 Kg6.

12 ... Kg4? 13 Kf6 Kh5 14 Bf4! Kg4 15 Be1 Kh4 16 Bg5 Kg4 17 Kf6 Kg5 18 Ke5 leads to position 65.

13 Be7 Kg4 14 Bb4 Kg6 15 Be3 Kg5 16 Be5! Kg6 (16 ... Kg4 17 Kf6 Kf3 18 Kf5 Ke3 19 Bb2! etc.) 17 Bf6 Kb6.

Thus White has managed to drive the black king to the edge of the board. But what next?

18 Kf7 Kh7 19 Be5 Kh6 20 Bg7+ Kh7 21 Kf8 (otherwise the king cannot be evicted from the corner) 21 ... Kg6 22 Kg8 Kf5 23 Kf7 Kg5 24 Bf8 Kf5 25 Be7.

At last the king has come out of the corner, but now it heads for a8.

25 ... Ke5 26 Ke8 (trying to prevent the king from reaching a8) 26 ... Ke6! 27 Bf8 (27 Kd8 Kf7 repeats what has already hap-

pened) 27 ... Kf6 28 Bb4 Kg7 29 Be3+ Kg6 30 Ke7 Kf5 31 Kd6 Kg6.

White has failed to drive away the black king to such an extent that it no longer threatens to make for one of the corners—a8 or h8. The bishop is not on the b2—a8 diagonal, so that only a draw results from 32 Kc6 Kf7 33 Kb5 Kc4 34 Kxa4 Kd7 35 Kb5 Ke7.

32 Be5 Kf7, and the game can go on like this only up to move 50, when it will be pronounced a draw.

Incidentally, instead of 7 ... Kd4, Black could also have played 7 ... Ke6 8 Bd6 Kf7 9 Kd7 Kf6 10 Bh2 Kf7 (10 ... Kf5 11 Ke7 Kg5 leads to similar play, whereas 11 ... Ke4? loses after 12 Kc6 Kd4 13 Kd6 Kc4 14 Kc6 Kd4 15 Kc5 Kd5 16 Bg3) 11 Be5 Kg6 12 Ke6, joining the main variation.

The conclusion is that there exists a drawing zone, within which the black king is able to draw.

Rauzer deduced the following rule, which facilitates the evaluation of the position: "White always wins if the black king is cut off from the sector of the board bounded by the squares a8, h8, h6, f4, e5, d4 and a7" (diagram 68).

68. In this case it is cut off from the corners h8 and a8.

If the black king is inside the drawing zone, this does not yet guarantee a draw, since, if the white king is close to the a-pawn, the black king may not reach a8 in time. Therefore it should be remembered that, if the
white bishop stands on the h2-b8 diagonal, the black king must be able to reach d7 when the white king goes to b5.

Teichmann, 1899
Rauzer, 1928

69. This position has an interesting history. It was published in 1900 by Teichmann, who regarded it as a win for White. His solution was too brief and was unconvinving, so that in 1912, on the basis of an incorrect evaluation, the position was declared drawn. It was only in 1928 that Rauzer demonstrated convincingly that White wins.

White's plan is as follows: if the black king does not move out of the drawing zone, he stalemates it, so as to force a3, and then win this pawn. If the king moves out of the drawing zone and can be isolated from it, White himself plays a2–a3 and obtains the ending already analyzed.

1 Kb6 Kd7 2 Kb7 Kd8.

Or 2 ... Ke7 3 Kc6 Kd8 4 Bd6 Ke8 5 Kc7 Kf7 6 Kd7 etc.

3 Ke6! Ke7! (or 3 ... Kc8? 4 Bc7 a3 5 Bd6 Kd8 6 Bxa3) 4 Bc7 Ke6 5 Bd6 Kf5.

If 5 ... Kf6, then 6 Kd7 Kf5 7 Ke7 Ke4 8 Ke6 Kd4 9 Ba3 (a repeatedly occurring bishop manoeuvre—a step back, so as to then make two forward) 9 ... Kc4 10 Kd6 Kd4 (10 ... Ke3 or 10 ... Kb5 11 Bc5) 11 Bb2+ Ke4 (11 ... Kd3 12 Kd5 Ke2 13 Bd4 a3 14 Kc4 Kb1 15 Kb3) 12 Ke6 Kf4 13 Bf6, joining the main variation after move 16.

6 Kd7 Kf6 7 Ba3.
Also possible is 7 Bh2 Kf5! 8 Ke7 Kg5! 9 Ke6 Kg6 10 Bd6 Kg7 11 Be7 Kg6! 12 Bf6! etc.

7 ... Ke5 8 Be7 Kf5 (if 8 ... Kd5, then 9 Bd6 Ke4! 10 Ke6 Kd4 11 Ba3 and so on) 9 Kd6 Kg6.

9 ... Ke4 10 Ke6 Kf4 11 Bf6, or 10 ... Kd4 11 Ba3 etc.

10 Ke6 Kg7 11 Bd8 Kg6!
If 11 ... Kf8, then 12 Bf6 Kg8! 13 Ke7, while on 11 ... Kg8 there follows 12 Kf6 Kf8 13 Be7+, and the black king is stalemated.

12 Bf6 Kh6!
Black intends to answer 13 Kf5 with 13 ... Kh7, while on 13 Kf7 he slips out by 13 ... Kh5.

13 Kf7.
White is faced with a difficult problem. He has to drive the king out of the h8 corner, without allowing it to reach a8. To do this he must occupy f6 with his king, threatening to stalemate the enemy king. But to do this is not easy.

White has to obtain the following set-up: Kf5, Bf6 / Kh6, with him to move. Then he can play his bishop away from f6, vacating this square for his king.

13 ... Kh5 14 Be7 Kg4.
If 14 ... Kh6, then 15 Kf6 Kh5! 16 Bf8 Kg4 17 Bb6 etc.

15 Kd6 Kf4.
On 15 ... Kh5 there follows 16 Kf5 Kh6 17 Bf8+ Kh5! 18Bg7 Kh4 19 Bh6 etc.

16 Bf6 Ke4.
If 16 ... Kg4, then 17 Ke5 Kh5 18 Kf5 Kh6 19 Bb2 Kh7 20 Kf6 Kh6 21 Be1+ Kh5 (21 ... Kh7 leads to stalemate) 22 Kf5 Kh4 23 Bf4 Kh3 24 Bg5 Kg3 25 a3, and so on.

17 Be5 Kf3.
Black attempts a by-pass on the right
flank. After 17 . . . Ke3 or 17 . . . Kd3 there follows 18 Kd5, and the a4 pawn is won.

18 Bh2!

18 Kf5 Ke3, and after 19 a3? Kd3 20 Ke6 Kc4 Black breaks into the drawing zone.

Since the black king has been forced out of the zone, 18 a3 also wins, but after this Black forces position 65 with him to move, which prolongs the game.

18 . . . Kg4! 19 Kf6 Kh5(h3).

Or 19 . . . Kf3 20 Kf5 Ke3 (20 . . . Kg2 21 Bf4 Kh3 22 Kg5 etc.) 21 Ke5 Kd3 22 Kd5 a3 (22 . . . Kc3 23 a3) 23 Be5 Kc2 24 Kc4.

If 19 . . . Kh4, then 20 Kf5 Kh5 21 Bf4 Kh4 22 Be1 Kg3 23 Bh6 Kh4 (23 . . . Kf3 24 Bg5 Kg3 25 a3) 24 Bf4 Kh3 25 Bg5 Kg3 (25 . . . Kg2 26 Kf4) 26 a3.

20 Bf4 Kg4 21 Bg5 Kg3 22 Kf5 Kf3 23 Bf4 Kg2 24 a3 Kf3 25 Bh6 Kg3 26 Bg5 Kf3, and White has finally achieved his goal.

In position 65, which we have managed to obtain, the pawn may be lost as late as the 19th move. Thus in position 69 the pawn is won only on the 45th(!) move.

The analysis of Teichmann’s position allows the following conclusion to be drawn, facilitating the evaluation of this type of ending: “With the white pawn at a2, Black can draw only if he is able to force a2-a3, and then return in time to the drawing zone” (Rauzer).

This is illustrated by the following study.

Rauzer, 1928

70. 1 Kb5!

Bad is 1 Kc5? Kc2 2 Kd6 Kc3 3 Kc7 Kb4 4 a6 Kb5, when Black wins.

Now Black has two main continuations:

a) 1 . . . Bf1+ 2 Kc6 Kd2 3 Kc7!

White loses after 3 Kb7? a6 4 Kc6 Kc3 5 Kd5 Bd3 6 Ke5 Kb4! 7 Kd4 Bh7 etc.

3 . . . a6! (4 a6 was threatened) 4 Kd6 Bg2.

Black tries not to allow the white king into the drawing zone, bounded here by the squares a1, a2, d5, e4, f5, h3 and h1. If 4 . . . Kc3, then 5 Ke5 Bd3 6 Kf4 Kb4 7 Ke3 Bh7 8 Kd2, with a draw.

5 Kc5 Ke3 6 Kf5 Bf3 7 Kg5! (not 7 Ke5? Be4, and wins) 7 . . . Ke4 8 Kh4 Kf4 9 Kh3 Be6 10 Kh2!

It was not yet too late to go wrong: 10 Kb4? Bg2, and Black wins. But now the position is drawn, since the white king is inside the drawing zone.

b) 1 . . . Bh7 2 Kc5 Be4.

Or 2 . . . Kd2 3 Kd6 a6! 4 Ke5 Ke3 5 Kf5 Bf3 6 Kg5 etc.

3 Kd6! (but not 3 Kb5 Bd3+, and Black wins) 3 . . . Bd3 4 Kc7 a6! 5 Kd6 Kd2 6 Ke5 Ke3 7 Kh4, with a draw.

As was mentioned earlier, one of the ways of gaining a draw is by exchanging pawns.

Sometimes this exchange is achieved by the use of various study devices.

Reti, 1928
Bishop and Pawn Against Pawn

71. How is White to catch the black pawn? It appears to be an impossible task...

1 Ke7!!

At first sight this move is incomprehensible, but in fact it is perfectly logical.

A basic geometric rule of the chess board is that the path of a king in a straight line is equal to that in a zig-zag. In chess a straight line is not always the shortest distance between two points, a factor which must constantly be borne in mind.

1 ... g5 2 Kd6 g4.

If 2 ... Bh5 3 Ke5 Kb7, then not 4 Kf5? g4 5 Kf4 Ke7, but 4 e7! Kc7 5 Kf5 g4 6 e8=Q, with a draw.

3 e7! Bh5 4 Ke5!

By luring the bishop to b5, White has gained the necessary tempo, and now catches the g-pawn.

4 ... Bd7 5 Kd4 Kb7 6 Ke4 Kc6 7 Kf4 Kd6 8 e8=Q, with a draw.

Jigis, 1927
(conclusion of a study)

72

A poor deployment of the pieces may seriously hinder the achievement of victory. In cases where the placing of the pieces cannot be improved, it may be altogether impossible to win.

73

73. The first impression is that Black must win, but White continues: 1 Kg6! (1 Kc6? Bh6, and wins) 1 ... Bf4 2 Kf5! Bd6 3 Ke6! Bf8 4 Kf7 Bh6 5 Kg6, and the bishop cannot escape from the white king's pursuit. Draw.

The movement of Black's bishop was restricted by his own pawn.

This motif, when one piece constantly pursues another, bears the name of 'perpetual pursuit'.

Batuyev, 1940

74

74. After 1 ... Kc4! White is again unable to regroup, and it proves impossible to win. For example: 2 Bf8 Kb3 3 Ba3 Ke4, or 2 Kf3 Kb3! 3 Ke2 Ke2 etc.
1.6 BISHOP AND PAWN AGAINST TWO PAWNS

In the material sense a bishop and pawn are much stronger than two pawns, and so, all other things being equal, the side with the bishop normally wins.

The winning plan is as follows:

1) If the pawn is passed, it must be queened, while at the same time the threat of an advance by the opposing pawns is neutralized.

2) If the pawn is not passed, the obstructing enemy pawns must first be eliminated, and the pawn then queened.

The detailed implementation of the winning plan will be examined in the following examples.

Averbakh, 1954

75. White's pawn is blockaded, and the black pawns are threatening to advance.

White's problem is to immobilize the enemy pawns, so that the black king will then be forced to lift the blockade. This is achieved as follows:

1 Bf1! (on 1 Kc4 there follows 1 ... a3 2 Kb3 Kc5, when, despite the fact that the black pawns are immobilized, White has not managed to lift the blockade, since his king cannot support the advance of his pawn) 1 ... h3 2 Bc4! (again the only move; 2 ... a3 was threatened) 2 ... b2 3 Ba2 a3 4 Bb1 Kd7.

Thus White has achieved his aim—Black has lifted the blockade, and the pawn can now advance.

5 Kc5 Kc7 6 d6+ Kd7 7 Kd5 Ke8 8 Kf6 Kc8 9 d7+ Kd8 10 Ba2, and White wins.

It should be noted that the functions of White's pieces were strictly divided. His bishop stopped the enemy pawns, while his king supported the advance of his own pawn.

Such a division of duties is a characteristic feature of such endings, as we will repeatedly see in what follows.

Trifunovic, 1951

76.

76. Here we see the opposite picture. The bishop is defending the pawn, while the king is controlling the enemy pawns. It is clear that, in order to win, White's pieces must exchange roles. The author's solution goes:

1 Be8 Kb6 (1 ... Kd6 2 b6) 2 Bd7 Ke5 3 Bc6.

The same position has been reached, but with Black to move.

3 ... Kb6 (3 ... Kd6 4 Kf5 g3 5 Kg4 and 6 K×g3) 4 Kd5! g3 5 Ke4, and the remainder is obvious.

But this is not the only way to win. Also possible is 1 Ke3 (but not 1 Kd3 g3 2 Ke3 e4!, with a draw) 1 ... Kd6 2 Kd3! Ke5 (2 ... g3 3 Ke4) 3 Ke4, joining the author's solution. White gave Black the move by utilizing the principle of 'triangulation'.
78. 1 Bf6! (White tries to provoke the advance of the pawns) 1 ... e3 2 Bg7 Ke4 (2 ... c2 3 Bh6 Ke4 4 Bc1 Kc3 5 g5 d3 6 Ke3) 3 Ke2 d3+ 4 Ke3 d2 5 Ke2 Kb3 6 Kd1 Ke4 7 Kc2, and White wins.

In certain cases, even if the bishop succeeds in blocking the pawns, it may prove impossible to carry out the typical winning plan.

Chekhov, 1950

79

79. With Black to move it is all very simple: 1 ... Ke6 2 Kf4 g5+ 3 Ke4 Ke6, and with the help of king and bishop the pawn quickly queens.

With White to move the play develops differently: 1 Kf4 Ke6 2 Ke4 Ke6 3 Kf4 g6 4 Kg5 Kf7 5 Kf4 Kf6 6 Ke4.

White attempts either to break through with his king to the support of his pawns, or else to attack the enemy pawn. Black has no way of forestalling both of these threats.

6 ... g5 7 Kd5! g4 8 Ke6 g3 9 Kxh6 g2 10 a7 g1=Q+ 11 Kb7, with a draw.

Let us try moving the bishop to a7: 6 ... Ke6 7 Kf4 Ba7. Then there follows 8 Ks5 Kf7 9 Kf4 Kf6 10 Ke4, and again 10 ... g5 fails to win after 11 Kd5 g4 12 Ke6 g3 13 b6 g2 14 bxa7 g1=Q+ 15 Kb7, with a draw.

What if the bishop is played to g1? For example: 6 ... Ke6 7 Kf4 Bg1. Here too a draw results from 8 Kg5 Kf7 9 Kf4 Kf6 10 Ke4 g5 11 Kd5 g4 12 Kc6 g3 13 b6 g2
14 a7, since the bishop prevents the pawn from queening!

It remains to try moving the bishop to f2: 6 ... Ke6 7 Kf4 Bf2. If now White plays the routine 8 Kg5 Kf7 9 Kf4 Ke6 10 Kc4?, he loses after 10 ... g5! 11 Kd5 g4 12 Kc6 g3 13 b6 g2 14 a7 g1=Q 15 a8=Q Qg2+. Correct is 10 Kf3!, destroying the co-ordination of Black’s forces. Wherever he moves his bishop, Black is unable to win: the g1–a7 diagonal proves to be too short!

The following is an instructive position.

Chekhover, 1950

80

80. With Black to move, after 1 ... Ba7 White is immediately in zugzwang.

But if it is White to move, after 1 Kd4! Ba7+ 2 Ke4 it is Black who is in zugzwang, for example: 2 ... Kf6 3 Kd5 g4 4 Ke6 g3 5 Kc7 g2 6 b8=Q Bxb8+ 7 Kx b8 g1=Q 8 a7, with a draw.

Chekhover, 1950

81

81. Here Black is unable to prevent the break-through of the opposing king to the pawns, but victory is nevertheless possible.

1 ... Ba5! 2 Kd5 g6 3 Ke5 Bc7+ 4 Kd5 g5 5 Kc6 Ba5 6 b6 Bxb6 7 Kxb6 g4 8 a5 g3 9 a6 g2 10 a7 g1=Q+, and Black wins, since his king is well placed, for example: 11 Kb7 Kd7! 12 a8=Q Qb1+ 13 Ka6 Qa2+ 14 Kb7 Qb3+ 15 Ka6 Qa4+ 16 Kb7 Qb5+ 17 Ka7 Kc7 etc.

It should be noted that, instead of 2 ... g6, the plan involving the transfer of the black king to a5 does not work. For example: 2 ... Kd7 3 Ke5 Kc7 4 Kf5 Kb6 5 Kg6 Bc3 6 Kf5 Ka5 7 Kg5 Bd4 8 Kg6!, with a draw.

An ancient position, 1775

82

82. This example shows the winning method when there is no passed pawn. White heads for the enemy pawns with his king, but in doing so he must take care that the opponent does not exchange his only pawn.

1 Kb4 (not 1 Bf4 c5! 2 Ka4 Kc6, when after ... d5 Black exchanges pawns) 1 ... Kb7 2 Ka5 d5 (2 ... Kc7 3 Ka6 Kd7 4 Kb6 c5 5 Bf4 Ke6 6 Kc6 etc.) 3 c5 Ka7 4 Kb4 Kb7 (4 ... Ka6 5 Kc3 Kb5 6 Kb4 Kb4 7 Ke5 Kc4 8 Kd6 etc.) 5 Kc3 Kc7 6 Kd4 Kd7 7 Ke5 Ke7 8 Bg5+ Kd7 9 Bf6 Ke7 10 Ke6 Kc8 11 Kd6 Kb7 12 Kd7, and so on.
Bishop and Pawn Against Two Pawns

Walker, 1841

83. This position differs slightly from the previous one. Here there is no possibility of a by-pass by the white king on both flanks, and the advance of the king via d4 and e5 is unsuccessful, for example: 1 Kd4 Ka6, and White is unable to avert the exchange of pawns after . . . c5 and . . . b5. The evaluation of the position remains unchanged if the white pawn is at b4.

Averbakh, 1954

84. It is not easy for White to approach the enemy pawns with his king. The waiting attempt 1 Bb7 after 1 . . . f4+ 2 Ke2 (2 Kd3 g3, with a draw) 2 . . . Kf5 leads to a position where the advance of White's king to the black pawns is no longer dangerous. For example: 3 Bh1 (the only way of freeing the king and of forestalling the threat of . . . g3) 3 . . . Kg5 4 Kd3 Kf5 5 Kd4 f3! (5 . . . Kg5 6 Ke4 f3 7 Ke3! leads to a win for White) 6 Ke3 Ke5! White has approached the pawns with his king, but has not achieved anything: 7 Bxf3 gxf3 8 Kxf3 Kf5 leads only to a draw.

First White must block the black pawns.
1 Bd7! f4+ (1 . . . Kf6 2 Kf4) 2 Ke2 g3 (clearly forced) 3 f3 Kd4 4 Bh3.

Again the same idea. The bishop controls the advanced pawn, while the king intends to head for the f4 pawn.
4 . . . Kc3 (Black tries not to admit the white king) 5 Bg2!
5 Kd1? leads only to a draw after 5 . . . Kd3 6 Kc1 Ke3 7 Bg2 Kd3.
5 . . . Kc2 6 Bf1!

White has deployed his bishop in the best way possible. It controls the g-pawn and deprives the black king of the square d3. Black is unable to carry out his plan.
6 . . . Ke3 (6 . . . Kc1 7 Kd3 Kd1 8 Ke4 etc.) 7 Kd1! Kd4 8 Kd2 Ke5 9 Ke3 Kd5 10 Kd3 Ke5 11 Ke4, and White wins.

If the bishop is unable simultaneously to control the enemy passed pawn, and to support the king in its advance to the pawns, it may prove impossible to realize the advantage.

Averbakh, 1969

85. Passive defence here leads to defeat:
1 . . . Kf6? 2 Ke2 Ke5 3 Kd3 Kf6 4 Kd4 Kg6 5 Ke5, and White wins.

Correct is 1 . . . f4! 2 g4 Kd4.

Black tries to prevent the advance of the white king to the g5 pawn.
Bishop Against Pawns

3 Ke2 Kc3 4 Bf5 Kd4 5 Kd2 Ke4 6 Be4 Kd4 7 Bd3.

White appears to have been successful—the opposing king is forced to retreat.

7 ... Ke5 8 Kc3.

In helping its king, the bishop has weakened its control over the opposing passed pawn, a factor which Black can exploit.

8 ... f3! 9 Bf5 Kf4 10 Kd2 Kg3 11 Ke1 Kg2 12 Be4 Kg3 etc.

Sometimes one has to reckon seriously with the threat of exchanging the lone pawn. In the following example this threat can be successfully neutralized only by the sacrifice of the bishop.

Neishtadt, 1930

86

86. 1 Bg1+! (1 Bg3 c3! 2 bxc3 b4 leads to a draw) 1 ... Kb4 2 Bd4 Kb3 3 Bc3 b4 4 Kd4!, and White wins.

No better is 2 ... Ka4 3 Kd5! Kb3 4 Bc3 b4 5 Kd4!

We have already seen that positions with a rook's pawn whose queening square is of the opposite colour to that of the bishop do not follow the general rule.

There are great difficulties in achieving the win if both opposing pawns are rook's pawns.

87. White's problem here is the same as in positions with one black a-pawn: he must not allow the black king into the drawing zone. But here matters are complicated by the fact that he does not have b5 for his king.

Black is threatening to enter the drawing zone by ... Kb5. On the natural 1 Kc7 there follows 1 ... Kb5 2 Be3 Kc4 3 Kd6 Kd3 4 Bg1 Ke4 5 Ke6 Kf4 6 Kf6 Ke4 etc.

The win is achieved as follows:

1 Be3! Kb5 2 Kd7 Kc4 3 Ke6 Kd3 4 Bg1 Kc4.

This move gives White the most difficulties. If 4 ... Ke4, then 5 Bh2 Kf3 6 Kd5 Kg4 7 Kc5 Kf5 8 Kb4 Ke6 9 K×a4 Kd7 10 Ka5 Kc8 11 K×a6 etc.

5 Kd6 Kb5 6 Bf2 Ka5 7 Kc7 Kb5 8 Bb6 Kc4 9 Kc6 Kb3 10 Be5 Kc4 11 Bd6 Kd4 12 Bh2.

Were it not for the a6 pawn, White would win simply by 12 Kb5, whereas now he has to reach b4 with his king, and this is by no means simple.

12 ... Ke4 13 Be5! Kb3 14 Bd6 Ke4 15 Be5 Kd3 16 Kd5 Ke3 17 Bd6 Kd3 18 Be5 Ke3 19 Kc4 Kf3 20 Bh2 Ke4 21 Bg3, and White can at last approach the pawns.

Kling & Horwitz, 1851
Bishop and Pawn Against Two Pawns

88. The direct attempt to attack the enemy pawns with the king and eliminate them would be pointless, since all the same it would be impossible to evict the black king from the a8 corner. Therefore White must first attempt to stalemate the black king, so as to force the advance of the b-pawn and thereby obtain a passed pawn on the b-file, or else to drive the king away, and only then win both pawns, at the same time not allowing the opposing king into the corner.

This plan is typical of such positions, and leads to a win.

1 Bd2!
It would be a mistake to play 1 Kd6? Ka5! 2 Kc5 Ka4 3 Bc1 b3 4 a3 Ka5 5 Bb2 Ka4, with a draw.

1 ... Kc7.
On 1 ... Ka5 there would have followed 2 a3! If 1 ... Kb7, then 2 Kd6 Kb6 3 Be1 Kb7 4 Bh4 Kb6 5 Bd8+ Kb7 6 Be7 Ka8 7 Kc6 Ka7 8 Bd8 Ka8 9 Kb6 Kb8 10 Bc7+ Kc8 11 Kc6 b3 12 a×b3 b4 13 Bd6 etc.

2 Bg5 Kd7 3 Ke5 Kc7 4 Bh4 Ke8 5 Kb6 Kb8 6 Bg3+ Ke8 (if 6 ... Ka8, then 7 Bd6 b3 8 a×b3 b4 9 B×b4) 7 Bf4 Kd7 8 K×b5 Kc8 9 Kc6 Kd8 10 Kb7 Kd7 11 Bd2 Kd6 12 B×b4+ Kd5 13 a4 Ke4 14 a5, and so on.

An interesting point is that, if Black had only one pawn, White would be unable to win.

Walker, 1841

89. In order to win, White must be able to stalemate the opposing king, and thus force ... b4, a problem which is not difficult to solve.

1 Kc6 Ka6.
The goal is achieved immediately after 1 ... Ka8 2 Kb6.

2 Bb8 (or 2 Bd4) 2 ... Ka5 3 Bc7+ Ka6 4 Bb6 b4 5 a×b4 a3 6 b5 mate.

Horwitz analyzed this position only with White to move. It is much more interesting to examine it with Black to move, since in this case Black’s king can attempt to break out of the danger zone, where it is threatened with mate.

1 ... Kb7 2 Kd6! Ke8.
The attempt to exchange pawns does not succeed. If 2 ... b4 3 a×b4 Kb6, then 4 Bb2! Kb5 5 Ba3 Kc4 6 Kc6 Kb3 7 b5, and White wins.

3 Bf6! Kb7 (there is no way to the right,
so the king is forced to return) 4 Bd8 Kc8
5 Bb6 Kb7 6 Ke5 Kc8 7 Ke6 Kb8 8 Ba5
Ka8 9 Kc7 Ka7 10 Bb6+ Kc6 11 Ke6, and
White wins.

Averbakh, 1954

91
+/=

91. With White to move, after 1 Bf6
play reduces to the solution of the previous
position.

If it is Black to move, he naturally takes
his king to the right—1 ... Kd8 2 Bg7 Ke8
3 Ke6 Kd8.

The king is forced to return, and one gains
the impression that White is again close to
success.

4 Bf6+ Kc7!

The only move, since 4 ... Kc8 loses
immediately to 5 Be7, and 4 ... Kc8 to
5 Kd6.

5 Be7 Kc6 6 Bd6.

It appears that White has achieved his goal,
but this is not so!

6 ... b4! 7 a×b4 a3 8 Be5 Kb5.

The exchange of pawns is inevitable.

Draw.

But couldn't White have tried to stalemate
the black king in some other place? Let us
try driving the king into the h8 corner.
2 Bf6+ Ke8 3 Be7 Kf7 4 Kd7?

The king is driven further away.

4 ... Kg6 5 Ke6 Kg7 6 Bh4 Kg8 7 Ke7
Kg7 8 Bf6+ Kg6 9 Kf6 Kh6.

Black’s king has been forced to retreat
onto the rook’s file.

10 Kf5 Kh7 (of course, not 10 ... Kh5
11 Bg5) 11 Be3 Kg8 12 Ke6.

By playing 12 Kf6, White can force the
king to the left, but Black does not have to
fear this. After 12 ... Kf8! (not 12 ... Kh7
13 Bd2! Kg8 14 Bh6) 13 Bb4+ Kc8! (not
13 ... Kg8 14 Be7 Kh7 15 Bf8, when again
Black’s king cannot avoid stalemate) 14 Ke6
Kd8 15 Bd6 Kc8 16 Ke7 he draws by 16 ... b4!
17 a×b4 Kd7 18 Ke6 Kc6! etc. Inciden-
tially, Black need not hurry with ... b4.
Also possible is 16 ... Kb7, and only on
17 Kd7—17 ... b4 18 a×b4 Kb6 19 Ke6
Kb5 20 Kd5 a3, with the same result.

12 ... Kf8 13 Bf6 Kg8 14 Ke7 Kh7 15
Kf7 Kh6 16 Be7 Kh5!

Again the only move. Bad is 16 ... Kh7
17 Bf8 or 17 Bg5.

17 Kf6 Kg4 18 Ke5 Kf3.

18 ... Kh5 leads to the same result after
19 Kf5 Kh6 20 Bf8+ Kh5 21 Bg7 Kh4 22
Bh6 Kg3 23 Bg5 Kf3 etc.

19 Bg5 Kg4 20 Bf4 Kh5 21 Kf5 Kh4 22
Bh6 Kg3 23 Bg5 Kf3.

92
=

92. The similar position without the b5
pawn is won for White (cf. example 65),
but here things are different.

24 Bf4 Kg2 25 Kg4.

The immediate approach of the king to the
b5 pawn is unsuccessful—25 Kc4 Kh3!
26 Kd4 Kg4 27 Bh2 Kf5 28 Kc5 Ke6 29
K×b5 Kd7, with a draw.

25 ... Kf2 26 Bc1 Ke2 27 Kf4 Kd3!
The only way! 27 ... Kf2 is bad in view of 28 Be3+, and now:

a) 28 ... Kg2 29 Kg4 Kh2 30 Bf4+ Kg2 31 Bg3 Kf1 (31 ... Kg1 32 Kf3 Kh1 33 Kf2) 32 Kf3 Kg1 33 Bh4 Kh2 34 Bf2 Kh1 35 Kg3, and wins.

b) 28 ... Ke2 29 Ke4 Ke1 30 Kd3 Kf1 31 Kc3 Ke2 32 Bg1 Kf3 33 Bh2! Ke3 34 Kb4 Ke4 35 Kx b5 Kd5 36 Bg3, and again White wins.

28 Ke5 Kc4 29 Bd2.

White defends against the threat of ... b4. But nevertheless there follows 29 ... b4! 30 Bxb4 Kb5 with a draw, since the king has broken into the saving zone.

A general rule can be made for such situations, to facilitate the evaluation of a position.

The only way! 27 ... Kf2 is bad in view of 28 Be3+, and now:

a) 28 ... Kg2 29 Kg4 Kh2 30 Bf4+ Kg2 31 Bg3 Kf1 (31 ... Kg1 32 Kf3 Kh1 33 Kf2) 32 Kf3 Kg1 33 Bh4 Kh2 34 Bf2 Kh1 35 Kg3, and wins.

b) 28 ... Ke2 29 Ke4 Ke1 30 Kd3 Kf1 31 Kc3 Ke2 32 Bg1 Kf3 33 Bh2! Ke3 34 Kb4 Ke4 35 Kx b5 Kd5 36 Bg3, and again White wins.

28 Ke5 Kc4 29 Bd2.

White defends against the threat of ... b4. But nevertheless there follows 29 ... b4! 30 Bxb4 Kb5 with a draw, since the king has broken into the saving zone.

A general rule can be made for such situations, to facilitate the evaluation of a position.

Here is a practical example of this ending.

Potapov–Volovich  
Moscow, 1958

96. 1 a4 Kb8 2 Be3 Ka8 (2 ... Ka7? 3 a5) 3 a7 Kb7 4 Kd7 Ka8 5 Kc6 b5! Draw.
Bishop Against Pawns

97. 1 a3 Ka6 2 Kc3 Ka5 3 Kd4 Ka6! (3 ... Ka4 4 Bb4!, and wins) 4 Ke5 Kb7 5 Kd6 Kc8 6 Bb6 c5 7 Ke6 b4! Draw.

Kling & Horwitz, 1851

Hanschisin, 1951

99. White gains a draw by accurate manoeuvring with his king.

1 Ke4! (1 Kd4? Bc5+ 2 Ke4 Bc3) 1 ... Bd2 2 Kd3! (2 Kd4? Bc1 3 Ke4 Be3) 2 ... Be3+ 4 Ke4 Ke7 5 Kf5 Bd2 6 Ke5 Bc1 7 d6+! (7 Ke4? Kf6 8 Kd4 Kf5 9 d6 Ke6 10 Kc5 Ba3+, and wins) 7 ... Kd7 8 Kd5 Ba3 9 Ke4. Draw.

In this example we encounter an interesting case of corresponding squares between bishop and king. With the bishop at d2 the white king must stand at d3, with the bishop at c1 the king must be at d4, and, finally, if the bishop stands at e3 the king must be at e4. White succeeds in maintaining the correspondence.

But the position obtained by moving No. 99 up the board by one rank turns out to be won for Black.

Kayev, 1940

98. The normal winning plan, whereby the bishop neutralizes the passed pawn, and the king approaches the other pawn, does not work here.

1 Bb1 h4 2 Bf5 d6 3 Bh3 Kd3 4 Bf1+ Kd4 5 Kb5 Kc3!, and on 6 Kc6 there follows 6 ... h3 7 Kd5 (7 K×d6 h2 8 Bg2 K×c4) 7 ... h2 8 Bg2 Kd3, when it turns out that White cannot win the d6 pawn without losing his c4 pawn. Draw.

He wins by 1 c5! h4 2 Bc6! d×e6 3 c6 h3 4 c7 h2 5 c8=Q h1=Q 6 Qc3+! Kd5 7 Qc5+ Ke4 8 Qc6+, winning the queen.

Here White won by making use of a study-like feature. Normally, if the winning plan given earlier proves inapplicable for some reason, the weaker side gains a draw. We will show this in some examples.

Averbakh, 1954

100. 1 Ke5 Bd3 2 Kd4 Bc2 3 Kd5 Bb1!, and after 4 Ke5 Be4 White loses his d-pawn.
Bishop and Pawn Against Two Pawns

101. This is the conclusion to a study by Chekhover. In order to win, Black must eliminate the h-pawn, but this proves to be impossible. White draws by 1 Kb8! Bf5 2 Kc7 Be4 3 Kd6! Kg2 4 Ke5 Bf3 5 Kf4 Kh3 6 Kg5 Bb7 7 Kh5 Bc8 8 Kg5 etc.

Alapin–N. N.
1907

102. After 1 a6 Be8 2 a7 Bb7 3 Kg3 Kg5 4 Kh3 Black cannot drive out the white king,

Hanschin, 1951

103. White manages to exchange off Black's lone pawn, although exact play is required.

1 Ka2!

If 1 Kc2?, then 1 ... Kd5 2 b3 a3 3 b4 Bxb4 4 h6 Kc4 5 h7 Bc3.

1 ... Kf5 2 Kb1!

Not 2 h6? Kg6 3 Kb1 B×h6 4 Kc2 Bg7 5 b4 Kf5 6 Kb1 Bf8 7 b5 Ke6 8 b6 Kd7 etc.

2 ... Ke5 3 Ka2! Ke6! 4 h6!

The only move that draws. If 4 Kb1, then 4 ... Kd5! 5 Ka2 Kc4 6 h6 Kb4 7 h7Bg7, and Black wins.

4 ... Kg7 5 h7!

5 Kb1? B×h6 6 Kc2 Bg7 7 b4 Ke6 8 Kb1 Kd5 9 Ka2 Kc4 10 Ka3 Kb5, and wins.

5 ... Kg7 6 Kb1 K×h7 7 Kc2 Bg7 8 b4 Kg6 9 Kb1!

After 9 b5 Kf5 10 b6 Ke6 11 b7 Be5 12 Kb1 Kd5 13 Ka2 Kc4 14 Ka3 Kb5 Black wins.

9 ... Bb8 10 b5 Kf5 11 b6 Ke6 12 b7 Bd6 13 Ka2 Kd7 14 b8=Q B×b8 15 Ka3. Draw.

Hanschin, 1951

104. Black is unable to avoid the exchange of his lone pawn.

1 Kg2 (1 Kf2? Bh4+ 2 Kg2 Ke3 3 Kh3

36
Bishop Against Pawns

K×f3 etc.) 1 ... Ke3 2 Kg3 Bh4+ 3 Kg4 (3 K×h4 loses) 3 ... Bd8 4 f5! g5 5 Kg3 Kd4 6 f6! (6 f4? Be7 7 f6 g×f4+. 8 Kf3 Ke5. 9 f7 Bf6) 6 ... B×f6 7 f4. Draw.

Hanschin, 1951

105

105. The weaker side draws by exchanging the opponent’s pawn.

1 ... Kd5 2 Be8 Kd4 3 Bh5 Ke5 (3 ... c5? 4 Ba6 Kd5 5 Kg4! Kd4 6 Kf3 Kd5 7 Ke3 Kd6 8 Ke4 Ke6 9 Be4+ Kd6 10 Bb3 etc.) 4 Bc4 Kd4 5 Ba6 Kd5 6 Kg4 Kd4! 7 Kf3 e6! 8 Ke2 e4. Draw.

If instead 8 Be4 e4+ 9 d×e4 K×c4 10 Kf4, then 10 ... Kb3 (or immediately 10 ... c5 11 e5 Kb3) 11 e5 c5 12 e6 c4 13 e7 c3 14 e8=Q c2, with a draw.

Wotava, 1935

106

106. The poor positioning of the opponent’s pieces allows White to draw.

1 Kh5 Bg7 2 g4 Kf6 3 g5+! h×g5 4 g4 Bh8 (4 ... Bf8—stalemate) 5 Kh6! Bg7+ 6 Kb5. Draw.

Reti, 1928

107

107. Because of the far-advanced enemy pawns, Black is unable to carry out his winning plan.

1 Ke6!! (1 h7?? Kg7 2 Kd6! K×h7 3 Kd7 Ba5 4 Ke6 Kg6, and wins) 1 ... Ba5 (1 ... f5 2 Kd5 Bf6 3 d7! Ke7 4 d8=Q+ K×d8 5 Ke6 leads to a draw) 2 Kd5 Bc3.

Black attempts to improve the position of his bishop, but he is unable to place it such that it simultaneously controls both pawns, since they are too far advanced.

3 h7! f5 4 d7 Ke7 5 d8=Q+ K×d8 6 Ke6! f4 7 Kd5! f3 8 Kc4! Draw.

In exceptional cases, when the opposing pawns are strongly advanced and the king cannot come to its aid, the bishop alone may be unable to cope with the passed pawns.

Berger, 1895

108

108. After 1 a6 Bf2 2 b5 g4 3 h6 g3 4 a7 g2 5 a8=Q+ Ke7 (5 ... Kf7 6 Qa2+ and 7 Q×f2) 6 Qa3+ Ke8 7 b7 g1=Q 8 b8=Q+
Bishop and Pawn Against Three Pawns

Kf7 9 Qf8+ followed by 10 Qg8+. White wins.

109. In this conclusion to a study by Reti, 1 b6, with the threat of 2 a6, forces the bishop to take up an extremely bad post at c8. Then there follows 2 Kf4! Kh5 3 Ke5 Kg5 4 Kd6 Kf6 5 Ke7 Bh3 6 a6 etc.

Hansch in, 1951

110. Black’s downfall is caused by the unfortunate position of his bishop at e6. By 1 c6 White wins: 1 ... dxe6 2 Kxe6 c5 3 Kd6 c4 4 e6 c3 5 e7 c2 6 e8=Q+

1.7 BISHOP AND PAWN AGAINST THREE PAWNS

According to the scale of values established by practice, a bishop and pawn are stronger than three pawns. However, the weaker side often has good drawing chances, and the evaluation normally depends on the peculiarities of the particular position.

We will begin our analysis by examining a position where the side with the bishop has a passed pawn, and the opponent has three connected pawns.

Averbakh, 1954

111. White’s plan is to neutralize the black pawns, immobilize them, and then advance his own pawn. Therefore the white king heads for the g-pawn, and the task of stopping the black pawns is entrusted to the bishop.

1 Ke4 a5.

1 ... b5 2 Bd2! Kg7 3 Kf5 c5 4 Be3 c4 5 Bd2, or 1 ... c5 2 Bg5! c4 3 Bd8 b5 4 Ba5, and the pawns are immobilized.

2 Bg5!

2 Bf4 is also possible. Black’s pawns must be stopped as early as possible, otherwise they may become dangerous. For example: 2 Kf5? b5 3 Bd2 b4 4 Be1 c5, or 2 Be3 c5! 3 Kf5 a4, and the bishop alone can no longer cope with the pawns.

2 ... a4 3 Bd8 h5 4 Be7 Kg7 5 Kf5 Kh8 6 Kf6 Kg8 7 Ba3 Kh8 8 Kf7 etc.

The evaluation of such endings depends basically on whether or not the bishop on its own can stop the opposing pawns. If these pawns are immobilized, as in the preceding example, the stronger side normally wins, although exceptions are possible.
112. The immediate attempt by White to break through with his king to the support of his pawns does not succeed: 1 Kf4 Ke6 2 Ke4 Kx6 3 Kd4 g5 4 Kc5 g4 5 b6 g3 6 Kc6 Bx6 7 Kxb6 g2 8 a5 g1=Q+, and Black wins. Sacrificing a pawn on the second move by 2 e7 does not help, because after 2 ... Kx7! 3 Ke5 Ba5 Black wins as in position 81.

The correct defence lies in the immediate sacrifice of a pawn—1 e7! Bxe7.

The pawn is sacrificed to allow the connected pawns to advance. But which pawn should be moved first? It turns out that 2 b6? loses to 2 ... Bb4! 3 Kf4 (or 3 b7 Bd6 4 a5 Bb8 5 a6 Kf6 etc.) 3 ... Kf6 4 Ke4 Ke6 5 Kd4 (if 5 Kf4, then 5 ... Ka6 6 Kf5 Kc6 7 Kg6 Bc3 8 a5 Kb7, and White is in zugzwang) 5 ... Kd6 6 Kc4, and here the simplest is 6 ... g5 7 Kxb4 g4 8 Kb5 g3 9 Ka6 g2 10 b7 Kc7 11 Ka7 g1=Q+, when Black wins. No better here is 5 b7 Bd6 6 a5 Bb8 7 a6 g6! 8 Kd4 Ba7+ 9 Ke4 g5, with the same result.

The only way to draw is by 2 a5! Bc5.

If 2 ... Bb4, then 3 a6 Bc5 4 Kf4 Kf6 5 Ke4 Ke6 6 Kf4, with a draw, as in example 79.

3 b6! (bad is 3 a6 Kf6 4 Kf4 g5+ 5 Ke4 Ke6) 3 ... Kf6 4 Kf4 g5+.

Or 4 ... g6 5 Ke4 Ke6 6 Kf4 Bf2 7 Kf3!, as in position 79.

5 Ke4 Ke6 6 b7 Ba7 7 a6, with a draw as in position 80.

If the bishop cannot stop the pawns on its own, much depends on how close to the pawns is the stronger side's king. But here, of course, concrete factors are of decisive importance, and any result is possible.

Leonidov–Zagorovsky
Voronezh, 1962

113. If Black advances his pawn immediately, then after 1 ... h4 2 c6 h3 3 c7 Bg4 4 b6 h2 5 b7 White easily draws.

1 ... Kf6!

A strong move! Black intends to bring his king across to battle against the enemy pawns. What should White do now? Bad, for example, is 2 c6 Ke7 3 Kb7 (3 c7 Kd7) 3 ... Kd6 4 a4 h4 5 a5 h3 6 a6 h2 7 a7 h1=Q 8 a8=Q Bx6+! 9 bxc6 Qxc6+ 10 Ka7 Qc5+ 11 Ka6 Qa3+ 12 Kb7 Qb4+ 13 Kc8 Qc5+ 14 Kb7 Qb5+ 15 Ka7 Kc7, when Black wins. No better is 2 b6 h4 3 b7 Bxb7+ 4 Kxb7 h3 5 c6 h2 6 c7 h1=Q-. 2 Ka7! A

As we will see below, this is the only saving move. The king intends to support the pawn from b8.

2 ... Ke5!

If 2 ... Ke7, then 3 Kb8 Kd7 4 a4 h4 5 a5 h3 6 c6+ etc.

Black fails to win after 2 ... h4 3 c6 h3 4 c7 Bg4 5 b6 h2 6 b7 h1=Q 7 c8=Q.
Bishop and Pawn Against Three Pawns

while 3 ... Ke7?? even loses to 4 c7 Bg4 5 b6 h3 6 b7.

3 a4.

After 3 Kb8 Kd4 4 c6 Ke5 5 c7 Bg4 6 a4 Kb6 Black succeeds in stopping the pawns.

3 ... h4 4 c6 Kd6 5 a5 Bxc6! 6 b6!

This is the whole point. After 6 bxc6 Kc7! White gets mated, for example: 7 a6 h3 8 Ka8 h2 9 a7 Kc8 10 c7 h1=Q mate.

6 ... h3 7 a6 h2 8 b7 h1=Q 9 b8=Q+ Kd7?!

Unexpectedly the white king finds itself in a dangerous situation. Bad, for example, is 10 Qe5 Qg1+ 11 Kb8 Qb6 mate. But there is a saving move!

10 Qc7+! Kxc7—stalemate!

If the pawn is not passed, the winning plan is exactly the same as in the ending with bishop and pawn against two pawns—the advance of the king with the aim of capturing the enemy pawns and creating a passed pawn.

Averbakh, 1954

114

114. The black king is actively placed, and threatens by 1 ... Kg3 to win White's lone pawn.

1 Bf2.

White defends against the threat. We will show below that 1 Bh2 is weaker.

1 ... Kf4 2 Be1 Kf5!

2 ... Kg4 loses quickly after 3 Ke5 Kh5 4 Kf5 c5 5 g4+ Kh6 6 Bd2. White's problem is to transfer his king to the defence of his pawn, and to free the bishop.

3 Bg3!

Black's chances are improved by 3 Ke3 Kg4 4 Kf2 c5 5 Ba5 c4 6 Bc3 Kf4 7 Bd2+ Kg4.

3 ... Ke6 (Black does not allow the bishop to reach d6) 4 Bb8 Kf5.

The threat was 5 g4 with a quick win.

5 Bc7! Kg4 6 Bd6!

White has deployed his bishop in the best way possible, and now he can move his king.

6 ... Kf5.

If 6 ... Kh4 7 Kc3 c5, then 8 Kf3 c4 9 Be5 Kh5 10 g4+ etc.

7 Ke3 Kg4 8 Kf2 Kf5 (8 ... d4 9 Ke2 Kf5 10 Kd3 Ke6 11 Bc5 etc.) 9 Kf3 d4 10 g4+ Ke6 11 Bc5 Kd5 12 Be7 c5 13 Bxg5 e4 14 Bf6, and White wins (cf. position 78).

If White had played 1 Bh2, this could have seriously complicated his task, for example:

1 ... Kh4 2 Bc7 (2 Bd6 Kg4 3 Ke3 c5 4 Kf2 c4 5 Be5 Kf5 6 Bg7 Ke4, and the black pawns are very dangerous) 2 ... Kh5! (2 ... Kg4 3 Bd6! wins for White) 3 Ke3 Kg4! 4 Kf2 c5 5 Bb6 c4 6 Bd4 Kf4, and it is unlikely that White can win.

Walker, 1841

115

115. White's king has to get through to the f7 and e6 pawns, and the implementation of this plan is a difficult task.

1 Ke2 Kh3 2 Bg5 Kg3 (2 ... g3 3 Kf3 g2 4 Be3 Kh2 5 Kg4 g1=Q+ 6 Bxg1+
Bishop Against Pawns

K×g1 7 Kg5 etc.) 3 Ke3 Kg2 4 Bh4! Kh3
5 Be1 g3 (or 5 ... Kh2 6 Kf4 Kh3 7 Bg3
f5 8 exf6 e5+ 9 K×e5) 6 Kf4 g2 7 Bf2
Kh2 8 Kg5 Kh3! 9 Kh5! (9 Kf6 Kg4 10
K×f7 Kf5, with a draw) 9 ... Kh2 10 Kh6!
Kh3 11 Kg5! Kh2 12 Kf6, and White wins.

Batuyev, 1940

116. Black is threatening by 1 ... a3
to exchange White’s lone pawn. On the natu-
ral 1 B×b4 there follows 1 ... Kb5!, and
if 2 Bf8, then not 2 ... Kc4 3 Ba3 d3 4 Ke3
and wins, but 2 ... a3!! 3 B×a3 Kc4!,
reaching position 74, which is known to be
drawn.

White wins by:
1 Bf6! Kc5!
1 ... b3 2 Be7, or 1 ... a3 2 b3 followed
by B×d4.
2 Kd3 (2 B×d4+? Kc4 3 Be5 Kb3)
2 ... b3 3 Bg7!!
3 B×d4+ Kb5 4 Kc3 a3 leads to a draw.
3 ... Kd5 4 Bf8 Ke5 5 Kc4 Ke4 6 Kb4
d3 7 Bb6.

Once again the familiar picture: the bishop
neutralizes the passed pawn, while the king
eliminates the remaining pawns.

If the pawns are tripled, the win is achieved
without difficulty, as in the ending with
bishop and pawn against pawn.

As always, difficulties arise if the pawn is
a rook’s pawn, and its queening square is
of the opposite colour to that of the bishop.

Rauzer deduced the following rule: “With

a white pawn at a3, and black pawns at a4, a5
and a6, White is assured of a win only when
the black king is restricted to the h1 corner
and the squares in the immediate vicinity,
bounded by the c1–h6 diagonal” (cf. position
117). If the king is on any other square,
a win is possible only in exceptional cases.

Rauzer, 1936

117. 1 ... Ke1 2 Kc2 Ke2 3 Bd2 Kf2 4 Kd3!
Not 4 B×a5 Kf3, when the king escapes
into the drawing zone.
4 ... Kf3 5 Be3 Kg3 6 Ke4 Kg4 7 Bd2
Kh4 8 Kf4 Kh5 9 Kf5 Kh4 10 B×a5 Kh5
11 Bd2! Kh4 12 Bf4 Kd3.

If 12 ... Kh5, then 13 Bg5 a5 14 Bd2 Kh4
15 B×a5, and the remainder has already
been examined in the chapter ‘Bishop and
pawn against pawn’.

13 Kg5 Kg2 14 Kg4 Kf2 15 Bc1 Ke2 16 Kf4
Kd3 17 Be3 Ke4 18 Ke5 Kh3 19 Bc5 Ke4
20 Kd6, and White wins as in position 87.

del Rio, 1750

118
In certain cases the win is achieved by study-like means.

118. Only the bishop sacrifice leads to a win.
1 Bf3+ Kg1 2 Bh1! K×h1 3 Kf1 d5 4 e×d5 e4 5 d6 e3 6 d7 e2+ 7 K×e2 Kg1 8 d8=Q h1=Q 9 Qd4+ Kh2 10 Qh4+ Kg2 11 Qg4+ Kh2 12 Kf2 etc.

Zakhodyakin, 1932

119. White creates a mating net around the black king, by sacrificing his only pawn: 1 a4! b×a4 (1 ... Kb6 2 B×b5, winning easily), and we have reached position 45, where after 2 Kc7 Black is mated in three moves.

As we have already stated, in such endings the weaker side has considerable drawing chances.

Kling & Horowitz, 1851

120. White to move wins by 1 g5 Kb4 2 Bg7 Ke4 (2 ... Ka4 3 Bc3) 3 Ka3, when thanks to his well-placed bishop he wins both black pawns with his king.

But if it is Black to move, the picture changes: 1 ... g5!! 2 B×g5 Kd4 3 Bf6+ Ke4 4 g5 Kf5, and White is unable to regroup, since on 5 K×b3 there follows 5 ... a1=Q 6 B×a1 K×g5.

Jigis, 1927

121. White draws by exchanging Black’s only pawn.
1 h4 Kd3 2 h5! g×h5 3 Kh2 K×e4 4 Kh3 (4 Kg3 Bc2 5 Kh4 Bd1, and wins) 4 ... Kf4 (4 ... Kf5 5 Kh4 Kg6 6 g4) 5 Kh4 Bg6 6 g4!! (nevertheless!) 6 ... h×g4—stalemate!

White is again saved by a stalemating possibility in the following study.

Gurvich, 1927

122. With the black king threatening to approach his pawns, White’s position looks hopeless. But there follows 1 f7! Bf4+ (if 1 ... Ke7, then 2 Kc3 K×f7 3 Kb4 Ke7
4 Kb5 Kd7 5 a6; therefore Black intends to hold the f-pawn with his bishop, and take his king to the Q-side) 2 Ke3 Bh6 3 f8=Q+ (an unexpected stroke!) 3 ... B×f8 4 a6!! (another stroke!) 4 ... b×a6 5 Kb4 Kc6+ 6 Ka5 Kb7—stalemate.

A most elegant study!

Reti, 1929

Therefore, if the king is remote, it may turn out that the bishop alone is unable to restrain the passed pawns, and in this case the side with the bishop loses.

We will consider several such examples.

124. 1 ... c4! 2 Kb6 b4!! 3 a×b4 a3 4 Bb1 c3 5 Kc5 a2 6 B×a2 c2 etc.

Endings where a bishop battles against passed pawns demand exact calculation.

Thomas–Flohr
Hastings, 1935

125 =/+ 125. Black obtained this position by sacrificing a piece.

There followed: 1 ... d4 2 Kd6 a5 3 g4 a4 4 g5 d3 5 Ke7 a3! 6 B×a3 d2 7 K×f7 d1=Q 8 Bc7 Kd5 9 g6 Qf3+ 10 Bf6 Qf5 11 g7 Qe6+, and White resigned.

If it had been White to move, he would have saved the game: 1 Kd6 d4 2 Ke7 a5 3 K×f7 a4 4 g4 d3 5 g5 a3 6 g6 a2 7 Bb2 d2 8 g7 d1=Q 9 g8=Q.

Horwitz, 1884

Reti, 1922
As we already know, a bishop alone is unable to cope with two advanced and widely-separated pawns.

The following study is a good illustration of this.

126. The solution is: 1 Kf5!! (1 Kf4 Be2!, with a draw), when Black has two possibilities:
   a) 1 ... Be2 2 Kf4!! (Black is in zugzwang!)
   2 ... Kg2 3 Kg5 Kf3 4 h5 Ke3 5 h6 Bd3 6 a5.
   b) 1 ... Ke3 2 a5 Kd4 3 b6 a×b6 4 a×b6 Kc5, and we reach example 19, where White wins after 5 Kf4 Bd5 6 Ke5!

Connected pawns should normally be supported by their king, as otherwise their advance can be paralyzed by the bishop. Supported by their king, connected pawns constitute a considerable force.

Charousek–Caro
Berlin, 1897

127. 1 Ke6. The most exact, although White also wins by 1 b5 Bb7 2 a3! a6 3 b6 a5 4 a4!! But 2 a4? leads to a draw after 2 ... a6! 3 b6 a5, since it is White who gets into zugzwang: 4 Kc5 Kd7 5 Kb5 Kd6 6 K×a5 Kc5.

1 ... Ke7 2 b5 Ke6 3 a4 Ke5 4 a5 Kd4 5 b6.

128. White wins, because the black king is too late in coming to the bishop’s aid.

1 Kb6! (1 Kc6 Kf7 2 c5 Bb4 3 Kb6 Ke7 4 c6 Kd8 5 Kb7 Bd6) 1 ... Kf7 2 c5 Ke7
   (2 ... Bf2 3 K×a5 B×c5 4 Kb5 followed by 5 a5, and White wins) 3 Ke7! Bg3+
   4 Ke8! Ke6 5 c6 Kd6 6 Kb7 Ke5 7 c7 B×c7 8 K×c7 Kb4 9 Kb6.

1.8 ENDINGS WITH A LARGE NUMBER OF PAWNS

In the preceding sections we have considered endings in which the side with the bishop has had either no pawns, or else only one.

Here we will be examining endings in which the side with the bishop has two or more pawns.

In this section we have not set ourselves the task of giving examples which will exhaust the basic instances. We have presented here only a few characteristic positions, showing the methods of attack and defence in endings with a large number of pawns.

The basic principles of playing endings where a bishop is opposed by pawns, which were laid out in the preceding sections, are
also applicable here. Therefore in the analysis of the examples we will pay attention to the special features which apply to endings with a large number of pawns.

129. White has a material advantage—a piece for two pawns. It is true that his pawns are doubled, but the g2 pawn, as we will see, plays a highly important role: it controls f3 and does not allow the black king to approach the g3 pawn.

In order to win, White must win the g4 pawn and create a passed pawn, and then advance it with the support of his king. But the direct attempt does not succeed, since the black pawns are too dangerous, for example: 1. Kd3 Ke5 2 Ke3 d5, and the white king cannot break through to f4, since on 3 Bb2+ there follows 3 . . . d4+ 4 Kd3 Kd5.

Therefore White carries out a plan, typical of such positions, which consists of three stages:

1) By threatening to approach the g4 pawn with his king, White forces . . . d5, after which the c5 pawn is weakened.

2) By attacking the c5 pawn with his bishop, White forces . . . c4, after which his king can approach the Q-side pawns.

3) White wins one of the Q-side pawns, at the same time ensuring that, in breaking through the centre, the black king does not eliminate his main reserve—the g3 pawn.

4) When the black pawns have become less dangerous, the white king heads for the g4 pawn and wins it.

5) After winning the g4 pawn, the white king and bishop beat off Black's last counter-attacking attempt—the advance of the two pawns supported by his king.

Now let us see how feasible this plan is in practice.

1 Bf4 Ke6 2 Kd3 Kd5 3 Ke3! Ke6.

3 . . . c4 leads to the loss of a pawn after 4 Kb4, for example: 4 . . . c5+ 5 Kc3 Ke6 6 Kxc4 d5+ 7 Kc3 Kb5 8 Bd6 Ke6 9 Be7 Kb5 10 Bf8 Ke6 11 Kd3 (now the king goes to the g4 pawn) 11 . . . Kb5 12 Ke3 Kc4 13 Kf4 d4 14 Kxg4 Kd5 15 Kf3 c4 16 g4 c3 17 Bg7 Kc4 18 Ke4 d3 19 Ke3, and White wins.

Or 4 . . . Kd4 5 Bx6e c3 6 Kb3 Kd3 7 Be5 c2 8 Bf4 c5 9 Kd2 c4 10 Bc1 c3+ 11 Kb3 Kd2 12 Kxc2 etc.

4 Kc4 Ke7 5 Kd3 Ke6 6 Kd4 d5+.

For a long time Black has resisted, but he is finally forced to make this move, since 6 . . . Ke7 7 Kf5 simplifies White's task.

7 Kd3 Ke7.

Black attempts to prevent any further weakening of his pawns, and stops Bd6.

8 Bb8 Ke6 9 Ba7 Kd6 10 Bb6 c4+ 11 Kd4.

The black pawns have been weakened, and White's king can approach them. However, great accuracy is still required of him.

11 . . . Ke6 12 Bc7!

Not 12 Kc5? Ke5 13 Kxc6 Kd4 14 Ba5 Ke3 15 Kd5 Kf2 16 Bc7 c3 17 Ke4 c2 18 Bf4 c1=Q 19 Bxc1 Kxc3, with a draw.

12 . . . Kf5 13 Bd6! Ke6 14 Ke5!

Now is the time!

a) 14 . . . c3 15 Bf4 Kf5 16 Kd4! (16 Kxc6?? d4 17 Kd5 d3, and it is Black who wins) 16 . . . c2 17 Kd3 (17 Bc1 Ke6 18 Kc5? Ke5 19 Kxc6 Kd4! 20 Kd6 Kc4 21 Ke5 d4 22 Ke4 Kc3! 23 Kf4 Kd3 24 Ke5 Kd2! 25 Kxd4 Kf2—draw) 17 . . . c5 18 Kxc2 Ke4 19 Kc3 c4 20 Bc1 Ke5 21 Bd2 Ke4 22 Bf4 Kf5 23 Kd4 Ke6 24 Bb8, and White wins.

b) 14 . . . Kf5 15 Kxc6 Ke4 (15 . . . d4 16 Kd5 d3 17 Bb4) 16 Kc5 e3 (16 . . . Ke3 17 Kxc6 c3 18 Ke5! c2 19 Ba3 Kf2 20 Kf4) 17 Bf4 c2 18 Be1 Kd3 19 Kxd5 Ke2 20 Ke4 Kf2 21 Kf4 etc.

If the g2 pawn were not there, Black would easily draw by continuing, for example, in this last variation 17 . . . Kf3 18 Kxc5 c2 19 Ke5 c1=Q 20 Bxc1 Kxg3.

Let us now move the g4 pawn to g5, and see how this affects the evaluation of the position.
Large Number of Pawns

Havasi, 1937

130. In the previous example Black’s play was based on attacking the g3 pawn, and White’s problem was not to allow the black king to break through to this pawn. Here Black has the possibility of a direct attack on the g3 pawn with his king, and hence his chances are improved. Nevertheless, White succeeds in overcoming his resistance. The author’s solution is as follows:

1 Be3 Kg4 2 Bf2 Kf5 3 Bg1!!

a) 3 ... Kg4 4 Bh2! (the bishop is transferred to the most favourable position) 4 ... Kf5 5 g4+! Ke6 6 Bg3 Ke7 7 Be1 Ke6 8 Bd2 Kf6 9 g3! (Black has two weaknesses, at d6 and g3, so that the remainder is not difficult; with his last move White diverts the black king still further) 9 ... Kg6 10 Ba5 Kf6 11 Bd8+ Kg6 12 Be7, and the black pawns fall one after another.

The author did not consider any alternative continuation, although White again wins:

b) 3 ... Ke4! 4 g4 d5+! 5 K×c5 Kf4 6 Kd4 (6 K×c6 K×g4 7 Bf2 d4 8 Kd5 d3, with a draw) 6 ... K×g4 (6 ... Kg3 7 Ke5 K×g2 8 Bb6 Kf3 9 Kf5, winning the g-pawn), and we reach position 114 which is won for White.

Finally, 3 ... g4 4 Be3 leads to the previous position.

The breaking up of Black’s pawn formation, then an attack by the bishop on the pawn weaknesses, and the resulting creation of a zugzwang position—this is the plan carried out in the following position.

Godes, 1959

131. 1 Kb2! (not 1 Bc3 b5 2 Ba5 b4, when the black pawns become dangerous) 1 ... b5 2 Ka3 Ke6 3 Bb2 Kd6 4 Be1 Kc6 5 Bd2 Kb6 6 Be1!

By threatening 7 Bg3, White forces the opposing king to concede control of a5, from where the bishop can make an effective attack on the black pawns.

6 ... Ke7 7 Ba5+! Ke6 8 Bd8 Kd7 9 Bb6 Kc6 10 Ba7 Kd6 11 Bb8+ Ke6 12 Bc7 (zugzwang!) 12 ... Kf6 13 Bb6 c4 14 Kb4 Ke6 15 K×b5 a3 16 Ba5!, and White wins.

Godes, 1959

132. White’s problem is to create a zugzwang situation. He achieves this by a subtle bishop manoeuvre, but first the black pawns must be stopped.

1 Ke1 Kf6 2 Bh3!

Nothing is achieved by 2 Be4 c2 3 Kd2
c3+ 4 Kc1 c4, when it is White who is in zugzwang.

2 ... Ke7 3 Kd1!

But not 3 Bg4 c2 4 Kd2 c3+ 5 Kc1 Kf7 6 Bh3 Kf6.

3 ... Kf6 4Bg4! c2+ 5 Kc1 c3 6 Bh3 Ke7 7 Bf1 c4.

Now comes the decisive bishop manoeuvre.
8 Bg2! Kf6 9 Be4 Kf7 10 Bd5 Kf6 11 Be6!, and White has achieved his goal.

Kling & Horowitz, 1851

134. Were it not for the f- and g-pawns, the position would be drawn, since 1 Bd5 Ka8 2 Kc7 would lead to stalemate, and 1 Be4 Ka8 2 B×a6 b×a6! to a drawn pawn ending. Therefore it would be a mistake to play 1 B×f5?? g3 2 Be4 g2.

The win is achieved by 1 Kd7 g3 (or 1 ... f4 2 B×g4 f3 3 Bh3! f2 4 Bf1 Ka8 5 B×a6, as in the main variation) 2 Bd5 f4 3 Bf3 g2 4 B×g2 f3 5 Bf1 f2 6 Kd8 Ka8 7 B×a6!! Kb8 (7 ... b×a6 8 Kc7, and mate in two moves) 8 Bf1 Ka8 9 Bg2 Kb8 10 Kd7 Ka8 11 Kc7 f1=Q 12 B×b7 mate.

With a rook’s pawn whose queening square is of the opposite colour to that of the bishop, extra pawns may prove disadvantageous to the defending side, by depriving the king of necessary squares.

Herbstman, 1928

135. With White’s king remote, and his pawns attacked, Black seems to have an
easy draw, but White has an ingenious way to win.

1 b6 a×b6 2 a6! Kc6 3 Be7!! (3 B×d6? h5 4 Bc5 b4! 5 Kd3 b3! 6 Kc3 Kc7 7 Ba7 Kc6, with a draw) 3 ... Ke7.

The black b-pawn is playing a negative role, by blocking the b6 square, and 3 ... b5 4 Bd8 b4 5 Kd3 d5 6 Kd4 b3 7 Kc3 does not help.

4 B×d6+! Ke6 5 Kd3 b5 6 Bc5 Kc7 7 Ba7 Kc6 8 Kc3 etc.

A further example on the same theme is provided by position 136.

Duras, 1923

136 +

136. Black has only a pawn for a piece, and his f-pawns are doubled, but he is threatening to capture the f4 pawn and then take his king to h8. How is White to defend against this threat?

Alekhine–Tylor
Nottingham, 1936
(variation)

137 +

1 Bg2! Ke3 3 h4 K×f4 3 Bf3!

White has lost his f4 pawn, but he intends not to allow the black king to reach h8. Here the pawns at f6 and f5 play an important role, by blocking these squares.

3 ... Ke5 4 h5 Ke6 5 Bd5+! (the bishop constantly hinders the black king) 5 ... Ke7 6 h6 Kf7 7 Kd2 f4 8 K×d3, and White wins.

137. To win, White must avoid the ending with rooks’ pawns. This is achieved in a study-like way: 1 Be8! Ke5 2 h5 Kf6 (2 ... g×h5 3 B×h5) 3 h×g6 h×g6 4 Bd7 etc.

Portisch–Stein
Sousse, 1967

138 +

138. The first impression is that Black’s resignation is due, since he has only a pawn for a piece. But the win is by no means as simple as it may seem. White only needs to play 1 Ke3 Ke5 2 Bb5, when the win is no longer there—2 ... f5! 3 Bd3 g5 4 Kf3 f4! 5 g4 h5!, and Black draws, for example:

a) 6 g×h5 Kf6 7 h6 Kf7 8 Bh7 Kf6 9 Kg4 Kf7 10 K×g5, f3, and Black’s king reaches the saving h8 corner.

b) 6Bg6 h×g4 7 h×g4, and we have the drawn position 85.

None of this occurred in the game, however, since White demonstrated an exact winning plan.

1 Be8! (gaining an important tempo)
1 ... Ke7 2 Bb5 f5.

If 2 ... Kd6, then 3 Bc4 f6 4 Bg8 h6 5 Bh7 g5 6 Kf3, and the rest is easy.
Bishop Against Pawns

3 Ke3 Kf6 4 Kd4 h5.

4 ... Kg5 5 Ke5 h5 would have set more problems, when White has only one way to win: 6 h4+! Kg4 7 Kf6! K×g3 8 Kg5 f4 9 Be8 f3 10 B×g6 f2 11 Bd3 Kh3 12 Be2 Kg3 13 Bf1.

5 Ke3 h4 6 g4 Ke5 7 Bf1 Kf6 8 Kf4 g5+ 9 Ke3 Ke5 10 Ba6, and Black resigned.

Utyatsky, 1969

139

139. In order to win, White must break through with his king to the f6 pawn. How is this to be done? It turns out that the break-through on the left is unsuccessful:
1 Bc4 Kb4 2 Ba2 Kc3 3 Bb3 Kb4 4 Kc2 Kc5 5 Ka3 d3! 6 Kb2 Kd4 7 Bd5 Ke4 8 Kc1 Ke2, with a draw as in position 85.

The win is gained by a by-pass with the king on the right, but it has to be carried out accurately.

1 Kd2 Kb3 2 Ke1! Kb2 3 Kf2 Ke3 4 Ke2 (this would also have followed on 3 ... Kc1) 4 ... Kb3 5 Kf3 Kc3 6 Bb5!

The author reaches this position in a slightly different way: 1 Ba6 Kb4 2 Kd2 Ka5 3 Bc8 Kb4 4 Ke2 Kc4 5 Ba6+ Kc3 6 Bd3 Kb3 7 Kf3 Kc3 8 Bb5. The path indicated by us is shorter.

At this point the author terminates his analysis, leaving the reader to find the further solution himself. Let us attempt to do this.

If Black plays 6 ... d3, the return of the king wins easily: 7 Ke3! d2 8 Ba4 Kb4 9 Bc2 Kc3 10 Bd1. On the other hand, advancing the king does not succeed: 7 Kg4 Kd4 8 Kh5 K×e4 9 Kg6 Kd4 10 K×f6 e4, with a draw.

But Black can play more strongly: 6 ... Kd2! 7 Kg4 Ke3 8 Kh5 K×e4 9 Kg6 d3 10 K×f6 d2, but here White wins by 11 Ba4 Kd4 12 Kg5! e4 13 Kf4 e3 14 Bd1! etc.

In exceptional cases the side with the bishop can win by utilizing mating threats, in spite of the opponent having a material advantage. Consider the following study.

Lomov, 1934

140

140. After 1 a7+ Ka8, in order to win White must manage to attack b7 with his bishop before one of the black pawns queens.

2 Bb5! g3 (otherwise 3 B×d7 and 4 Bc8) 3 Bf1 e5!

The only move: if 3 ... d5, then 4 Bg2 f4 5 Bf3, and in the end Black will be forced to play ... e5.

4 Bh3! (4 Bg2? e4 5 Bh3 d5 6 Bg2 d4 7 Bh3 d3 8 B×f5 g2) 4 ... e4 (4 ... d5 5 Bg2 e4 6 Bh3 etc.) 5 Bg2! (5 Bf1? f4 6 Bg2 f3) 5 ... d6 6 Bf1 d5 7 Bh3 d4 (the pawn has blocked the a7–g1 diagonal) 8 B×f5! g2 9 Bc8 g1=Q 10 B×b7 mate.

We already know that a bishop draws against three pawns, provided they are not far advanced. With a larger number of pawns for both sides, this condition still holds.

Position 141 shows one such instance.
141. 1 Kc6 Ke4 2 K×c7 B×c4 3 a4 Kd5.
It would be a blunder to play 3 ... Ke3
4 a5 Kf2 5 f5 K×g2 6 f6 K×g3 7 a6, when
one of the pawns queens.
4 a5 Ke6 (4 ... Kc5 5 Kd7 Kb5? 6 f5
K×a5 7 f6 Kb4 8 Kc7 leads to a loss for
Black) 5 Kb7 Bd5+! 6 Ke7 (6 Kb6 Kd6 7 a6
B×g2 8 a7 Bc6 also leads to a draw) 6...
Bc4 7 Kb7. Draw.

Note that the doubled g-pawns played their
part. Had it not been for the g2 pawn, Black
would have won: 1 Kc6 B×c4 2 K×c7 Ke4
3 a4 Kf3! 4 f5 K×g3 5 f6 Kf4 6 a5 Ke5 7 a6
K×f6 8 a7 Bd5 etc.

In exceptional cases, in spite of the oppo-
ten having insufficient material compen-
sation, the advantage of the extra piece
cannot be realized. This may be due either
to the piece being badly placed, or to the

strong position of the opposing king or pawns,
fully compensating for the material deficit,
and not allowing a winning manoeuvre to be
carried out.

142. Black is a piece up, yet White can save
the game.
1 g6 Kd6 2 Kf8! Bb2 3 Kf7 Bb8 4 Kg8 Bf6
5 Kf7, with a draw, since Black cannot ad-
vance his d-pawn without blocking the
bishop's diagonal.

143. White draws by exploiting a stalemat-
ing possibility.
1 Kd1 Ke3 2 Ke1 Bg3+ 3 Kd1 Kf2 4 Kc1
Kx2 5 Kb1 Kd2 6 Ka1. Draw.

If in position 143 the pawns at a2 and a3
are removed, White loses, since there is no
stalemate.

Reti, 1928
(conclusion of a study)

144. White gains a draw, thanks to his
strong passed pawn and the unfortunate po-
position of the black king.
1 a6 B×c4 2 e4+! (the saving move; White
Bishop Against Pawns

lures the king onto the bishop’s diagonal)
2 ... K×e4 3 a7 Bd5 4 c4! (restricting the bishop still further) 4 ... Ba8 5 Kb8 Be6
6 Kc7, with the familiar ‘perpetual pursuit’.
The problem of blocking the opposing pawns arises when the king of the side with
the bishop cannot lend any assistance, and the bishop has to tackle the pawns on its own.

Averbakh, 1954

145

145. Black has only a pawn for a bishop, but the white king is merely a helpless observer of what is happening. The lone bishop can stop the three connected pawns, which are on their initial squares. But can it fulfill yet another task—deprive the black king of the square f8, and force it to allow the white king out of captivity?

1 Bg3.
The strongest. After 1 Bf2 a5 2 Bc5 b5 3 Be7 b4! White does best to play 4 B×b4!, agreeing to a draw.
1 ... c5 2 Bf2 b6 3 Bg3 c4! 4 Be5.
Or 4 Bb8 c3 (4 ... b5 5 B×a7 and 4 ... a5 5 Bc7 both lose) 5 B×a7?? c2.
4 ... Kf8 5 Bd6+ Kf7.

With a draw, since on 6 Bb4 there follows 6 ... a5 7 Bc3 a4 8 Bb4 b5, when it is White who has to force a draw by stalemate.

A far advanced passed pawn can prove stronger than a bishop, especially if the king cannot come to the bishop’s aid. This also applies when both sides have a greater number of pawns.

Troitsky, 1924

146

146. 1 c6! (interference) 1 ... d×c6 2 a6 d2+ (2 ... Be4 3 d5! c×d5 4 c×d3 Bh1 5 d4)
3 K×d2 Be4 4 d5! B×d5 (4 ... c×d5 5 Ke3! Bh1 6 Kd4) 5 c4! Bh1 6 c5. A brilliant study!

Zakhodyakin, 1929

147

147. This study demonstrates the theme of sacrificing a pawn to restrict the bishop’s activity. After 1 f7 K×f7 2 b6!! a×b6 3 d7 Bc7 4 Kb7 Bd8 5 Ke8 White wins.

148. This example is on the theme of division of duties—the bishop must tackle one pawn, and the king the other. But if the king
heads for the a7 pawn, Black loses: 1 ... Kc5
2 h5 Kb6 3 h6, and one of the pawns queens.

The following rule comes to our aid: in the
battle against two pawns, it is normally best
for the king to control the less advanced pawn,
and the bishop the further advanced one. On
this basis the king should make for the h-pawn.
But first the bishop must be moved away, so
as not to give White an extra tempo when his
king goes to the help of his a-pawn.

Black played 1 ... Bb7, but after 2 h5
Ke5 3 b4 Kf5 4 K×e3 Bc6 5 Kd4 Kf6 6 h6
Kg6 7 Ke5 he had to resign, since his king
is not in time to come to the aid of his bishop.

He could have drawn by the subtle 1 ...
Ba8!, for example: 2 h5 Ke5 3 K×e3 Kf5
4 Kd4 Kg5 5 Ke5 K×h5 6 h4 Kg6 7 Ke6 c6!
8 Kd7 Kf7 9 Kc7 Ke7 10 Kb8 Kd8 11 K×a8
Kc7.

A bishop may not be able to cope with
three far advanced pawns, even with the help
of its king.

149. White's position is lost. To win,
Black needs merely to improve the position
of his bishop and bring his king to the centre.
White tries his last chance.

1 d5!
After 1 Ke3 Ba2 2 Kf4 f6 3 a6 Bd5 4 g3
h×g3 5 K×g3 e5 6 d×e5 f×e5 7 Kh4 e4
8 f×e4 f×e4 Black wins.

1 ... Bd3?
A routine move, after which Black can
no longer win. He should have stopped
White creating another passed pawn by
1 ... f4!, for example: 2 a6 Ba2 3 d×e6
f×e6 4 a7 Bd5 5 Ke2 e5, and White can
resign.

2 d6 Kf8 3 g3! f4?
And this even loses. After 3 ... h×g3+
4 K×g3 Ke8 5 h4 Kd7 6 h5 K×d6 7 h6 f4+
8 K×f4 f6 9 Ke3 Bf5 10 a6 Kc6 11 a7 Kb7
12 Kd4 K×a7 13 Kc5 Kb7 14 Kd6 Kb6
15 Kc7 Kc5 16 K×f6 Kd6 17 f4 Kd5 18 Kf7
the game ends in a draw, since Black is unable
to improve his position.

4 g×h4 Ke8 5 Ke1!
The bishop at d3 is operating along two
diagonals; therefore it must be driven away
from this square.

Here White could still have gone wrong:
5 h5 Kd7 6 h6 K×d6 7 a6 Kc6, and it is
Black who wins.

5 ... e5 6 Kd2 e4 7 h5 Bb1 8 a6, and White
won.

Ilyin-Zhenevsky–Myasoyedov
Leningrad, 1932

149
W

Capablanca–Em. Lasker
New York, 1924

52
Bishop Against Pawns

On average a bishop is worth three pawns, but, depending on the placing of the pieces and pawns, a bishop may prove stronger or weaker than three pawns.

150. White has only three pawns for the bishop, but the black e-pawn is weak, and White’s king is much more active than his opponent’s. This positional advantage is quite sufficient for a win.

1 b4 a6 2 Kg4 (White strengthens his position still further, by placing his pawn at f5)
2 ... Bc4 3 f5 Bb3 4 Kf4 Bc2 5 Ke5 Kf7 6 a4!
Kg7 (6 ... Bxa4 7 Kxe4 is also hopeless)
7 d5 Bxa4 (or 7 ... cxd5 8 Kxd5 Bxa4
9 Kxe4, and the three connected pawns on the 5th rank also win) 8 d6 c5 9 bxc5 Bc6
10 Ke6 a5 11 f6+ Resigns.

Schumov–Chigorin
St. Petersburg, 1874

151. Black’s king and bishop are cramped, and this makes his material advantage insignificant. After 1 Kf6 Black has more difficulties than he can cope with, although he has a solid material advantage—a bishop for a pawn.

1 ... Bh7 2 h6 Bg8 3 a5 b6! 4 a6!
White avoids a subtle trap. If 4 a×b6?
a×b6 5 g3, then 5 ... Ke8!! 6 Kg7 Bh7!!
7 K×h7 Kf7, and the white king is trapped.

4 ... Bh7 5 K×e6 Ke8.
Here White could have won most simply by 5 K×d5 Kd7 7 Ke5 Ke7 8 d5 Bg6 9 d6+ Kf7 10 d7 Ke7 11 d8=Q+! K×d8 12 Kf6 Bh7 13 Kg7 Ke7 14 K×h7 Kf7 15 g3 etc.

In exceptional cases a bishop is unable to stop a passed pawn, but it is nevertheless possible to draw by creating a position in which the appearance of the new queen is not decisive.

Chekhov, 1947

152. White loses if he attempts to stop the passed pawn with his king: 1 Kd2 Kg6 2 Kc3 Kg5 3 Bh2 g1=Q 4 B×g1 Kf4.

He draws by creating a ‘fortress’: 1 f3!!
a4 2 Kf2! a3 3 Kg3 a2 4 K×h3 a1=Q 5 K×g2, when it is easily shown that the black king cannot penetrate. For example: 5 ... Qb2+
6 Bf2 Kg6 7 Kg3 Qc1 8 Kg2 Kg5 9 Kg3 Qc1
10 Ba7 (the only move; the black king cannot go either to f4, or to a7) 10 ... Qf4+ 11 Kg2
Kh5 12 Bf2 Qg5+ 13 Kh2. Draw.

In spite of his enormous material superiority, Black is unable to win. An amazing position!

Chekhov, 1952
Large Number of Pawns

White also draws by isolating the black king in the conclusion to another study by Chekhov.

153. 1 Bg4!! e1=Q (1 ... K×g4 2 f3+ and 3 Kf2, with a draw) 2 h3. Draw.
2. Bishops of the Same Colour

2.1 BISHOP AND PAWN AGAINST BISHOP

The evaluation of such endings depends on how effectively the weaker side is able to counter the advance of the pawn.

154. If it is Black to move, he plays 1 ... Ke8! and 2 ... Kd8, after which the draw becomes obvious, since the white pawn cannot advance.

A position of this type, in which the weaker side's king occupies a square in front of the pawn and invulnerable to the enemy bishop, we will call the first basic drawing position.

If it is White to move, he plays 1 Bh5, not allowing the black king to go to e8.

1 ... Bh3 (a move along the a4–e8 diagonal is also possible). Now on 2 Bg6 Black loses after 2 ... Bg4? 3 Bf5 B×f5 4 K×f5 Kf7 5 Ke5 Ke8 6 Ke6 Kd8 7 d7, but he has an adequate reply in 2 ... Bd7, so as to answer 3 Bf5 with 3 ... Ke8, and a draw.

White can attempt to make a by-passing manoeuvre with his king to e7. If Black then adopts waiting tactics—2 Ke5 Bd7 3 Kd5 Ba4 4 Ke5 Bd7 5 Kb6 Ba4 (5 ... Bf5 does not help; White continues 6 Kc7 Bh3 7 Bf3 8 Bb7 and 9 Bc8, driving the bishop off the h3–c8 diagonal) 6 Kc7 Bh5, the resulting position turns out to be lost for him.

155. White plays 7 Bf3 Ba4 8 Bc6 B×c6 9 K×c6 Ke8 10 Kc7, and queens his pawn.

We have seen that, without the help of his king, the weaker side's bishop is unable to stop the enemy pawn. The opponent carries out a typical manœuvre, either blocking out the bishop or driving it away.

A position of this type, where the weaker side's king cannot occupy a square in front of the pawn and invulnerable to the bishop, and cannot prevent the blocking out of his bishop and hence the advance of the pawn, we will call the first basic winning position.

But perhaps in this example Black's king could have prevented the blocking of his bishop's diagonal?

White blocked the diagonal by Bc6. Black could have prevented this only if his king were at c5.

156. After 1 Bg4 Ba4 2 Bd7 Bd1 3 Bc6 Bg4 it turns out that White has not improved his position. He is powerless to drive the black bishop off two diagonals; this position is drawn.
Bishop and Pawn Against Bishop

156

A position of this type, in which the weaker side's king cannot occupy an invulnerable square in front of the pawn, but can prevent the blocking of his bishop's diagonal, we will call the second basic drawing position.

Let us return to position 154. From what we have just stated, it follows that if the white king heads for c7, the black king should aim to reach c5. From this we easily find the solution:

2 Ke5 Kg7 3 Kd5 Kf6 4 Ke6 Ke5 5 Kc7 Kd4 6 Be8 Kc5, and we have obtained the second basic drawing position.

Black could have delayed the transfer of his king to c5. Thus he could have answered 5 Kc7 with 5 ... Bf5, and if 6 Be8, only then 6 ... Kd4 7 Bd7 Bc2 8 Bc8 Ba4 9 Bb7 Kc5!

Note that 6 ... Kd4 was the only move. Any other would have lost, for example: 6 ... Bh3 7 Bd7 Bf1 8 Bc8 Bb5 9 Bb7 Kd4 10 Be6, blocking the diagonal.

Instead of 3 Kd5 White could have played 3 Be8, attempting to occupy a more favourable position with his bishop and to gain a tempo. But Black has a tempo in reserve, and after 3 ... Bg4 4 Kd5 Kf6 5 Ke6 Ke5 6 Kc7 Kd4 our second basic drawing position is reached. But Black could have played even more strongly: 3 ... Kf8, and if 4 Bb5, then 4 ... Kf7 5 Kd5 Bg2+! 6 Kc5 Ke6!, when White is altogether unable to reach c7.

Averbakh, 1954

157

157. If he wishes, Black can convert this position into the second basic drawing position by 1 ... Bh3 2 Kc6 Ke5! 3 Kc7 Kd4! etc.

Kling & Horwitz, 1851

158

158. If White's bishop were at h5, he would win by 1 Bg4 and 2 Bd7. But the bishop is at g6 . . .

1 Be8 Be2! (the only move; if 1 ... Bd3 or 1 ... Bc4, then 2 Bh5! Bb5 3 Bg4 etc.)
2 Bf7 Bb5 3 Bh5 Ke5! 4 Bg4 Kd6, and the second basic drawing position has been reached.

If position 154 is shifted one file to the left, for the new situation all our arguments remain in force, as the reader can check for himself.

With a knight's pawn Black achieves his goal rather differently.

56
159. After 1 Bf5 only a move with the bishop along the h1-a8 diagonal will draw.

1 ... Ba6? loses in interesting fashion. White continues 2 Kc6! Bc8 3 Bd3! It is with a knight’s pawn that this move is the most effective, since the bishop has no more squares on the a6-c8 diagonal. After 3 ... Bg4 4 Kb7! and 5 Ka7 White obtains the first basic winning position.

In position 159 the by-passing manœuvre of the white king to a7 does not normally work. After Kb5 Black plays ... Bb7, altogether preventing it from reaching a6.

Let us consider this case in more detail.

1 Bf5 Bf3 2 Be6 Bb7! 3 Ke5 (3 Bd5 Kc81) 3 ... Bf3 (a bishop move along the diagonal is the only possibility; on 3 ... Ke7 White wins by 4 Bd5) 4 Bd5 Be2 5 Bb7 (otherwise 5 ... Kc8) 5 ... Kd7, with a draw.

We will now try to establish what will be the evaluation of such endings, depending on the file or rank on which the pawn is located.

Let us move position 156 one file to the left.

160. Here the black bishop’s diagonal has become shorter, but the bishop nevertheless has two free squares.

Now consider the position with a knight’s pawn.

161. Here the black bishop has only one free square on the short diagonal, so that any waiting move by the white bishop on the h3–c8 diagonal (except 1 Bc8) will put Black in zugzwang. For example: 1 Bg4 Kb5 2 Bc2+.

A position of this type, where the weaker side’s king prevents the blocking of his bishop’s diagonal, but the diagonal is too short and he gets into zugzwang, we will call the second basic winning position.

Let us try shifting position 161 down the board by one rank.

162. The black bishop has two free squares, so that zugzwang is not possible.

The following conclusion can be drawn: “If on the short diagonal the black bishop has two free squares, the position will be drawn, but if less than two, the position is won for
White" (this conclusion was drawn in the mid-19th century by Centurini).

In order to check this rule, we will examine a few more characteristic positions.

Centurini, 1847

163

163. Here the short diagonal consists of only two squares, and if the white bishop should succeed in reaching a7, then after 1 Bb8 Bg1 2 Bg3 Ba7 3 Bf2 White wins. But Black can attempt to stop the bishop reaching a7, by answering 1 Bh4 with 1 ... Kb5! 2 Bf2 Ka6. The black king prevents the blocking of the diagonal at c7, and does not allow the bishop to reach a7.

Suppose that White makes the waiting move 3 Be3, so as after 3 ... Bg3 4Bg5 Kb5 5 Bd8 Kc6 6 Bh4! Bh2 7 Bf2 to gain a decisive tempo. Instead of 3 ... Bg3, however, Black continues 3 ... Bd6!, and after 4 Bg5 Kb5 5 Bd8 Kc6 6 Be7 Bh2! again nothing is achieved, because the black king controls c5.

But White can play more strongly: 3 Bc5! (depriving the black bishop of the square d6)

Averbakh, 1954

165

If the pawn has crossed the indicated boundary, the position will be won. However, this rule has two exceptions.
166. Averbakh, 1954

167. Black draws, since his bishop cannot be driven off the long diagonal.

168. Here White wins according to the rule.

1 Bg7 Bh4 2 Bf8 Bd2 (or 2 ... Bc3 3 Bc5 Bg7 4 Be3) 3 Bc5 Bh6 4 Bd4, and Black is in zugzwang.

But if the kings are moved to e8 and e6 respectively, the result, contrary to the rule, changes.

169. After 1 Bf8 Be5 2 Bc5 Bg7 3 Be3 White has deprived the bishop of all its free squares, but he has not placed Black in zugzwang, and there follows 3 ... Kd6 4 Bd4 Bb6 etc.

Instead of 3 ... Kd6, also possible is 3 ... Kf5 4 Kc7 Kg6 (not 4 ... Bf6 + 5 Kf8, and White’s king reaches g8), when after 5 Ke6 another drawn position (170) is reached.

170. If the pawn has not yet reached the 6th rank, it might seem that the typical winning plan—driving away the bishop or blocking its diagonal—is not a threat, since it leads merely to the exchange of bishops and a drawn pawn ending.

Position 171, obtained from example 164 by moving the black king from b4 to d6, together with position 172, will acquaint us with this type of drawn position.

171. Both on Bb7—a6, and on Bc6—b5, Black exchanges and then plays ... Kc7.
171

As the basis of our classification, we will take the file on which the pawn stands.

2.11 Pawn on one of the central files

It follows from diagrams 165 and 166 that central pawns are the least dangerous, but even here accuracy in defence is required.

Averbakh, 1954

172.

Averbakh 1954

172. After 1 Bd2 the only way to draw is by 1 ... Kf8! (the threat was 2 Bh6 and 3 Bg7, forcing out the bishop) 2 Bg5 Kg8! 3 Bf6 Bf2 4 Be5 Bh4, and if 5 Bf4 Be7 6 Bg5, then 6 ... B×g5! 7 K×g5 Kf7.

Summing up, we can state that there exist three types of drawn position in endings with bishop and pawn against bishop:

1) The weaker side’s king occupies a square invulnerable to the bishop in front of the pawn.

2) The weaker side’s king can prevent the driving away of his bishop or the blocking of its diagonal.

3) The attempt to drive away or block the diagonal of the bishop leads only to an exchange of bishops and a drawn pawn ending.

A knowledge of the basic positions allows more complicated endings, with a variety of piece arrangements, to be more easily understood.

173.

173. It would be wrong to play 1 ... Kd8? 2 d7 Kc7 3 Bc5 Bd8 4 Be7 etc., or 1 ... Bd8? 2 Bg7! Bg5 3 d7+ Kd8 4 Bd4 Kc7 5 Bc5 Bd8 6 Be7.

The only way to draw is by 1 ... Kf8!, escaping from the danger zone. For example: 2 d7 Bd8 3 Bf6 Ba5 4 Bh4 Bb6 5 Kd6 Kf7 6 Ke6 Ba5 7 Kh7 Ke6 8 Ke8 Kd5, with a draw.

Averbakh, 1954

174.

174. After 1 Ke6 White is threatening to queen his pawn directly. What should Black play?
1 ... Bg5 loses to the manoeuvre just examined: 2 d7 Ke7 3 Bc5 Bd8 4 Be7. The only way to draw is by 1 ... Ba5!, for example: 2 Bf6+ Ke8! (but not 2 ... Ke8 3 Be7 and 4 d7 mate) 3 d7+ Kb7 4 Ke7 Ke6 5 Ke8 Kd5, and the black king reaches e6.

On the contrary, after 1 Ke6 the only way to draw is by 1 ... Bg5!

As we see, the defence here has to be accurate.

An instructive mistake was made by Black in the following ending.

175. It is clear that 1 Kf6 Ke4 2 Kf7 Kf5 leads to a simple draw, so White tries taking his king to the other side.

1 Ke5! Bb4 2 Kd5 Kd3?

Unexpectedly, this turns out to be a decisive mistake. Now White makes a favourable regrouping, and carries out a winning manoeuvre. Of course, 2 ... Kf4 was also bad, in view of 3 Be5+ and 4 Bd6, but Black could have drawn by 2 ... Be7! 3 Be5 Kd3 4 Bc7 Bh4 5 Kd6 Ke4 6 Kd7 Kd5.

3 Bf6!

Note how helpless Black is. He is unable to prevent the transfer of the bishop to e7, and is obliged to wait.

3 ... Ba3 4 Bd8 Bb4 5 Bc7! Be7.

Otherwise there is no defence against the threat of 6 Bd6.

6 Ke6 Ke4 7 Kd7, and Black resigned. Depending on which side he moves his bishop to, White wins by either 8 Bd6 or 8 Bd8.

Here is an exceptional position which does not fit the general rules.

Centurini, 1856

176. 1 e7 appears to force the promotion of White’s pawn, but there follows 1 ... Bd8!, and he cannot promote to a queen or rook because of stalemate.

2 e8=N (if 2 e8=B, then 2 ... Ba5! 3 Bg3 Kd8 and 4 ... Ke7, with a draw) 2 ... Bh4! (2 ... Ba5 and 2 ... Bg5 both lose to 3 Nd6+, while on 2 ... Be7 there follows 3 Bc7! Bf8 4 Nf6 and 5 Nd5) 3 Bc7 Be7 4 Ng7 Bd8 5 Bf4 Bc7!

It is interesting that, if White’s bishop stood initially at g3, f4 or e5, after 2 e8=B Ba5 he would give mate in two moves by 3 Bd7+.

2.12 Bishop’s pawn

Horwitz, 1880
177. In order to win White must penetrate with his king to e7 without allowing his opponent to reach e5. But nothing is achieved by the immediate march: 1 Kf4 Kh6 2 Ke5 Kg5 3 Ke6 Kf4 4 Ke7 Ke5, with a draw.

No better is 1 Be6 Be8! (2 Bf5 was threatened) 2 Kf5 Kh6 3 Bd5 Bh5 (3 ... Bd7 + 4 Ke5 Kg6 5 f7 Kg7 6 Kd6! and 7 Ke7) 4 Ke6 Kg5 5 Ke7 Kf4 6 Bf7 Bd1 7 Be8 Bb3 8 Bd7 Ke5!, and the black king arrives just in time.

To win White must gain a tempo, which he achieves as follows: 1 Bg8+ Kh8 2 Be6! Be8.

On 2 ... Kh7 there follows 3 Bf5, while if 2 ... Bc3, then 3 Kf4 Bb5 4 Ke5 Be8 5 Kd6 Kh7 6 Ke7 Kg6 7 Bd7 Bf7 8 Bf5 +. 3 Kf5 Kh7 4 Bd5 Kh6.

4 ... Bd7 + 5 Ke5 Kg6 is met by 6 f7 Kg7 7 Kd6 and 8 Ke7. No better is 4 ... Bh5 5 Ke6 Kg6 6 Ke7 Kf5 7 Bf7 Bd1 8 Be6 +. 5 Ke6 Kg5 6 Ke7 Bh5 7 Bf7 Bd1 8 Be8 Bb3 9 Bd7 Kf4 10 Be6 etc.

Sokolsky–Lipnitsky
Moscow, 1950

178. In order to obtain a basic winning position, Black must advance his pawn to c2 and at the same time reach b1 with his king. 1 ... Ke4 2 Kg2 (no better is 2 Kg4 Kd3 3 Kf5 Be3 4 Ke6 Bd2, when White is too late) 2 ... Kd3 3 Kf1 Bc3 4 Bb8 Bb4 5 Bf6 Kc2.

Black transfers his king to b3 and then plays ... Bb2 followed by ... c2 and ... Kb1. White is powerless to prevent the implementation of this plan.

6 Ke2 Kb3! 7 Be5 Ba3 8 Bf6 Bb2 9 Bg5.

Now Black had the immediately decisive 9 ... c3! 10 Bh6 c2 11 Kd3 Ba3 12 Bg5 Kb2 13 Kc4 Kb1 14 Kb3 Bc1 etc.

Two further variations on the same theme are shown in positions 179 and 180.

Centurini, 1856

179. If in this position it were Black to move, he would draw by 1 ... Ke3 2 Be6 Be2 3 Bd5 Bb5 4 Be6 Kd4. But it is White’s move, and the extra tempo enables him to win.

1 Be6.

Also possible is 1 Bc4 Kc3 2 Bd5 Be2 3 c6 Kd4 4 c7 Ba6 5 Kc6 Bc8 6 Bg2 Ke5 7 Bf1!, when Black is unable to prevent the advance of the white king to b8, and hence the attainment of the second basic winning position.

1 ... Be2 2 Bd5 Bb5 3 Be6 Ke3 4 Bd7 Ba6 5 c6 Kd4 6 c7 Kc4 7 Bb3 Kb4 8 Ke6 Ka5 9 Bg4 Kb4 10 Kb6, and White wins.

180. The result again depends on whether or not Black can prevent the white king from reaching b8.

1 c6 Ke3.

No better is 1 ... Ba6 2 Ke4! (2 c7? Bb7+! 3 Kf4 Kd3 4 Ke5 Kc4 5 Bf3 Be8 6 Kd5 Kb5 with a draw; in this variation Black removed his bishop from a6 with gain
of tempo, gaining the opportunity to move his king via c4 to b5, thereby not allowing the white king to reach b8) 2 ... Kc3 3 Kd5 Kb4 4 Bg4! Ka5 5 Kc5! Bb5 6 c7 Ba6 7 Kc6, and White wins.

2 c7 Ba6 3 Ke3! Kd4.

Moving to c4 would give a draw, except that it loses to 4 Be2+.

4 Be2 Bc8 5 Kd4 Bb7 6 Bf1 Be8 7 Kd5 Bb7+ 8 Kd6 Ka5 9 Ke5! Bc8 10 Ke6 Bg4 11 Kb7 Bf5 12 Kb8 etc.

White succeeded in pushing the opposing king away from the pawn, using his bishop and king to sever its path.

Cutting the path of the enemy king is a highly dangerous device in situations where the result depends on whose king reaches its goal more quickly.

2.13 Knight’s pawn

\[ \text{2.13 Knight’s pawn} \]

181. In order to win, White must reach f7 with his king, since then he obtains a basic winning position.

1 Bg5! Bf8 (bishop moves on the a1–h8 diagonal are decisively met by 2 Bf6) 2 Kf6 Be7+ 3 Kf7.

The task is slightly more difficult with Black to move.

1 ... Kh6 2 Bf6 Bf8 3 Bd4 Be7 (3 ... Bg7 4 Be3+ Kh5 5 Bg5, or 3 ... Bb4 4 Kf6 and 5 Kf7) 4 g7 Kh7 5 Ke6! and 6 Kf7.

Hällstrom

\[ \text{Hällstrom} \]

182. Here White is unable to carry out the standard winning plan.

1 Be5 Bb8 2 b6 (2 Bb6 Bf4 3 Bf2 Bc7! 4 Kc5 Kb3! 5 Kc6 Kc4, with a draw) 2 ... Ka5 3 Kd5 (the unfortunate position of the bishop at c5 prevents White from transferring his king to c6) 3 ... Kh5! 4 b7 Be7! etc.

\[ \text{182} \]

183. After 1 Be4 Black’s position appears critical, since on 1 ... Be8 or 1 ... Kh7 there follows 2 Bf7.

\[ \text{183} \]
Bishop and Pawn Against Bishop

But after 1 ... Bg6!! White's 'ambitious' plans prove to be unrealizable. 1 Bg6 Be2 2 Bf7 Bd3 3 Be6 Bc2 4 Bf5 also does not work because of 4 ... Bxf5.

Grigoriev, 1931

184. This is a study on the theme of 'path-severance'.

White wins by 1 b6 Bf2 2 b7 Ba7 3 Bg1 Bb8 4 Bf2! Bh2! (if 4 ... Kg4, then 5 Kg2 Kf5 6 Bg3! Ba7 7 Kf3 Ke6 8 Ke4 Kd7 9 Kd5 Kd8 10 Kc6, and Black's king has failed to break through to the white pawn) 5 Be1! Bb8 6 Kg1 Kg4 7 Kg2 Kf5 8 Bg3 Ba7 9 Kf3 Ke6 10 Ke4 Kd7 11 Kd5 Kd8 12 Kc6 etc.

Averbakh, 1954

185. This position is taken from the game Capablanca–Janowski (New York, 1916).

Black's position appears completely hopeless, and so Janowski resigned. But if he had been familiar with the basic drawing positions, he would have been able to draw!

Black should take his king round to the rear, in order to obtain the second basic drawing position.

1 ... Kf4!! 2 Bd4 (2 Be5+ Ke3 3 b5 Kd3 4 Kc6 Kc4) 2 ... Kf3!! 3 b5 (3 Bc5 Ke2!! 4 Kc6 Kd3) 5 Kd7 Bg5 6 b5 Kc4) 3 ... Ke2!! 4 Kc6 Kd3 5 Bb6 Bg5.

186. 6 Kb7!

Little is promised by 6 Bc7 Be3 7 Bd6 Kc4, so White makes a further attempt to win.

6 ... Kc4 7 Ka6 Kb3! 8 Bf2 Bb8 9 Be1 Ka4!, and the black king has arrived in time.

An interesting attempt to refute Black's defensive manoeuvre has been made by V. Issler (West Germany). In position 186 after 6 Be7 Be3 he suggests going back with the king—7 Kd5! Now after 7 ... Kc3 8 Bd6 Kb3 9 Bc5 Ka4 10 Kc6 White wins.

But this attempt can also be parried. On 7 Kd5! Black has a single but adequate reply in 7 ... Bd2! The point is that 8 b6 fails to 8 ... Ba5!, while if 8 Bd8, then 8 ... Be3 9 Be7 Bb6 10 Kc6 Ba5, with a draw.

Let us now return to diagram 185.

If it were White to move, then he would easily win by 1 Be5 Kg4 2 b5 Kf3 3 Kc6 Ke4 4 Be7.

Note that, with his bishop at d2 (instead of c3), White wins even if it is Black to move.

1 ... Kg4 2 b5 Kf3 3 Kc6 Ke4 (Black's misfortune is that he cannot gain a tempo by 3 ... Ke2, since White does not continue 4 Bd4 Kd3 5 Bb6 Kc4 with a draw, but
4 Bf4 Kd3 5 Bc7) 4 Kb7!! (the only move to win) 4 ... Kd3 5 Be1! Kc4 6 Ka6 Kb3 7 Ba5 Bg5 8 b6, obtaining the second basic winning position.

Averbakh, 1954

187. Here the black king is not far from the pawn, but it is White to move, and, due to the poor position of his bishop, Black loses.

1 Bf3+ Kh6 2 g4 Kh7 (Black cannot switch his bishop to the b1-h7 diagonal, since 2 ... Bh7 is met by 3 g5 mate) 3 g5 Bc4 4 g6+ Kg8 (4 ... Kh6 5 Be4 Bb3 6 g7 Bc4 7 Bg6 Bg8 8 Be8 Kh7 9 Bf7) 5 g7 Kh7 6 Bh5 Kg8 7 Be8 Bb3 8 Kg6 Be2+ 9 Kh6 Bb3 (9 ... Bg6 10 Bb5 Bf7 11 Bd3 etc.) 10 Bg6, and White wins.

Grigoriev, 1931

188. In order to win, White must advance his pawn to b6 and reach a7 with his king, without allowing the black king across to b8.

By accurate play he succeeds in obtaining this basic winning position.

1 Bd5.

Only a draw is given by 1 Kd4 Kg5 2 Bd5 Kf6 3 Bc4 Bg4! 4 Kc5 Ke7 5 Ba6 (5 b5 Kd8 6 Kb6 Bd7 and 7 ... Bx b5) 5 ... Bf3 6 Kb6 Kd8 7 Ka7 Bc6.

1 ... Kg5 2 Bc4 Bg4!

White's task is simpler after 2 ... Bf3 3 b5 Kf6 4 Kb4! Ke7 5 Ka5, when the king reaches a7.

3 b5 Kf6 4 b6 Bc8.

On 4 ... Bf3 5 Kd4 Ke7 there follows 6 Bd5!

5 Kd4 Ke7 6 Kc5 Kd7 (on 6 ... Bb7 White wins by 7 Bd5 Bc8 8 Kc6 7 Bb5+ !

Not 7 Bf1 Bb7! 8 Bb3 + Ke7, with a draw.

7 ... Kd8 8 Ke6!

Only a draw results from 8 Kd6 Bb7!

9 Bd7 Bg2! 10 Be6 Bb7!

8 ... Bd7+ 9 Kd6! Bc8 10 Be4! (suggested by A. Khachaturov) 10 ... Bb7 11 Be6!, and White wins as shown earlier. The author's continuation 10 Bc6 leads only to a draw after 10 ... Bf5 11 b7 Bc8!!

2.14 Rook's pawn

The basic positions with a rook's pawn were sufficiently well covered by us at the start (Nos. 164, 167 and 171). Here we will consider a study by Grigoriev, demonstrat-
ing an already familiar theme—severing the path of the enemy king.

189. White severs the king’s path by 1 h6 Bg8 2 Be8 Bh7 (if 2 ... Kb8, then 3 Be6! Bh7 4 Kb6) 3 Ba6! Bg6 4 Bb5 Kb7 5 Kb4! Kb6 6 Ba4! Now on 6 ... Bh7 there follows 7 Ke4, and the white king reaches g7. Black to move obtains a draw after 1 ... Kb7.

2.2 BISHOP AND TWO PAWNS AGAINST BISHOP

2.21 Connected pawns

Two connected pawns normally win without any great difficulty. Here is a typical position.

Averbakh, 1954

190. White wins easily:

1 Ke2 Kg4 2 Be1 Bd6 3 f3+ Kf4 4 g3+ Kf5 5 g4+ Ke6.

Or 5 ... Kf4 6 Bd2+ Kg3 7 g5 Be5 8 g6Bg7 9 Ke3 Kh4 10 Ke4 Kh5 11 Kf5 etc.

6 Kd3 Kd5 7 Bc4 Bc7 8 f4 Bb6.

Otherwise White plays 9 Ke3, 10 Kf3, 11 g5 and 12 Kg4.

9 Bc3 Bc5 10 g5 Bb6 11 g6 Kf6 12 Ke4 Bd6 13 f5+ Ke7 14 Kd5 Kf8 15 Ke6 Bb5 16 f6, and White wins.

This is not the only way to win. All that White must concern himself over is not allowing his pawns to be blockaded. It is in the possibility of such a blockade that Black’s drawing chances lie.

Thus, for example, White is unable to win in the following position.

Fine, 1941

191. 1 Kd1 Kd3 2 b5 Bd8 followed by 3 ... Ke4, or 1 Kb2 Bf4 2 Ka3 Bg5 3 Ka4 Bd8! (the king must not be allowed to reach a5) 4 b5 Bb6. A classic example of a blockade!

Let us try shifting this position one rank up the board.

Fine, 1941

192. Here White wins by 1 Kb3 Bf5 2 Ka4 Bd7 3 Ka5 Bc8 4 b6 Bh7 5 Bf1 Bc8 6 Bh3! Bb7 7 Be6, when Black, who is in zugzwang, is forced to lift the blockade.

There is also another winning plan, involving the sacrifice of a pawn: 4 Bf3 Kxc4 5 Kb6 Kb4 6 Bc6 etc.

In positions with rook’s pawn and knight’s pawn the weaker side may have additional drawing chances.
Bishops of the Same Colour

193. White gains a draw by 1 Ba6!
The following example is more complicated.

Moravec, 1927

194. Black's material advantage proves insufficient to win after 1 Ka1!
For example: 1 ... Ba2 2 Bc2! b3 3 B×b3, or 1 ... Bc4 2 Bd3!, or 1 ... Bd1 2 Be2!,
with a perpetual attack.

Averbakh, 1954

2.22 Doubled pawns

If the weaker side's king can reach a square invulnerable to the bishop in front of the pawn, the result will be a draw. If this is not possible, the stronger side normally wins.

All this is clarified by an examination of position 195.

195. Black to move plays 1 ... Ke8 and 2 ... Kd8.
White to play wins by 1 Bh5 Bh3 (or 1 ... Bb5 2 Ke6 Be8 3 d7) 2 Bf7 Bd7 (3 Be6 was threatened) 3 Bg6! Bb5 (or 3 ...Bg4 4 Bf5 etc.) 4 Ke6 Be8 5 d7.

196. 1 Be5 Be3 (1 ... Bb8 2 Bd4, and White wins) 2 Bc7 Ba7, with a draw.

2.23 Isolated pawns

With isolated pawns a win is again normally possible.

Fine, 1941
197. Fine gives the following winning sequence: 1 f4+ Kd6 2 f5 Ke5 3 d4+ Kf6 4 Kf4 Bb3 5 Bc6 Bc2 6 Bd7 Bb3 7 Ke4 Kc4 (or 7 ... Bc2+ 8 Kd5) 8 d5 Bb3 9 Bb6 Bc4 10 Kd4 Be2 (or 10 ... Ba2 11 Kc5 Bb3 12 d6) 11 d6 Bb5 12 d7 Ke7 13 f6+ Kd8 14 f7 Ke7 15 d8=Q+ and 16 f8=Q+

Let us now return to the position after White's 4th move.

198. In this position Fine failed to consider Black's strongest defence—4 ... Be8! It only now requires a slight delay on White's part, and after 5 ... Bd7! he will unexpectedly no longer be able to win. For example: 5 d5 Bd7 6 d6 Be8, and White has no way of improving his position. King manoeuvres promise nothing: 5 Ke3 Bd7 6 Kd3 Ke7 7 Kc4 Kd6, when the sacrifice 8 f6 Ke6 9 Bf5+ fails to 9 ... Kxf5 10 f7 Be6+.

There is only one way to win: 5 Bf3! Bd7 6 Bg4.

After switching his bishop onto this important diagonal, White intends to use the e4 square for king manoeuvres. Thus on 6 ... Bc8 White wins by 7 Ke4 Bb7+ 8 d5 Bc8 9 Kd4 Bd7 10 d6 Bc8 11 Kc5 Bd7 (11 ... Ke5 12 f5) 12 Kb6.

6 ... Bc6.

The best defence. Black controls the d-pawn and the square e4. If now White begins a by-pass, 7 Ke3 Bd5 8 Kd3, then after 8 ... Kg5! 9 Bh3 Kh4 the game ends in a draw.

7 Bh5! Bd7.

If 7 ... Bb5, then 8 d5 Bd3 9 Bg4 Bc2 10 d6 Ba4 11 Ke4 Bb5 12 Kd5 Bc4 13 Ke5 Ke5! (the most tenacious; to win White must now sacrifice a pawn) 14 Be2 Bd7! 15 Bd3 Be8 16 f6! Kxf6 17 Bb5 Bb5 18 Kd6 Bg4 19 Kc7 Ke5 20 Bd7 Be2 21 Bc8 Bb5 22 Bb7, and White wins.

8 Bg6 Bc6 9 Ke3! (the king can at last set off on its long journey) 9 ... Bd5 10 Kd3 Ke7 11 Kc3 Ba2 12 Kb4 Kd6.

Otherwise there follows 13 Kc5, but now, in turn, Black threatens to force a draw by 13 ... Bb1!

13 f6! Bd5 14 f7 Ke7 15 Kc5 Be6 16 d5 Bd7 17 d6+ Kf8 18 Kb6 and 19 Ke7, winning.

Because of the threat of a blockade, it was by no means easy to win with isolated pawns separated by one file. But this happened for the reason that White advanced his pawns too carelessly. After 1 f4+ Kd6 it was much more accurate to play 2 Bf5!, seizing the important diagonal. In this case White would indeed have won easily, without allowing a blockade.

For example: 2 ... Bb3 3 Kd4!

Of course, Black could have prevented this move by 2 ... Kd5, but then 3 Bc8 followed by 4 f5 and 5 Bc6+ would have been very strong.

3 ... Bf7 4 Bc8 (threatening 5 f5 and 6 Be6) 4 ... Ke7 5 Ba6! Kd6 6 f5 Bb8 7 Bc4 Bd7 8 f6 Bc8 9 f7 Kc7 10 Ke5 Bh3 11 Bc6! Bf1 (11 ... Bxe6 12 f8=Q+ and 13 Kxe6) 12 d4, and the rest is very simple.

Thus before advancing isolated pawns, it is very important to deploy the bishop in the best way possible, so as not to allow a blockade of these pawns.

White carried out a similar plan in the following ending.
Bishops of the Same Colour

Kholmov–Bronstein
Baku, 1972

199. 1 Bg4! Bb5 2 Be8 Bc6 3 g4 Bd5 4 Bf5

199. 1 Bg4! Bb5 2 Be8 Bc6 3 g4 Bd5 4 Bf5

Bc6.

Not allowing the white king to go to f3,
when White’s task would be eased consider-
ablely, but he finds another possibility. It is
worth mentioning that the manoeuvre em-
ployed by White in the previous example
does not work here: 5 Bd3 Bb7 6 g5 Bd5
7 g6 Kf6 8 Kf4.

Kholmov, 1978

199. 1 Bg4! Bb5 2 Be8 Bc6 3 g4 Bd5 4 Bf5

200. Because his pawn has not yet reached
the seventh rank, after 8 ... Be6! White
cannot take the important diagonal by
9 Bf5, and he can no longer win, for example:
9 Kg3 Kg7! 10 Kh4 Kh6!, and White is
unable to lift the blockade. A by-passing
manoeuvre by the king does not help. Black
manoeuvres with his bishop along the h3–c8
diagonal, and as soon as the white king
reaches e8, he answers ... Kg7. If the white

king goes to d6, Black again plays his king
to f6.

But it is time to return to the position after
Black’s 4th move.

201. Here Kholmov found the only move
to win: 5 Kf2! Kf4 6 e3+ Kg5 7 Kg3 Ba4
8 Kf3.

Also possible was the immediate 8 e4
Bd1 9 e5, since 9 ... Be2 is met by 10 Kf2
Bd1 11 Ke3, when White’s king goes to the
aid of his e-pawn.

8 ... Be6+ 9 e4 Ba4 10 Ke3 Bc6 11 e5
Bb7 12 Kd4 Kf4 13 e6 Bc6 14 Kc5 Ba4 15
Kd6 Kg5 16 e7 Be8 17 Kc7, and Black resign-
ed.

If in position 199 it had been Black to
move, by 1 ... Be6! he could have attempted
to complicate White’s task.

Now a draw results from 2 g4 Bd7 3 Kf2
Kf4 4 e3+ Kg5 5 Ke2 Kf6 6 e4 (6 Kd3
Ke5) 6 ... Ke5 7 Ke3 Bc6 8 g5 (or 8 Bg2
Bb7! 9 g5 Bc6 10 g6 Be8 11 g7 Bf7, with
the same result) 8 ... Be8 9 Be2 Bg6 10
Bd3 Bh7 11 Kf3 Bg6 12 Kg4 Be8.

Correct is 2 Bh5!, with the intention of play-
ing 3 Kf3 and threatening to seize the
important h3–c8 diagonal by 4 Bg4, when 3 ...
Bd5+ can be met by 4 Kg4, and the king
breaks out of the blockade.

2 ... Kf5 3 Kd4 Be8 4 e4+ Kg5 5 Be2!
Bb7 (the threat was 6 e5 Kf5 7 Kd5) 6 e5
Kf5 7 g4+ Ke6 8 Bc4+ Ke7 9 Ke3, and
White wins.

Thus it can be concluded that, in positions
Bishop and Two Pawns Against Bishop

such as No. 199 with a knight’s pawn and a central pawn, where there is no possibility of a by-pass from the side, the threat of a blockade is very real. We will give a further couple of examples, where, because of the blockade, a win proves impossible.

Kholmov, 1978

202. In order to win, White must move his king over to the support of his e-pawn, but against correct defence this cannot be done. For example: 1 e7 Ba4 2 Be4 Be8 3 Bd3 Bd7! 4 Be2 Be8 5 Bh5 Bd7 6 Kf4 Kf6.

Let us try for the moment refraining from the advance of the e-pawn: 1 Bg4. If now Black abandons the a2–g8 diagonal, he loses: 1 ... Bc2? 2 Bh5! Bd3 3 e7 Bh5 4 Kf5 Bd7+ 5 Ke5 Ba4 (5 ... Be8 6 Kd6 Kf6 7 g7?) 6 Kd6 Kf6 7 Bg4! Be8 8 Bf5! Kg7 9 Kc7 etc. But after 1 ... Be4! 2 e7 (2 Kf5 B×e6+) 2 ... Bh5 3 Bh5 (3 Kf5 Bd3+ and 4 ... B×g6) 3 ... Bd7! Black maintains the balance.

Kholmov, 1978

203. White appears to be close to success: in order to win, he has to penetrate with his king to d6. But how is this to be done?

1 Bd1 Be6!

The bishop must control d5 only from this square. 1 ... Bb7 is met by the immediately decisive 2 g4+ Kf4 3 e6.

2 Be2 Bf7 3 Bf3 Be6 4 Bd5 Bd7!

The only move! Black loses after 4 ... Bc8? 5 e6 Kf6! (5 ... Kd4 6 e7 Bd7 7 Be6+) 6 Ke3! (6 Ke4? B×e6!, with a draw) 6 ... Ba6! 7 Kf4 Be2 8 g4 Ke7 9 g5 Bd3 10 Ke5 Bc2 11 Bf3 Bg6 12 Bg4 Bc2 13 Bf5 etc.

5 e6 Bc8 6 Ke5 Kg4 7 Kd6 K×g3 8 Ke7 Ba4!

Bad is 8 ... Bh5 9 Kf8 Bg4 10 e7 Bd7 11 Bf7 Kf4 12 Be8 Bg4 13 Bb5 Bh5 14 Bc4, when White wins.

9 Kd8 Kf4 10 e7 Ke5, and Black's king succeeds in reaching d6. Draw.

Instead of the pawn sacrifice 6 Ke5, White could have moved his king to the other side—6 Kc3 Kg4 7 Kf2 Kf5 8 Kf3 Bh5+ 9 Kg2 Kf6! 10 Bf3 (10 Kh3 Kg5) 10 ... Bg6 11 Bg4 Be4+ 12 Kf2 Bd5 13 Ke3 Bb3 14 Kf4 Bc2!, when a position similar to example 200 is obtained.

Kholmov, 1978

204. Black has a simple system of defence: if White's king is at f4, the bishop manoeuvres on the b1–h7 diagonal, while if the king moves to d4 the bishop switches to the a2–g8 diagonal. Finally, if the king moves...
Bishops of the Same Colour

Towards h3, the bishop must be on any square of the a2-g8 diagonal, except a2. Then, if with his bishop at b3 the white king goes to h3, Black can play his king to g5.

If one of the pawns is a rook's pawn, and its queening square is not controlled by the bishop, the realization of the advantage is hindered by the fact that the defender is threatening to give up his bishop for the other pawn, leaving his king in the safe corner.

Larsen–Patterson
Siegen Olympiad, 1970

205. All White's winning attempts proved unsuccessful.

1 Bg4 Bd3 2 Bf5 Be2 3 Bg6Bg4 4 Bf7 Bh3 5 Bg6 Bg4 6 Be8 Bh3 7 Ke7 Bf5.

White was threatening 8 Bd7, but Black is on the alert. Also possible was 7 ... Bg4, but this required exact calculation, for example: 8 Bd7 Bxh5 9 f5 Kg5! 10 f6 Bg6! 11 Be6 Kf4 12 Bf7 Bd3 13 Be8 Bc4 14 Bd7 Ke5!, with a draw.

8 Bd7 Bd3 9 Bg4 Bc2 10 Kf6 Bd3 11 Bf3 Bc2 12 Ke5 Kg7 13 Be2 Kh6 14 Bg4 Bd3 15 Bd1 Kg7 16 Bf3 Bc2 17 Bc6 Bd1 18 Be8 Bg4 19 Bh6 Kh6 20 Kf6.

White has made no progress, and the game soon ended in a draw.

206. Were it Black to play, he would easily draw by 1 ... Kh6. But it is White to move, and, by reaching g5 with his king, he wins in instructive fashion.

Fischer–Keres
Zurich, 1959

1 Kg5! Bd3 2 f4 Be4 3 h4 Bd3 4 h5 Be4 5 h6+ Kh8.

5 ... Kf7 is decisively met by 6 Bh5+ Kg8 7 Bg6 and f5-f6.

6 Bf5 Bd5 7 Bg6 Be6 8 Kf6 Bc4 9 Kg5 Be6 10 Bb5 Kh7 11 Bg4! Bc4.

The exchange of bishops would have led to an elementary pawn ending.

12 f5 Bf7 13 Bh5 Bc4 14 Bg6+ Kg8 15 f6, and Black resigned.

The finish could have been: 15 ... Bb3 16 Kf4 Kh8 17 Ke5 Bc4 18 Kd6 Bb3 19 Ke7 Bc4 20 Bf7 Bd3 21 Be8! Bc4 22 Bd7, and against 23 Be6 there is no defence.

The win is easier when the pawns are separated by more than one file. Difficulties can arise only if one of the pawns is a rook's pawn, and its queening square is of the opposite colour to that of the bishop.

Sokolsky–Lipnitsky
Moscow, 1950

207

+/+

60

71
Bishop and Two Pawns Against Bishop

207. 1 ... c5 would be a blunder, in view of 2 B×c5 with a draw. Black’s plan is to give up his h-pawn to obtain a won ending with one pawn.

This is most easily achieved by a bishop manoeuvre: 1 ... Be5 2 Bb6 Bd4 3 Ba5 c5 4 Kh2 e4 5 K×h3, when we reach position 178, which is won for Black.

But there is no rule without exceptions!

Goglidze–Kasprian
Tbilisi, 1929

208

208. If White’s pawn were at h4, he would win easily, for example: 1 Be8 Bg4 2 Kd6 Kh6 3 Bd7 Bh5 4 e6 Kg7 5 e7 Kf6 6 Bb5Bg6 7 Kd7 Ke5 8 Kd8 Kd6 9 Be8 Bd3 10 Bf7 Bh5 11 h5.

The necessity of defending his h-pawn restricts White’s manoeuvring freedom, and, despite his material advantage, he is unable to win.

1 Be8 (if 1 e6, then 1 ... Bg4 and 2 ... B×e6) 1 ... Bg4 2 Kd8.

Or 2 Kd6 Kh6 3 Bd7 B×h5 4 e6 Kg7 5 e7 Kf6.

2 ... Kh6.

Also possible is 2 ... Be6 3 Bd7 Bf7 4 Bg4 Bb3 5 Ke7 Bc4 6 Kd6 Bb3 7 Bf3 Bf7 8 Bd5 B×h5 9 e6 Kf6 10 e7 Be8, with a draw.

3 Bd7 B×h5 4 e6 Kg7 5 e7 Kf6!

Black loses after 5 ... Bg6 6 Be8 Be4 7 Bh5 Bc6 8 Bg4.

6 Be8 Be2 7 Bg6 Bh5. Draw (cf. position 158).

If White tries the manoeuvre Kd6–d5–e4–f5–g5, Black must be able to answer Ke4 with ... Kg5!

Finally, on 1 h6+ K×h6 2 Kf6 there follows 2 ... Bg4 3 Bg6 Be2 4 e6 Bc4 5 e7 Bb5 6 Kf7 Kg5!, when Black attains a basic drawing position.

Benediktsson–Olafsson
Reykjavik, 1956

209

209. The special feature of this position is that, against correct defence, Black is unable to advance his e-pawn.

The game continued: 1 ... Bc3 2 Bd6 Ke4 3 Be7.

It was simpler to manoeuvre the bishop without removing the attack on e5, but this move does not yet lose, since on 3 ... e5 White has 4 Bf6.

3 ... Be5 4 Bb4 Be7.

Had White now played 5 Bc3! Black’s winning attempts would have been unsuccessful. But there followed 5 Be7? Kf5 6 Bb4 Bf4! 7 Bc1 Bc8 Bc3 e4, when Black, with his opponent’s help, had crossed the decisive boundary. The game concluded: 9 Bd4 Kg4 10 Bf2 Kf3 11 Bh4 e3 12 Bf2 e2 13 Be1 Bg3 14 Bb4 Kf2 15 Bc5 + Kf1 16 Bb4 Be1 17 Be7 Bd2 18 Bb4 Be3, and White resigned.
Bishops of the Same Colour

Yaroslavets, 1947

210. After 1 Bf7+ Kd4 2 B×b3 Black appears to win by 2...Kc3, when there is no defence against 3...e3+ and ...e2.

But White draws by 3 Bc2!! e3 4 Kc1 e2 5 Bd1!, as in the Centurini study (example 176).

An elegant study!

2.3 BISHOP AND PAWN AGAINST BISHOP AND PAWN

In such endings the normal result is a draw. A win can be gained only in the following exceptional cases:

1) If the enemy pawn can be won, and a winning ending with an extra pawn obtained.

2) If the pawns are passed, and one succeeds in queening first, or else the pawns promote simultaneously but the resulting ending can be won.

Averbakh, 1954

211. 1 Ke7.

Even fewer chances are offered by 1 Bd7+ Kd8 2 B×e6 Be2 3 Bf5 Bc4 4 Be4 Bb3, when on 5 Bd5 there follows 5...B×d5 6 K×d5 Kd7, with a draw.

1...Kc7 2 Bd7 Bb3 3 B×e6 Bd1 4 Bf5 Bb3 5 Kf6 Bc4 6 Bg6 Bb3 7 Bf7 B4 8 e6 Kd6 9 e7 Bb5 10 Bh5 Ba4 11 Kf7 Ke5 12 Kf8 Kf6. A basic drawing position has been reached.

If position 211 is shifted one file to the right, it turns out that the evaluation of the resulting ending will depend on who it is to move.

Averbakh, 1954

212.

/+=

212. If it is Black to move, he continues 1...Ke8! 2 Be7 Bc3 3 B×f6 Bd2 4 Bh4 Bc3. Also possible is 4...Kf8 5 f6 Bh6! 6 Bf2 Kg8! 7 Bc5 Kh7.

White to move wins: 1 Kf7! Kd7 2 Be7 Bc3 3 B×f6 Be1 4 Bg5 Bc3 5 Kg6!, and Black is helpless against Bh6-g7 and f5-f6, after which the second basic winning position is reached.

It is curious that the position obtained by shifting position 212 one file to the right will again be drawn, irrespective of who it is to move.

213. After 1 Kg7 Ke7 2 Bf7 Bd3 3 B×g6 Bh5 Kf6 Kf8 Bh5 Bd3 all White's attempts are doomed to failure, since he has no possibility of reaching h7 with his bishop, without allowing the enemy bishop to seize the
Bishop and Pawn Against Bishop and Pawn

Averbakh, 1954

213

6 Kg3 h2 position 167 is reached with colours reversed.
4 Bd5! Bd7 (or 4 ... B×d5 5 Kg4) 5 Be6! Bh3 6 Bd5 Bg2 7 Be6. Draw.
In the following studies the better placing of White’s pieces enables him to queen his pawn.

Isenegger, 1940

215

215. 1 a6 Bd5 2 Kg3 e5.
Black intends answering 3 Bf3 with 3 ... e4 4 Bg2 Ke7 5 Kf4 Kd6 6 a7 Kc7, when the pawn is stopped.
3 Be8!
Now White has created a threat from the other side. Against 4 Bb7 Black has only one defence.
3 ... Bc4 4 a7 Bd5 5 Bh3!
Now that White’s pawn is one step away from the queening square, he reverts to his initial plan.
5 ... Ke7 6 Bg2 e4 7 Kf4 e3 8 Bf3 Kd6 9 K×e3, and the pawn cannot be stopped.

Troitsky, 1913

216

214. In the game Teichmann—Marshall (San Sebastian, 1911) White played 1 Ke4?, and after 1 ... Bc8 2 Kc3 Bd7? he resigned, since on 3 Ke4 there follows 3 ... Bc6+ 4 Ke3 B×g2, while if 3 Kd2, then 3 ... Kf2! 4 Bc4 K×g2 5 Ke1 Kg1! (5 ... h3 6 Bf7+) 6 Bf1 Be6 7 Bb5 h3 8 Bc6 h2 9 Be4 Bh3 and 10 ...Bg2.
Meanwhile, he could have drawn the game.
1 Bb5! K×g2.
Or 1 ... Be6 2 Bc6 Bc4 3 Be4 Bf1 4 Bd5 B×g2 5 Be6, and position 171 is obtained with colours reversed.
2 Kf4!
But not 2 Bb7+ Kg3 followed by ... h3–h2 and ... Bh3–g2.
2 ... Be6 3 Bc6+ Kf2.
After 3 ... Kh2 4 Bb7 h3 5 Be4 Kg1
216. 1 a5 Bb4.

If 1 ... Kg3, then 2 Kf5! Bf4 3 Bh2+!, while on 1 ... Bd8 there follows 2 Bb6. Finally, if 1 ... Kg4, then 2 a6 Bf4+ 3 Kd5! Bb8 4 Kc6 Kg3 5 Kb7 Kg2 6 K×b8 K×g1 7 a7.

2 a6 Bg3+ 3 Ke4 Bb8 4 Kf3! Kh4.

4 ... h4 5 Bf2 leads to the loss of the pawn.

5 Be3!

Unexpectedly Black is in zugzwang.

5 ... Kh3 6 Bf2 Kh2 (or 6 ... h4 7 Bg1) 7 Bg3+.

In this study a great impression is created by the play of the centralized king, which has time to go to both sides of the board.

In the following position White’s pawn is again much more dangerous than the black one, but if Black can manage to play ... e4, he will draw without difficulty.

Häuacker, 1930

217. White finds an artistic way of preventing ... e4.

1 Ba7! Ba1 2 Kb1 Bc3 3 Kc2 Ba1 4 Bd4!!

This move deserves even three exclamation marks. Both after 4 ... e×d4 5 Kd3, and after 4 ... B×d4 5 Kd3 and 6 Ke4, Black is powerless to stop the pawn.

A classic example on the theme of interference!*

* This theme was first expressed in a study by Mouterde (1914). White: Kc1, Bb4, pawns a3, f2, h3. Black: Kb7, Bb6, pawns a5, e5, h4. Solution: 1 h6 Bd4 2 Be5 Ba1 3 Kb1 etc.
219. If Black did not have his h-pawn, this would be a won position for White, as stated earlier. It turns out that the pawn does not save Black.
1 Be3 Be5.

Black is forced to move his bishop, losing a tempo, since on 1 ... h4 there follows 2 Bf2! Bh2 3 Bxh4 etc.
2 Ba7 h4 3 Bb8 Bxh8 4 Kxb8 h3 5 Ke8 h2 6 h8=Q h1=Q 7 Qa8+.

There is a similar finish to the following study.

Liburkin, 1940

220

220. 1 h6 Bc3.

Black loses immediately after 1 ... Bd2
2 h7 Bc3 3 Bb4, but if his king were at e2, then 1 ... Bd2 would draw. For example:
2 h7 Bc3 3 Kg2 Kd3 4 Kf3 Ke4 5 Bd6 b4
6 Kf4 b3 7 Be5 Bxe5+ 8 Kxe5 b2.
2 Bf8 b4 3 Bg7.
A position of tension has been reached.

Troitsky, 1925

221

White’s plan is to play his king to g6 followed by h6–h7, which Black tries to prevent.
3 ... Kf2 4 Kh2 Kf3 5 Kh3 Kf4.

Black’s idea would appear to have been successful, but there follows 6 Bxe3! Bxh3
7 h7 c2 8 h8=Q c1=Q 9 Qh6+.

221. This study concludes with a similar finish, but only after more complicated play.
1 a6 c4 2 a7 c3 3 Bh1! Ba4+.
If 3 ... Bg6+, then 4 Ke7 c2 5 a8=Q c1=Q 6 Qg2 mate.
4 Kf7! (only this move wins) 4 ... Be6!
Black gives up his piece, hoping to draw with queen against queen and bishop.
5 Bxg6 c2 6 a8=Q c1=Q 7 Qa2+ Kg3!
8 Qg2+ Kf4.

On 8 ... Kh4 there follows 9 Qf2+ Kg4
(9 ... Kg5 10 Qg3+ or 9 ... Kh5 10 Bf3+ and 11 Qg3+) 10 Bd7+ Kh5 11 Qf3+, with a quick mate.
9 Qf3+ Kg5 (or 9 ... Ke5 10 Qf6 mate)
10 Qg3+ Kf5 11 Qg6+ Kf4 12 Qh6+.

2.4 BISHOP AND TWO PAWNS AGAINST BISHOP AND PAWN

The side with the extra pawn wins if he succeeds in:

1) queening a pawn, or at least winning the bishop for it, obtaining a won ending with an extra bishop.

2) winning the opposing pawn, obtaining a won ending with two extra pawns.

3) after the exchange of a pair of pawns, obtaining a won ending with bishop and pawn against bishop.

4) exchanging bishops and obtaining a won pawn ending.

Of course, we have covered here only the basic cases.

One of the characteristic features of a position is its pawn formation, and we will take this as the basis of our analysis. We will
consider the following instances, with regard to the two pawns:

1) connected pawns, both passed.
2) connected pawns, one passed.
3) connected pawns, neither passed.
4) isolated pawns, both passed.
5) isolated pawns, one passed.

2.41 Connected pawns, both passed

With two connected passed pawns against one, a win is normally gained without great difficulty. If necessary, one can even give up the bishop for the opponent's lone pawn. Here is a typical instance.

Santasiere–Fine
New York, 1938

222

222. 1 b4 h4 2 b5 Bg3 3 Bg1 h3 4 a5 Kf5
(if 4 ... h2, then 5 B×h2 B×h2 6 a6 Bb8

Bronstein–Ragozin
Stockholm, 1948

7 b6 etc.) 5 b6 Ke4 6 a6 Kf3 7 a7 Kg2 8 Bc5
(the simplest) 8 ... h2 9 a8=Q h1=Q 10
Kd7+ Kh2 11 Q×h1+ K×h1 12 Bd6,
and Black resigned.

Difficulties can arise only when the opponent's passed pawn is far advanced.

223. Black is threatening by the advance of his pawn to win the bishop. White nevertheless succeeds in neutralizing this threat.

1 b5 f3 2 a6! (not 2 b6 + Kb8, when White's pawns lose their mobility) 2 ... f2 3 b6 +
Kd8 4 a7 f1=Q 5 a8=Q + Ke7 6 Qe8 +
Kf6 7 Qf8+, followed by the exchange on
f1. For this reason Black terminated his resistance after 2 a6.

But there is no rule without its exceptions.

Mikhailov, 1951

224

224. White saves the game by exploiting a stalematting possibility.

1 Bd3 b4 2 d5! B×d5 3 Bc2+!! (an unex-

Duras, 1906
(conclusion of a study)
 Bishop and Two Pawns Against Bishop and Pawn

pected blow!) \(3 \ldots \text{Ka}3 \) (\(3 \ldots \text{Kc}3 \) \(4 \text{B} \times \text{a}4 \text{Be}4 \) \(5 \text{Bb}3!!\)) \(4 \text{Be}4! \text{Bg}8 \text{5 Bh}7! \text{Ba}2 \text{6 Be}2! \text{Bb}3 \text{7 Be}4 \text{Bd}1 \text{8 Bc}2!,\) with a draw as in example 194.

A far-advanced passed pawn may altogether prove stronger than two, if it cannot be securely stopped.

225. After \(1 \text{Bb}4! \text{Kb}5 \text{2 Be}1! \text{g}3 \text{3 B} \times \text{g}3 \text{B} \times \text{g}3 \text{4 a}7 \text{f}2 \text{5 a}8=\text{Q} \text{f}1=\text{Q} \text{6 Qa}6+\) Black loses his king.

2.42 Connected pawns, one passed

If only one of the pawns is passed, the result will normally depend on whether or not the stronger side can win the opposing pawn.

Averbakh, 1954

226. White’s problem is to place the opponent in zugzwang, for which his possibilities have to be restricted. First the black bishop is forced onto the short diagonal.

\(1 \text{Bf}5 \text{Bf}1 \text{2 Kd}4 \text{Be}2 \text{3 Bd}3! \text{Bg}4 \text{4 Kc}5 \text{Bd}7.\)

The bishop has only two squares—\(e8\) and \(d7\). If it can be deprived of one, Black will be in zugzwang, and this indeed proves possible.

\(5 \text{Bf}1 \text{Be}8 \text{6 Bb}3!!\)

Black has no useful move. For example: \(6 \ldots \text{Ka}7 \text{7 Bg}2 \text{Ka}6 \text{8 Be}6,\) or \(6 \ldots \text{Bf}7 \text{7 Be}8+,\) and the pawn is lost.

Shifting this position one file to the right, we again obtain a won position:

Averbakh, 1954

227. After \(1 \text{Bg}5\) Black can play \(1 \ldots \text{Bd}4 \text{2 Ke}4 \text{Be}3 \text{3 Be}3 \text{Bb}4 \text{4 Kd}5 \text{Ba}3,\) but then the bishop is lacking in space. White continues \(5 \text{Bg}5 \text{Bb}4\) (or \(5 \ldots \text{Kb}7 \text{6 Be}7 \text{Kb}6 \text{7 Bd}8+ \text{Kb}7 \text{8 Ba}5) \text{6 Be}7 \text{Ba}3 \text{7 Bd}8+ \text{Kb}7 \text{8 Ba}5!\), and again Black is in zugzwang.

He loses both after \(8 \ldots \text{Ka}7 \text{9 Kc}6,\) and after \(8 \ldots \text{Bb}4 \text{9 B} \times \text{b}4 \text{c} \times \text{b}4 \text{10 Kd}4 \text{Kb}6 \text{11 Kd}3 \text{Kc}5 \text{12 Kc}2 \text{Kb}6 \text{13 Kb}2.\)

But position 228 turns out to be drawn, since the black bishop has a sufficient number of squares on the a2–c4 diagonal.

Averbakh, 1954

228. \(1 \text{Bb}5 \text{Be}4 \text{2 Kf}4 \text{Bd}3 \text{3 Bf}3 \text{Be}4 \text{4 Ke}5 \text{Bb}3 \text{5 Bb}5 \text{Bc}4 \text{6 Bf}7 \text{Bb}3 \text{7 Be}8+ \text{Kc}7 \text{8 Bh}5 \text{Ba}2,\) and White has not achieved anything.

Shifting position 228 a further file to the right, we again obtain a winning position, since White gains a new attacking possibility.
Bishops of the Same Colour

Averbakh, 1954

229. White continues 1 Bd3 Bd1 2 a5 Kb7, with a clear draw, or 1 b5 a×b5 2 a×b5 Kb7 3 b6 Kb8 etc.
Winning chances appear if position 230 is moved one rank up the board.

231. The black king has been pressed onto the back rank, and the white pawns have become more dangerous. Exact defence is demanded of Black.
Thus on 1 b6 he loses after 1 ... a×b6 2 a×b6 Kb8 3 b7Bg3 4 Kb6 Bc7+ 5 Ka6.
The correct continuation is 1 ... Kb8!, when only a draw results from 2 Bf6 Bg3 3 Bd8 Bf4 4 Bc7+ Bc7 5 b×c7+ Ke8 6 Kd6 a6.
If position 231 is shifted one file to the right, the resulting position will again be dangerous for Black.

2.43 Connected pawns, neither passed

Here, all other things being equal, the stronger side has few winning chances.

Averbakh, 1954

230. All White's aggressive attempts are easily parried.

232. After 1 c6 Ke8! (1 ... b×c6? 2 b×c6 leads to a lost ending) 2 Bg6 passive defence by 2 ... Bh3 3 Be8 Bg4 loses for Black.
White continues 4 Bd7+ B×d7 5 c×d7+ Kd8 6 Ke6 b6 7 Ke5! K×d7 8 Kd5! etc.
Black obtains a draw by 2 ... Kb8 3 Be8 b×c6! 4 b×c6 Ka7, for example: 5 Ke7 Kb6 6 Kd8 Ke5.
Instead of 1 c6, there is also the possibility of 1 Bc4, when Black loses after 1 ... Bf5? (or 1 ... Bh3?) 2 b6! Bg4 (2 ... Kc8 3 Be6+, or 2 ... Be4 3 Bd5, or else 2 ... Bc2 3 c6! b×c6 4 b7) 2 Bd5 (but not 3 c6 Ke8, with a draw) 3 ... Ke8 4 Be6+, with a won pawn ending.
2 b6 is not the only move. Also possible is 2 Be6 Bd3 (2 ... Be4 3 b6) 3 c6 b×c6
4 b×c6, and wins.

Note that in this last variation 3 Bd7 also wins (but not 3 b6 Bb5!, with a draw):
3 ... Be4 4 b6 Bg2 5 Be6! (5 c6?? B×c6
6 B×c6 Kc8!!) 5 ... Bf3 6 Bd5 etc.

But after 1 Bc4 Black nevertheless draws by 1 ... Bd7! 2 b6 Ba4 3 Be6 Bb5, when
White is unable to improve his position.

Averbakh, 1954

\[
\text{233. This position is even worse for Black,}
\text{but here too the direct 1 d6 does not win}
\text{after 1 ... c×d6! (in contrast to the preceding}
\text{positions, only this exchange gives a draw).}

\text{Black loses after 1 ... Kd8 2 d7 Be7}
(2 ... c6 3 Kd6 Be7+ 4 K×c6 B×c5 5
Bg5+) 3 c6 Bf6 4 Bf4 Bh4 5 Be5 Bg5 6 Bg3
Bf6 7 B×c7+ etc.

2 c×d6, and position 173 is reached, where
2 ... Kf8! gives a draw.

White wins in an extremely interesting
and instructive way.

1 Bd4!

An important move. White does not allow
the black king to reach c8.

1 ... Be7!

The strongest move, making it difficult
for White to realize his advantage.

2 c6! Ba3 3 Bf6! (the king must not be
allowed to reach c8) 3 ... Bb4 4 Kf5 Kf7
(if 4 ... Bd6, then 5 Be5) 5 Bg5! Bc5 6 Ke4.

White has positioned his pieces so that
6 ... Bd6 can be met by 7 Bf4, exchanging
bishops, and he now intends to take his king
to c8 and win the black pawn. Therefore
Black can no longer continue playing passive-
ly. He must quickly take his king up to the
d-pawn, so as to attempt to obtain a drawn
ending with bishop against bishop and pawn.

6 ... Kg6 7 Bf4 Bb6 8 Kd3 Kf5 9 Bg3
Ba5 10 Kc4 Ke4.

White seems to win now by 11 d6 c×d6
12 Kb5 Bd8! 13 Bf2 Bc7 14 Bb6 Bb8 15 Ba7!
Bc7 16 Ka6 d5 17 Kb7, but after 17 ... Bh2!!
18 Bb8 d4 19 B×h2 d3 the pawns queen
simultaneously.

The win is achieved by:

11 Bh2 Bb6 12 Bg1! Ba5.

If 12 ... B×g1, then 13 d6 Bh2 14 d7,
and Black's bishop is powerless to stop the
d-pawn.

13 Kc5!

This continuation, suggested by Dzhenan-
dian, wins most easily.

13 ... Bd6+.

If 13 ... Bc3, then 14 d6 c×d6 + 15 Kb5,
while if 13 ... Ke5, then 14 Bh2 + followed
by 15 B×c7 B×c7 16 d6 etc.

14 Kb5 B×g1 15 d6, and White wins.

2.44 Isolated pawns, both passed

If the two pawns are isolated, and the
opposing pawn is also passed, the stronger

Reti, 1925
side wins if he is able to block the opposing pawn with his king or bishop, while simultaneously advancing his own passed pawns.

The following study is an excellent illustration of this.

234. Black is threatening to play 1 ... Kb4 2 a5 Kb5, tying White’s bishop to the defence of his a-pawn, after which both of his pawns will be stopped.

White therefore continues 1 Ba5! Kb3 (1 ... Kd5 2 Ke2 Kc6 3 Kd3 Kb7 4 Be3 Bh6 5 Ke4! Kb6 6 Kd5 Bf8 7 Bd2 Bg7 8 Be3 Ka5 9 Bxc5 Kxa4 10 Bd4 Bh6 11 Ke6 Kb4 12 Kf7 Kc4 13 Be3) 5 Be3!! Kxc3 (2 ... Bxc3 3 a5, and the bishop cannot cope with the pawns) 3 a5 Kb2 4 a6 c4 5 a7 c3 6 a8=Q c2 7 Qb7+ Ka2 8 Qf7+ Ka3 9 Qc7 Kb3 10 Ke2 Bh6 11 Kd3, and White wins.

2.45 Isolated pawns, one passed

If the stronger side manages to win the opposing pawn, the win is normally beyond doubt. The following example shows a typical position.

235. White wins most simply by 1 Bd3 Bd7 2 Ke4 Be6+ 3 Kf4 Bf3 4 Bf5 etc.

236. 1 ... Be5 2 Bf8 Ke4 3 Be7 Kd5 4 Bh4 Bd6! 5 Be1 Kc4 6 Bd2 B×b4 7 Bf4 Kd5! 8 Be3 Bd6.

We have reached position 207. Black cannot play ... c5 because of B×c5, but he

Sokolsky–Lipnitsky
Moscow, 1950

236
/+ 

wins by sacrificing his h-pawn, as already examined.

We know that in certain cases a bishop and two pawns do not win against a bishop. One such exception is shown in the following position.

Goglidze–Kasparian
Tbilisi, 1929

237
=

237. White wins the opposing pawn by 1 Kd6 Bg4 2 Kd7 Kg7 3 Ke7 Bd1! 4 K×e6, but after 4 ... Bg4+(4 ... Bb3+ 5 Ke7 B×f7? 6 h6+ Kg6 7 h7) 5 Ke7 Be2 we reach position 208, which is drawn.

It is not always possible for the stronger side to win the opposing pawn without giving up one of his own. Sometimes an exchange of pawns occurs, leading to an ending with bishop and pawn against bishop, where the result will depend on the evaluation of this ending.
Bishop and Two Pawns Against Bishop and Pawn

Santasiere–Kashdan  
Boston, 1918

238. If White's bishop were at e4, he would be able to play 1 f5 and 2 Ke6, winning the black pawn.

But now this does not work, since Black answers 1 Be4 with 1 ... f5, when the pawn is defended by the bishop. Nevertheless, White succeeds in winning, although, as we will see, the result depends on a single tempo.

1 Ke7 f5 2 Kf6 Bh3 3 Ke5.

If 3 Kg5, then 3 ... Kc8 4 Be6+ Kb7 5 B×f5 Bg2 6 Bd3 Bh3 7 Be2 K×b6 8 Bg4 Bf1 9 f5 Kc5 10 f6 Bc4 11 Kg6 Kd6 12 Kg7 Ke5 13 Bh5 Kf4!, with a draw.

3 ... Kc8 4 Be6+ Kb7 5 B×f5 Bf1 6 Be6 K×b6.

The game took a different course: 6 ... Bd3? 7 Kd4, and Black resigned.

7 f5 Kc7 8 f6 Kd8 9 Bf7! Kd7 10 Kf5 Kd6 11 Kg6 Bh5 12 Kg7 Ke5 13 Bg8, and Black is one tempo short.

Instead of 3 ... Kc8, more tenacious is 3 ... Bg4!, since 4 Be6? Kb7 5 B×f5 Be2 6 Be6 K×b6 7 f5 Kc5 8 f6 Bh5 leads only to a draw.

But even this would not have saved the game. White has a very elegant win:

4 Bg2! Kc8 5 Kf6! Kb8 6 Kg5 Kc8 7 Be4!! Kb8 (7 ... f×e4 8 K×g4 K×f5 9 f5 etc.) 8 B×f5 Bf3 9 Bh7 Kb7 10 f5 K×b6 11 f6 Bd5 12 Kg6 Kc5 13 Kg7 Kd6 14 Bg8 etc.

Both at g4 and at h3 the black bishop proved to be badly placed. White was able to exploit it each time to gain a decisive tempo for the resulting ending of bishop and pawn against bishop.

With the black bishop at d3, White is no longer able to win, although Black's defence has to be very exact.

Averbakh, 1954

239. 1 Ke6 f5 2 Ke5 Bc2 3 Be6 Kb7 4 B×f5 Bd1 5 Be4+ K×b6 6 f5 Kc7 7 f6 Bb5, and from the foregoing it is clearly pointless to attempt to win.

White can try to squeeze the black bishop off the b1–e4 diagonal by playing 3 Kd4. Then the natural 3 ... Bb1 loses, although it is true that White has to find a study-like way to win.

4 Bc4! Kb7 5 Bd3 Ba2 6 Ke5 Be6 7 Bc2! Be8.

Or 7 ... Kb8 8 Kd6 Bc8 9 Ke5 Ba6 10 B×f5 Kb7 11 Be6 K×b6 12 f5 Kc7 13 f6 Kd8 14 Bf7 Kd7 15 Kf5 Kd6 16 Kg6 Bd3+ 17 Kg7 Ke5 18 Bg8, and wins.

8 Bb3 Bd7 9 Bd5+ Kb8 10 Be4! Kb7.

No better is 10 ... Kc8 11 Kd6 Ba4 12 Be6+ Kb7 13 B×f5 K×b6 14 Be4 Be8 15 f5 Kd5 16 f6 Bc4 17 Kd7 Bh5 18 Bc6 and 19 Be8, or 10 ... Ba4 11 Bd3 Bb7 12 Kd6 Be8 13 Ke5 etc.

11 Bb3! Kb8.

Or 11 ... Bc8 12 Bd5+ Kb8 13 Kd4!! Ba6 14 Bc4! Be8 15 Ke5 Bd7 16 Bd5 Be8 17 Bc6!
Bishops of the Same Colour

12 Kd6! Be8.

12 ... Bb5 loses to 13 Bc2 Kb7 14 B×f5 K×b6 15 Be4 Be8 16 f5 Kb5 17 f6 etc.

13 Be6 Kb7 14 B×f5 K×b6 15 Bd3! Kb7 16 f5 Kc8 17 Ke7 Bb5 18 f6, and wins.

But if Black plays the correct 3 ... Bd11, White's plan would be unrealizable, since on 4 Bc4 there follows 4 ... Kb7 5 Kc5 Bc2.

Also possible is 3 ... Kc8, and if 4 Bc4, then 4 ... Kb7 5 Bd3 Bd11 6 Kc5 Bg4, when White again cannot win, for example: 7 Bc2 Kb8 8 Kd4 Kb7 etc.

The following position is even more difficult to evaluate. Again White cannot win the black pawn without giving up his own passed pawn. It is true that the pawns are more widely separated, so that after the exchange the black king will be further away from White's pawn. On the other hand, the b3 pawn has to cross the black bishop's diagonal three times (at b4, b6 and b8), which allows Black to approach with his king.

Capablanca–Janowski
New York, 1916

240

240. Capablanca played 1 Ke4.

But why not 1 Kc5 b4 2 Kc4 Be1 3 Bc5 Kg7 4 B×b4?

A thorough analysis shows that in this case Black can draw.

4 ... Bg3! (as we will see below, the most exact move) 5 Bc3+ K×g6 6 b4 Kf7 7 b5 Bc7! It should be clear from the foregoing that with the pawn at b7 the position is won.

8 Kd5 Kc7 9 Kc6 Kd8 10 Kb7 Kd7, and the drawn position has been reached.

4 ... Bf2 also does not lose, although in this case the draw is achieved in study-like fashion. After 5 Bc3 + K×g6 6 b4 Kf7 7 Bd4 Bg3 8 b5 Bc7 9 Kd5 Kc7 10 Kc6 Kd8 11 Bb6 Black is saved by 11 ... Kc8!!

It is curious that only 4 ... Bh4 loses: 5 Bc3+ K×g6 6 b4, and now:

a) 6 ... Kf7 7 b5 Bd8 (7 ... Ke6 8 b6 Kd7 9 Kd5, 10 b7 and 11 Kc6) 8 Kd5 Ke8 9 Kc6 followed by Bc7 and b6–b7.

b) 6 ... Kf5 7 Kd5 Bb8 8 b5 Kf4 9 Be5+ Ke3 10 Kc6 Kd3 11 Bc7 and 12 b6.

1 Ke4 is a typical Capablanca move. He is in no hurry to force events, but first tries every chance.

1 ... b4 2 Be3 Bc3 3 Kd3 Be1 4 Bd2 Bf2 5 Ke4 Bc5?

After 5 ... Kg7 6 Kf5 Bc5 7 Bf4 Bf2 8 Be5+ Kg8 White would have had nothing better than to take his king to the c4 pawn, which should have led only to a draw. The move played allows White to gain the extra tempo he needs.

6 Kd5! Be7.

6 ... Bf2 fails to 7 B×b4 Kg7 8 Bc3+ K×g6 9 b4 Kf7 10 Bd4 Bg3 11 b5 Bc7 12 Kc6 Ba5 13 Be5, 14 Bc7 and 15 b6.

7 Kc4 Kg7 8 B×b4 Bd8 9 Bc3+? K×g6 10 b4 Kf5 11 Kd5.

We have reached position 185, in which Janowski resigned, although, as we have established, he could have drawn. Instead of 9 Bc3?, White could have forced a win by 9 Bd2!, as shown in our analysis of position 185.

This example shows clearly that in such endings the realization of the advantage often involves considerable difficulties, since at times the result can depend on a single tempo.

It is not surprising that White is unable to win in position 241.
241. We will examine some possible variations.

1 Be2Bg4 2 Ba4+Kc7!
The only move. After 2 . . . Ke7 3 Ke5 Bh3 4 c6 Bg2 5 c7 Bb7 6 Bb5! Be8 7 Bc4 Black
can resign.

3 Ke5 Bh3!
3 . . . Bf5 loses to 4 Bb3 Kd7 5 Bd5!! e×d5
(5 . . . Bh3 6 c6 + Ke7 7 Bb3 Bg2 8 Ba4 Bf3
9 c7 Bb7 10 Bb5!, or 6 . . . Ke7 7 B×e6 Bg2
8 Bd5) 6 K×f5 Ke6 7 Ke5 K×c5 8 f5 Ke6
9 f6 Kd7 10 K×d5 etc.

4 Bb3.
If 4 Kf6, then 4 . . . Kd8! 5 Kf7 (5 c6 Ke7
6 Ke7 Bg4 7 Bb3 e5!) 5 . . . Bg4 6 Bb5 Bf5
7 Be8 Bg4 8 Kf8 Be2! 9 c6 Bc4 10 Bd7 Bd5
11 Kg7 Ke7, with a draw.
4 . . . Kd7 5 c6+ K×c6 6 B×e6 Bf1 7 f5
Bd3 8 f6 Bg6 9 Bb3.

Alekhine–Euwe
3rd Match Game, 1937

If 9 Kf4, then 9 . . . Kd6 10 Kg5 Be8 11 Bb3
Ke5 with a draw.
9 . . . Ke5 10 Kf4 Kd6 11 Kg5 Be8 12 Kh6
Ke5 13 Kg7 Kf4. Draw.
White’s attempts to win were unsuccessful
in position 242.

242. 1 Kh4 Kf6 2 Kh5 Kg7 3 e4 Bd3 4 e5
Bg6+ 5 Kg4 Kf7 6 Bd5+ Ke7 7 Kf4 Bh7
8 g3 Kf8 (or 8 . . . Kd7 9 Be4 Bg8 10 Bf5+
Kc8 Bh7) 9 Be4 Bg8 10 Bf3 Kc7 11 Kg4
Kd6 12 Kf4 (12 Kh5 K×e5 13 K×h6 Be6
with a draw) 12 . . . Ke7 13 Kg4 Bb3 14 Be8
Kf7. Draw.

Averbakh–Veresov
Moscow, 1947

243.

243. If one of the pawns is a rook’s pawn,
and its queening square is of the opposite
colour to that of the bishop, additional
difficulties arise in trying to realize the advan-
tage.
Here White’s pawn cannot advance, and
his king cannot break through to the enemy
pawn on account of the black king’s strong
position. And even so White manages to win,
by exploiting the fact that the black pawn
is on a square of the same colour as the
bishop. If the pawn were at h6, White would
evidently be unable to win.

1 . . . Ba4.

If 1 . . . Be8, then 2 Bf3 Kf5 3 Be2! (3 Kd4?
Kf4 4 Bd5 Kg3 5 Kc5 K×h4 6 Bc6 B×c6
7 K×c6 Kg4 8 b5 h4, with a draw) 3 . . . Ke3
4 Bd3! Kd5 (4 . . . Bd7 5 Bg6 Kd5 6 B×h5
Bishops of the Same Colour

Kc4 7 Be2+ Kxb4 8 h5 Bf5 9 Bd3 Be6
10 h6 Bg8 11 Kd4 etc.) 5 Kf4 Kd4 6 Be2 Kc3
7 B×h5! B×h5 8 b5 and so on.

2 Bg6 Bd1 3 b5 Kd5 4 Kf4 Kc5 5 Kg5!
Be2!

In the event of 5 ... K×b5 there follows
6 B×h5 Be2 7 Be8+ Kc5 8 h5 Kd6 9 Kf6!
etc.

6 Be8!

Not 6 B×h5? B×b5 7 Bg4 Be8 8 Bf5 Kd6
9 Bg6 Ke7! with a draw.

6 ... Kb6 7 B×h5 B×b5 8 Bg4 Be8 9 Bf5
Kc7 10 Bg6 Kd8 11 Kf6!, and Black resigned.

It was not yet too late to go wrong—11
B×e8? would have led to a draw.

The following ending is highly instructive.

Eliskases–Capablanca
Semmering-Baden, 1937

244

244. 1 Ba6+ Kc6?

Curiously enough, this move is the decisive
mistake. White is intending to take his king
over to the K-side, in order to win the black
h-pawn, but if Black had played the correct
1 ... Kb8!, this manoeuvre would not have
won. For example: 2 Kb4 Bb7! 3 Be2 (3 Kb5
h5!, or 3 B×b7 K×b7 4 Kc5 h5! with a drawn
ending) 3 ... Bg2 4 Kc5 Kb7 5 Kd6 K×b6
6 Ke6 Kc6 7 Kf6 Kd6 8 Kg6 Ke7 9 K×h6
Kf8, with a draw.

2 Bc8! Bf1 (3 Ka6 was threatened) 3 Kg4
Bd3.

Black no longer draws after 3 ... Kb7

4 Bf3+ Kb8 5 Kb4 Ba6 6 Kc5 Bb7 7 B×b7
K×b7 8 h5!

4 Bf3+ Kd6 5 Bb7 Be2 6 Ba6!

The battle for the diagonals between the
bishops is most instructive. White restricts
the black bishop’s field of activity by driving
it off the f1–a6 and c8–a6 diagonals.

6 ... Bf3 7 Bf1 Bb7 8 Bb3 Ke7.

If 8 ... Kc5 9 Bg4 Kc4, then 10 Be2+
Kc5 11 Ba6 Bf3 12 Bc8, and the white king
penetrates to a7.

9 Kb5 Kd6 10 Bg4 Ke7 11 Kc5 Bg2 12 Be8
Kd8 13 Ba6 Bf3.

No better is 13 ... Kd7 14 Bc4 Kc8 15 Bd5
B×d5 16 K×d5 Kb7 17 Ke5 etc.

14 Kd6 Bg2 15 Be4 Kc8 16 Bd5 Bf1 (at last
the white king has cleared itself a way)
17 Ke6 Be2 18 Kf6 Kd7 19 Kg6 h5 20 Kg5
Kd6 21 Bf7 Ke6 22 B×h5, and Black resigned.

This example is instructive in that it
demonstrates the difficulties arising in the
realization of an extra pawn. Despite the fact
that there were five files between the pawns,
the win was rather complicated.

In position 245 the distance between the
pawns is three files. Let us see how this
reflects on the evaluation of the position.

Seibold–Keres
Correspondence, 1934

245

245. 1 Bd5 c3 2 Kd3 Bf5+ 3 Ke2 Bd7 4 Bc4
Ke4 5 Bd3+ Kd4 6 Ba6 Bg4+ 7 Ke1 Ke5
8 a4.
Black was threatening ... Kb4-a3, for example: 8 Bb7 Kb4 9 Bd5 Ka3 10 Bc4 a5
11 Bb3 a4 12 Bc2 Kb4 13 Be4 a3 14 Bd5 Kc3
15 Bf7 Kb2 16 Bd5 Bf5 17 Ke2 Bb1 18 K×e3
B×a2 etc.

8 ... Kb4 9 Bb5 Ka5 10 Be8 a6 11 Bc6
Kb6 12 Be8 Kc5 13 Kf1 Be6 14 Ke2 Kd4
15 Be6 Be4+ 16 Ke1 Kc5 17 Bd7 Kb4 18
Bc6 a5 19 Bd7.

Black has carried out the standard plan. He has taken his king up to the white pawn,
and is now ready to win it. The defence which White has chosen is undoubtedly the
best. The pawn must be on a square of the same colour as the bishop, so that it can
be defended.

19 ... Bb3 20 Ke2 B×a4 21 Bg4!!
The only move to draw. 21 Be6 Bb5+
22 K×e3 Kc3 and 21 Bf5 Bh5+ 22 K×e3
Kc3 both lose.

21 ... Kc3.

On 21 ... Bb5+ there follows 22 K×e3 a4
23 Kd2, with a draw.

22 K×e3 Bb5 23 Bd1 Bc4 24 Ba4. Draw.

Note that Black would not have won by
4 ... a5 5 Bd3 a4 6 a3! Bc6 7 Bc2 Bb5+
8 Ke1 Ke5 9 Bd1 Kd4 10 Be2 Kc4 11 Bd1
Kc3, as White draws by the study-like
12 Bc2!!

But in the course of the play White made
a mistake, which Black failed to exploit. Thus
1 Bd5? was wrong, a draw being given by
1 Kd2! e3+ 2 Ke1. Black in turn went wrong
with 2 ... Bf5+ ?, instead of which 2 ...
Bd7?! (or 2 ... Bc8) was correct, for example:
3 Ke2.

Or 3 Bc4 Kf3 4 Kd4 Kf2 5 a3 Bg4 6 Ke5
Be2 7 Be6 Bf1 8 Bg4 a5 9 Kf4 a4 10 Bh5 e2
11 B×e2 K×e2, and Black wins.

3 ... Bb5+ 4 Ke1 a5 5 a3 Ke5 6 Bb3 Kd4
7 a4.

Or 7 Bc2 Kc3 8 Bd1 Bc4 9 a4 Bb3, and
wins.

7 ... Bd7 8 Ke2 (8 Bc2 Kc3 9 Bd1 Be8)
8 ... Bg4+ 9 Ke1 Kc3 10 Bd5 Bd7 11
Ke2 B×a4! 12 K×e3 Bb5! 13 Kf2 a4
14 Ke1 Kc2 15 Be4+ Kc1 16 Bd5 a3 17 Be6
Ba4 18 Bd5 Kc2 19 Kc2 Bb3, and Black
wins.

Here the position of the black bishop on the
d1–b3 diagonal proved decisive.

To conclude with, we will examine two
positions in which the passed pawn is a rook’s
pawn.

We know that a passed pawn is especially
effective if it can be supported by the king.

Keres–Lilienthal
Tallinn, 1945

246. White’s king is both supporting his
passed pawn, and hindering its advance.
The result will depend on whether or not
Black can succeed in not allowing the enemy
king out of the cage.

1 Kh7 Bd5 2 h4 Be4 3 h5 Bd5 4 Be8! (of
course, not 4 h6 Bf7! with a draw) 4 ... Be6

Alatortsev–Averbakh
Moscow, 1950

247 =
5 b6 Bf7 6 Bd7! Bc4 7 B×f5! (this is the whole point) 7 ... Kf7 8 Bd7 Bd3+ 9 f5 Kf8 10 Be6, and so on.

247. Black's king has great freedom of movement, but it is powerless to support the passed pawn or attack the enemy pawn. Black tried his last chance: 1 ... Be1.

Now White loses after 2 Bh6 Bd2! 3 Bg7 Kc3 4 Bh6+ K×f3 5 B×d2 h2.

But after 2 Kg1! Black was unable to achieve anything: 2 ... Bd2 3 Bf6 Ke2 4 Kh2 K×f3 5 K×h3, with a draw.

The fact that Black had a rook's pawn proved unfortunate. If position 247 is shifted one file to the left, 1 ... c4 followed by 2 ... Kd3 wins easily, whereas here 1 ... f4 is met by 2 B×f4!

2.5 ENDINGS WITH A LARGE NUMBER OF PAWNS

In this chapter we will be examining positions where each side has at least two pawns.

2.51 Exploitation of an extra pawn

In endings with a large number of pawns, an extra pawn is normally enough to win. The winning plan can be divided into the following basic steps:

1) The king and bishop take up their best positions.

2) The pawns are arranged in the most advantageous way possible—the creation of a passed pawn is prepared.

3) Having improved the positioning of the pieces and pawns, a passed pawn is created and advanced with the king's support.

Subsequent events depend on the plan of defence:

4) If the opponent attempts to blockade the pawn with his bishop, the king and bishop drive away or block out the bishop, thus ensuring the further advance of the pawn.

5) If the pawn is blockaded by the enemy king on a square inaccessible to the bishop, the further advance of the pawn is impossible. But, exploiting the fact that the enemy king has been diverted by the pawn, the stronger side takes his king to the pawns on the opposite flank, where it makes a decisive gain of material.

We will meet with various details of the plan in the analysis of the following examples.

Averbakh, 1954
Fine, 1941

248. Observe how White realizes his advantage.

1 Kf1 Kf8 2 Ke2 Ke8 3 Kd3!

The king heads for the best square, c4, where it can support the creation of a passed pawn.

3 ... Kd7 4 Ke4! (improving the king's position has been carried out) 4 ... Kc6 5 Bc3 g6 6 b4 Bb6 7 f3 Bc7 8 a4 Bb6 9 Bd4.

The bishop has also taken up a strong central position, from where it can support the future passed pawn on the b-file.

9 ... Bc7 10 h5+.

Since the pieces and pawns are positioned as well as possible, the next step can begin.

10 ... a×b5 11 a×b5+ Kb7.

The attempt to stop the pawn with the bishop is unsuccessful: 11 ... Kd7 12 b6 Bg3 13 Kd5 Bf4 14 Be5 etc.
12 Kd5.
All according to plan. With his passed pawn White has diverted the black king, gaining the opportunity to take his king over to the enemy pawns.

12 ... Bb8.
If 12 ... Bf4 13 Be5 Be3, then 14 Kd6, and in return for the b-pawn White wins at least two pawns on the K-side.

13 h6 Bb2 14 Be5 Bg1 15 Kd6 K×b6
16 Ke7 Kc5 17 K×f7 Kd5 18 Bg7 h5 19 K×g6 etc.

This was an idealized example. White carried out his plan without difficulty, and Black had no way of countering it. In practice it more often happens that the implementation of the plan involves certain difficulties—the weaker side has counter-chances, which have to be reckoned with. We will subsequently examine a number of such positions.

In position 249 Black has no need to create a passed pawn—he already has one. He must first improve the position of his king.

Nei-Kan
Moscow, 1952

249. 1 ... Ke8 2 Ka3 Kd8 3 Kb4 Kc7
4 Be4 Kb6.
The one square through which the black king can penetrate (c5) is defended by the opposing king. Black therefore sacrifices his passed pawn to divert the white king, so as to break in with his king via c5, which is bound to lead to a material advantage.

The game continued: 5 Bg2 Bc2 6 Bf3 Bb3
7 Bc6 Bc2 8 Bb2.
If 8 c4, then after 8 ... a3! 9 Bb1 Bc2!
10 Ba2 Bf5 11 Bb3 Bb1! 12 K×a3 Ke5
13 Kb2 Kd4! (13 ... Bf5? 14 Ke3, and the black king cannot break through) 14 c5
d×c5 15 d6 e×d6 16 B×f7 Be4 17 Bg8 d5
18 B×h7 d4 19 g5 d3 20 B×g6 d2 Black again wins.

8 ... a3! 9 K×a3 Ke5 10 Be4 Be2 11 f5
Be4 12 f×g6 h×g6 13 Bf3 B×d5 14 h5
g×h5 15 B×h5 Ke4 16 Kb2 Kd4 17 g6 f×g6
18 B×g6+ Kd2 19 Be8 Bc4 20 Bh5 e5
21 Bg6 d5, and White resigned.

Here we encountered an important device: for the sake of a positional advantage (active king) Black sacrificed his material advantage (his extra pawn). In turn, the active king led to new material gains. It would not be an exaggeration to say that, in endings with bishop of the same colour, an active king is worth a pawn.

This interesting device, which can be called a transformation of advantages, will be encountered in many subsequent examples.

White’s task is more difficult in the following position.

Fine-Kashdan
New York, 1938

250. It seems impossible for White's king to break through to the black pawn on the Q-side, but it is this plan that leads to a win.

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Bishops of the Same Colour

1 Kf2 Kd8 2 Ke3 Kc7 3 Kd4.

The king has been centralized, but that is not the aim of its journey. It has to approach the black a-pawn.

3 ... a5.

After 4 Kc4 Black would all the same have been forced to play this, in view of the threat of 5 Kb4.

4 Bd3.

White begins improving the position of his bishop, which has to help the king penetrate to b5.

4 ... Be8 5 Bc4 Bd7 6 Bb3!

This forces Black's reply, since on 6 ... Kb7 there follows 7 c6+! Bxc6 (7 ... K×c6 8 Ba4+ Kc7 9 B×d7 K×d7 10 Kc5, with a won pawn ending) 8 B×e6 Kc7 9 Ke5, with an easy win.

6 ... Bc8 7 Ba4! Ba6! (the game went 7 ... Bb7 8 Kc4 Ba6+ 9 Bb5 Bb7 10 Kb3, when Black resigned, since he loses his a-pawn).

Now how is White to break through? To free a path for his king he has to sacrifice his passed pawn.

8 c6! Kb6! 9 c7! Be8 10 Be8 K×c7 11 Ke5.

By the pawn sacrifice White has improved still further the position of his king.

11 ... Ba6 12 Ba4 g5 13 Bb3 Be8 14 Kb5 Bd7+ 15 K×a5.

Thus White has achieved his aim: he has exchanged his c-pawn for the a-pawn. The way for the white king is open, and the rest does not cause any difficulty.

15 ... Kb7 16 Ba4 Be8 17 Kb5 Bd7+ 18 Kb4 Be8 19 Ke5 Kc7 (otherwise 20 Kd6)

20 Bb3 Bd7 21 a4 Be8 22 a5 Bd7 23 a6 Bc8

24 Be4 Bd7 25 Bb5 Be8 26 g4, and Black can resign.

Readers of the magazine Shakhmaty v SSSR found an alternative winning plan: 1 c6! Bc8 2 a4 a5 (otherwise 3 a5) 3 Bd3! Kd8 4 Kf2 Ke7 5 Bb5 Kb6 6 Ke3 Kc5 7 Ke4.

A pawn sacrifice with the aim of invading the enemy position with the king is a typical endgame device. In the following example a sacrifice of this type leads to a won pawn ending.

Donner–Smyslov
Havana, 1964

251.

[Diagram]

251. In order to win, Black must be able to break through to the K-side pawns with his king. The way that he fulfills this task is instructive.

1 ... Bh6+ 2 Kc2 d3+ 3 Kd1 Kd4 4 Bf2+ Kc5 5 Bb6 d2! (otherwise the K-side cannot be reached) 6 Bf4 Kd3 7 Bb6 Bf4 8 Bf2 Bb5 9 Bg1 h4!

Black arranges his pawns in readiness for the coming pawn ending.

10 Bf2 Bc3 11 Bg1 Bd4! 12 B×d4.

Or 12 Bh2 Ke3 13 Bg1+ K×f3! 14 B×d4 Kg2 15 K×d2 K×h3 16 g5 Kg2 17 Ke3 h3 18 Be5 h2, and again Black wins.

12 ... K×d4 13 K×d2 Ke5 14 Ke3 g5, and White resigned.

The finish could have been: 15 f4+ (15 Ke2 Kf4 16 Kf2 f6) 15 ... g×f4+ 16 Kf3 f6 17 Kf2 Ke4 18 Ke2 f3+ 19 Kf1 Ke3 20 Ke1 f2+ 21 Kf1 Ke4! 22 K×f2 Kf4, when Black wins.

Note that all White's troubles here resulted from the weakness of his f-pawn. If, for example, his g4 pawn had been at g2, his f3 pawn would have been securely defended, and Black would have been unable to realize his material advantage.

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252. Black has to decide on how to attack the enemy pawns. He has two possibilities: he can attempt to break through either on the Q-side, or on the K-side.

1 ... f5.

As Botvinnik showed, simpler was 1 ... Bd6 2 Bf2 Bc5 3 Be1 Kb6 4 Bd2 Bd6 5 Kd4 Kc6 6 Be1 Be5+ 7 Kd3 Kc5 8 Bd2 Ba1 9 Be1 d4 10 Bd2 Bc3! (the familiar sacrifice of a pawn, with the aim of creating invasion squares) 11 Bxc3 dxc3 12 Kxc3 a5, and in the end White will be forced to give way to the black king.

After the move played, this plan no longer works: 2 Bf2 Bd6 3 Bd4 g6 4 Bc3 Bc5 5 Bg5, and by attacking the opposing king from the rear, the bishop does not allow it to approach. However, Black has an alternative, although more complicated plan—a break-through with his king on the K-side. But for this he must create invasion squares there.

2 Bf2 Kd6 3 Ba7 Ke6 4 Be3 Kf6 5 Bd2 Kg6 6 Ke2 Kh5 7 Be1 Kg5 8 Bd2+ Kh4 9 Be1+ Bg3 10 Bc3 g5.

Black consistently carries out his plan. He has brought his king up to the starting point for a breakthrough, and now intends to open lines.

11 Bd4 g4 12 Bf6+ Kh5 13 h×g4+ f×g4 14 Bd8 Bf4 15 Be7 g×f3+!

In the game Black played 15 ... g3?, eliminating the possibility of a break-through, and after 16 Kd3 Kg6 17 Kd4 Kf7 18 Bh4 Ke6 19 Bd8 h5 20 Bh4 Kd6 21 Bf6 Kc6 22 Bh4 it became clear that the black king's entry was blocked, and that there was no longer a win.

16 K×f3 Be5 17 Bd8 Kg6 18 Be7 Kf5 19 g4+ (otherwise 19 ... h5) 19 ... Kg6 20 Bd8 Bf6 21 Ba5 Kg5.

At last the invasion squares on the K-side have emerged. It is true that, with few pawns remaining, definite accuracy is required of Black.

22 Be1 d4 23 Kg3 Be5+ 24 Kf3 Bc7 25 Bd2+ Kh4 26 Be1+ Kh3 27 Bd2 Bd8 28 Bf4 d3 29 Bd2 Be7 30 Bf4 Bb4 31 g5 Be7 32 Ke3 Kg4 33 Be5 B×g5+ 34 K×d3 Kf3, and Black wins.

Petrosian-Zeinalli
Leningrad, 1946

253. Although White has only the slight material advantage of a doubled pawn, he has a solid positional advantage. Black's pieces are cramped, and his pawns are on squares of the colour of his bishop, which means that they can become targets for attack.

White's task would not be difficult if he had some entry squares into the enemy position, but there are none. The attempt to break through on the K-side by playing his king to f2 and advancing g3-g4 is frustrated by ... h4. His only chance is to sacrifice a pawn with the aim of vacating squares on the Q-side.
1 a6! b×a6 (or 1 ... b6 2 a4 followed by 3 c×b6+ and 4 a5+) 2 Ka5 Kb7!

All the same the pawn cannot be defended. In the game Black played the weaker 2 ... Bc8 3 h4 Bd7 4 B×a6 Be8 5 Bc8 Bf7 6 Bd7 Kb7 7 a4 Ke7 8 Ka6! K×d7 9 Kb7, when he was powerless to stop the a-pawn. 2 ... Kb7 is significantly stronger.

3 B×a6+ Kc7! 4 Bc4 Kb7!

White has improved his position and has created a passed pawn. But Black continues to prevent the breakthrough of the king, and for the moment it is not clear how White is to achieve this.

5 h4 Ke7.

5 ... Be8 is decisively met by 6 Ba6+, and 5 ... Ka7 by 6 Ba6 Be8 7 Bc8 Bf7 8 Bd7 Kb7 9 a4, as in the game. Black intends to allow the white king to reach a7 or a8, since there it will all the same be in the way of its own passed pawn.

6 Ka6 Be8+ 7 Ka7 (step by step White carries out his plan) 7 ... Bd7 8 a4 Be8 9 a5 Bd7 10 Ba6 Be8 11 Bc6!!

A surprise blow, which wrecks Black's plan.

11 ... K×c8.

Clearly forced, since if 11 ... Bf7, then 12 Bd7!! (the bishop feels perfectly at home in the enemy position) 12 ... Bg8 13 Be8 Bh7 14 Bf7 etc.

12 Kb6 Kb8 13 a6 Ka8!

Or 13 ... Bd7 14 a7+ Ka8 15 Kc7 Be8 16 Kd8 Bf7 17 Ke7 Bg8 18 Kf8 Bh7 19 Kg7 (cramped by its own pawns, the normally swift-moving bishop cannot escape from the king!) 19 ... K×a7 20 K×h7 Ka6 21 K×g6 Kb5 22 Kf6 K×c5 23 K×e6 Kd4 24 K×f5 c5 25 e6, and the white pawn queens first.

14 Kc7 Ka7 15 Kd8 Bf7 16 Ke7 Bg8 17 Kd7!

17 Kf8 Bh7 18 Kg7 prolongs the game, since after 18 ... K×a6 19 K×h7 Kb5 20 K×g6 K×c5 21 K×h5 Kd5 Black also queens.

17 ... Bf7.

On 17 ... K×a6 there follows 18 K×c6 Bf7 19 Kd7, when Black has to give up his bishop for the c-pawn.

18 K×c6 Be8+ 19 Kd6 K×a6 20 c6 Kb6 21 c7 Kb7 22 Ke7!, and White wins.

We have seen that the existence or absence of invasion squares is an important factor in the evaluation of bishop endings. In fact this is a highly important feature in almost every type of ending. Even a big material advantage may prove useless, if there are no invasion squares into the opponent's position.

Grigoriev, 1934

254

254. Apart from his extra pawn, White also has a positional advantage. The black pawns can be attacked by his bishop, and the black pieces are cramped. White has an advantage in space—he has more manoeuvring freedom. But there are no invasion squares, and it seems impossible for him to win.

The attempt to create a passed pawn by 1 g4 has no effect, since the black king will securely blockade it. But even so White can win.

1 Bf3! Bb7 2 Ke3 Ba8 3 Ke4! Bb7 4 Kf4! Ba8.

By means of 'triangulation' White has forced the bishop to occupy the very worst square—a8.

5 B×h5!!

Exploiting the poor position of the black
Large Number of Pawns

bishop, White sacrifices a piece so as to invade with his king and create a passed pawn.

5 ... Kxh5 6 g4+.

Now Black has two possibilities:

a) 6 ... Kxh4 7 g5 fxg5 + 8 Ke4! Kh5 (8 ... g4 9 f6 g3 10 Kf3 Kh3 11 f7 g2 f8=Q g1=Q 13 Qh8 mate) 9 Ke5 g4 10 f6 g3 11 f7 g2 12 f8=Q g1=Q 13 Qh8+, and wins.

b) 6 ... Kh6 7 g5+ Kg7 8 h5! Bh7 9 h6+ Kf7 10 gxf6! Kxf6 11 h7 Kg7 12 Ke5! Kxh7 13 Kd6, and White wins.

In the examples considered the stronger side experienced difficulties in realizing his advantage, due to a direct breakthrough with his king being impossible. He had to resort to sacrifices of material in order to make the breakthrough.

If the opponent has a passed pawn or the possibility of creating one, this can lead to serious counter-play, and the material advantage will not play such an important role. Victory goes to the side which is able to queen a pawn first.

Duras, 1906

255

255. Black is threatening to win by 1 ... f3, so that White's first move is forced: he has to deploy his bishop so as to combat the f-pawn in the best way possible.

1 Ba3 Ke4 2 Be7! f3 3 Bd8!

An extremely important move, gaining a tempo. The loss of the h-pawn is unimportant.

3 ... Bxh2 4 Bb6 Kh5 5 a6 g4 6 Bf2 Bc7 7 b8=Q+!! Bxb8+ 8 Kb7!

The roles are reversed. Now Black is a pawn up, but his bishop is badly placed, and this proves decisive.

8 ... Ka5 (position 225) 9 Bh4! Kb5 10 Be1!

Black is in zugzwang. He is forced to continue 10 ... g3 11 Bxg3 Bxg3 12 a7 f2 13 a8=Q f1=Q, and after 14 Qa6+ he loses his queen.

Positional defects may be so serious that it will be impossible to realize a material advantage. This is the case in position 256.

Kotov–Estrin
Moscow, 1952

256

256. White is a passed pawn to the good, and his king must either support its advance or else break through to the black pawns. But neither the one, nor the other, proves possible, since he must constantly concern himself with the defence of his weak pawn at f2. For example:

a) 1 Bc3 Bc5 2 Be1 Kc6 3 Kd1 Bb6 4 Ke2 Ke5 5 Ke3 Kxc4+ 6 Kxc4 Kb3 7 Kf4 Kxa4 8 Kxg4 Kb3 9 Bxa5 Bxf2, with a draw.

b) 1 Ke2 Bg5 + 2 Ke2 Ke6 3 Be3 Kb6!

It is interesting that if 3 ... Kc5?, then 4 Bxa5 Kxc4 5 Bb6! Kb4 6 a5 Kb5 7 Kd1 Be7 8 Kd2! Bg5 + 9 Kc3 Bf6 + 10 Kb3 Bg5 11 Be3, 12 a6! and 13 Ke4, and White wins.
4 c5+ Kxc5 5 Bxa5 Ke6!
Black must not permit Bb6 followed by a4–a5.

6 Bd2 Bd8 7 Be3 Ba5 8 Bd2.
If 8 Kd1, then 8 ... Kd5 9 Ke2 Kc4.
Black’s task is more difficult after 8 Ba7 Kd5 9 Ke3, when he draws by 9 ... Ke5
10 Bb8 + Kd5 11 Kf4 Bb6 12 Kxg4 Bxf2
13 a5 Kc6 14 a6 Bxg3!

8 ... Bd8 9 a5 Kd5 10 Be3 Bg5, and the white king cannot approach the pawns.

Keres–Lilienthal
Tallinn, 1945

7 ... Ke6!
The only move to draw, which Black failed to find. The game went 7 ... Bg8? 8 Bg6
Bxd5 9 Kh5 Kf6 10 Kxh6 Be6 11 Kh7, and White won (position 246).
Now White’s winning attempts are unsuccessful:
a) 8 Be8 Ke7 9 Kh5 Kxe8 10 Kxb6 Bg8
11 d6 Kd7 12 b4 Bf7!
b) 8 Bf7 Ke7 9 Kh5 (if 9 Be6, then 9 ... Bg6
10 Kg3 Kd6 11 Kf2, and here 11 ... Bh5
gives a draw, since after the exchange of
pawns a drawn ending is reached) 9 ... Kxf7 10 Kxb6 Bg8 11 d6 Kf6!
When all the pawns are on one wing,
again it often proves impossible for the king
to break through to the enemy pawns. In this
case the game ends in a draw. Here is a typical
example.

Stahlberg–Fine
Kemeri, 1937

257. White has a clear plan—to attack the
h6 pawn with his king. Can Black prevent
this?
1 Kg3 Be8 2 Kh4 Ke6 3 Be6 Bg6 4 Bh3
Kd6 5 Bd1! Ke7?
5 ... Kd5 loses after 6 Bh5 Bh7 7 Bf7 +
Kxd4 8 Kh5 Ke4 9 Kxh6 Kxf4 10 h4
Kg4 11 h5 etc.
6 Bh5.
In the game this move was made later.
Note that after 6 Be2 the only way to draw
is by 6 ... Kf8! If instead 6 ... Kf6, then
7 Bh5 Bh7 8 Be8 Ke7 9 Kh5!! Kxe8 10
Kxh6 Bg8 11 Kg6, and White wins.
6 ... Bh7 7 d5.
7 Be8 Kxe8 8 Kh5 Kf7 9 Kxh6 Bg8
10 Kg5 Ke6 11 h4 leads only to a draw, for
example: 11 ... Bh7 12 h5 Bg8 13 h6 (13 Kg6
Bf7+) 13 ... Bh7 14 d5 + Kxd5 15 Kf6
Kd6 16 Kg7 Ke7! 17 Kxh7 Kf7 etc.
Large Number of Pawns

258. 1 ... f6 2 Ke5 Bd7 3 Bg8 h6 4 Kd5 Ba4 5 Kd4 Bd7 6 Bc4 Ba4 7 Bd3 Be8 8 h4 g5 etc.

We already know that an active king position is often worth a pawn. In order to obtain position 259, White sacrificed a pawn.

259. After 1 a3 Bf7 2 Bh5 Kf6 3 Kd4 g5 4 Bd3 g×h4 5 g×h4 Be6 6 Be2 Bg4 7 Bd3 Bf3 a draw was agreed. The strong position of the opposing king together with the weakness of the h5 pawn prevent Black from winning.

2.52 Positional advantage

The evaluation of a bishop ending will depend on the pawn formation, and on the positions of the bishops and kings. These factors, in turn, are interdependent, and can change. Of them the most definite and stable is the pawn formation, and it is for this reason that we take the arrangement of the pawns as the basis of our classification.

Earlier we saw that a positional advantage can be equivalent to a material one, and that one form of advantage can be transformed into the other. Here we will examine positions where one of the sides possesses a definite positional advantage, and we will set ourselves the task of establishing the nature of the advantage and its method of realization.

2.521 Passed pawn

The existence of a passed pawn, or the possibility of creating one, is one of the important factors in the evaluation of a position.

In position 260 White has a dangerous passed pawn, which Black can stop only with his bishop.

V. Platov, 1922

260

260. 1 a6 B×d3 2 a7 Be4+ 3 f3! B×f3+.

If 3 ... K×f3, then 4 Bg6!, diverting the bishop from its main task of stopping the passed pawn.

4 K×h2 d4 5 Bh5! g4 6 B×g4.

The bishop cannot cope with the passed pawn.

A classic example of the creation of an outside passed pawn is provided by the following example.

Goglidze–Bannik
Riga, 1954

261

261. 1 e5! f×e5 2 f5 g×f5 3 g5!! h×g5 4 h×g5.

In spite of his big material advantage, Black is powerless to save the game. For example: 4 ... e4 5 g6 e3+ 6 Ke1 Bb5 7 g7 d3 8 g8=Q d2+ 9 Kd1 Ba4+ 10 Bb3 etc.

In the game itself White played 1 g5, and after 1 ... f×g5 2 f×g5 h×g5 3 h×g5 Kb5 4 Bf7 K×b4 5 B×g6 Kc5 Bh7 Bc4 8 g6 Kd6 a draw was agreed.

94
It happens more often that the opposing king is able to take part in the battle against the passed pawn. Then it is very important to divert the king from fulfilling this task, or, on the contrary, to use the passed pawn to divert the king and break through to the opponent’s pawns.

Balogh–Barcza
Budapest, 1946

262. Black has the possibility of creating a passed pawn on the K-side, and his king is much more active than the opponent’s.

Two of White’s Q-side pawns are doubled, so that he is unable to create a passed pawn. Thus Black has virtually an extra pawn, and therefore he wins.

The winning plan does not differ in any way from the one already examined. Black first improves the positions of his pieces, and then creates a passed pawn, which diverts the enemy king, after which the black king goes across to the opponent’s pawns, gaining a material advantage. Thus the method of realizing a positional advantage consists of transforming it into a decisive material advantage.

There followed: 1 ... Kf6 2 Kf2 Ke5 3 h4.

If 3 Ke3, then 3 ... g5 4 Bf1 f4+ 5 g×f4 g×f4+ 6 Kd3 Be4+ 7 Kc3 f3, and the black king advances to g3.

3 ... Kd4 4 Be2 Be4 5 c5 h6 6 Bf1 g5 7 h×g5 h×g5 8 Be2 f4 9 g×f4 g×f4 10 Bf1 Be6 11 Be2 Ke4 12 Be4 f3! 13 Be6 (13 Bf1 Kd4) 13 ... Kd3 14 Bh3 Kd2, and White resigned, since he loses all his Q-side pawns.

Eliskases–Capablanca
Semmering-Baden, 1937

263. White can win the a-pawn, but after 1 B×a6 Kb6 2 Bd3 c5 3 b×c5+ K×c5 Black gains drawing chances, in view of the active position of his king and the small number of pawns. Therefore White first improves the placing of his pieces.

1 Kd4! Kb6 2 Be4! Bg4 3 e5 f×e5+ 4 f×e5 h6 5 h4 Bh5 6 e6 Be8, and here the simplest way to win was by 7 e7, for example: 7 ... Bh5 8 Ke5 c5 9 b×c5+ K×c5 10 B×a6, and the e-pawn will cost Black his bishop.

If both sides can create or already have passed pawns, then, all other things being equal, the more distant passed pawn will be the stronger.

Geller–Tan
Petropolis, 1973
Large Number of Pawns

264. In order to win, White must create an outside passed pawn, divert the opponent's king with it, and break through with his king to the K-side pawns. The one thing that he has to fear is that the opponent may set up a fortress, since in this case a break-through may prove impossible.

1 Ke2 Ke6 2 Bb4 d4.

Apparently an anti-positional move: Black voluntarily places his pawn on a square of the colour of his bishop, which is normally unfavourable. But in the given position there is a reason for this—Black's king becomes active, and may gain the possibility of attacking White's Q-side pawns.

3 Kb3.

Natural moves such as this are usually made without much thought, but in fact this move by White is a poor one, which loses him the greater part of his advantage. The correct continuation was 3 a5!, for example: 3 ... Bc7 (3 ... d3+ 4 Kxh3 Bxf2 5 Kh4 and 6 Bc5) 4 Bc5! Kd5 5 Bxa7 Bxa5 6 Kb3 Bc3 7 Bb6 Bb2 8 Bd8 Kc5 9 b6 Kc6 10 Bf6, and after winning the d-pawn White must win, although not without overcoming technical difficulties.

3 ... Kd5 4 Bf8.

After 4 a5 Bc7 the bishop can no longer go to c5, which means that White is faced with the new problem of how to create a passed pawn on the Q-side.

4 ... Ba5 5 Bg7 Bb6 6 f3 h5 7 h4.

One feels inclined to attach a question mark to this move, since it is obviously anti-positional. However, I can understand why Geller decided on it. The point is that 7 Bf6 fails to win after 7 ... Kc5! 8 Bxh4+ Kb4, when Black succeeds in exchanging his weak d-pawn for a healthy opposing pawn, and he fully equalizes. Seeing that he will be unable to win by normal means (the result of his mistake on the 3rd move), Geller resorts to extreme measures—he earmarks for the h4 pawn the role of a bait, and simulta-

neously fixes the pawn at g6, hoping to approach it with his king.

7 ... Bc5.

The bait plays its part! This move loses, whereas after 7 ... Kc5 8 Bf8+ Kd5 9 Bb4 Bd8 10 Be1 Kc5 Black would have had no worries about the future.

8 a5 Bb4 9 b6 axb6 10 a6.

White stumbles over easy ground. After the natural 10 a6 Bc6 11 Kxh4 Black seems unable to save the game, for example:

a) 11 ... Be7 12 Ke5 Bxh4 13 Ke6 Bd8 14 b7! Kxb7 15 Bf6 Bb6 16 Kf7 Kc6 17 Kxg6 f4 18 Kxh5 Kd5 19 Kxg4 Be3 20 Kf5, and White must win.

b) 11 ... Kxb6 12 Kd5 Be7 13 Ke6 Bxh4 14 Kf7 f4 (14 ... g5 15 Bf6) 15 Kxg6 Kc5 16 Kxh5Bg3 17 Kg4 Kd5 18 Kf5, with the same result.

10 ... Kc6 11 Bxh4 Be1.

Once again the bait has an effect! This move loses, whereas after 11 ... b5! 12 Bf2 Ba5 13 Kc2 Bb4 14 Kb3 Bd2! Black maintains the balance.

12 a7 Kb7 13 Bxb6 Bg3.

No better is 13 ... Bxh4 14 f4Bg3 15 Be3, when the white king approaches the g6 pawn. Now everything has fallen into place—White's outside passed pawn plays the deciding role by diverting the opposing king.

Averbakh–Veresov
Moscow, 1947
Bishops of the Same Colour

14 Ke2 Be5 15 Bf2 Bd6 16 Kd3 Bc7 17 Kc4 f4 18 Kd5 Bd8 19 Ke5 g5 20 Bxg5 Bxg5 21 Kf5 Bh6 22 Bc5, and Black resigned.

265. On a static evaluation of this position, it might seem that Black has the advantage: he has a passed pawn, his king is the more actively placed, and White’s Q-side pawns are on squares of the colour of his bishop. But in the endgame it is very important to be able to evaluate a position dynamically—taking account of the changes that can take place. Examining position 265 from this point of view, we see that Black’s passed pawn is blockaded by the king, while White’s Q-side pawns can advance and create a more dangerous passed pawn, since it is further away from the opposing king. Also, Black’s K-side pawns can be fixed on white squares, and it follows that they will have to be defended, which in turn will tie down the black pieces. Thus in fact White has a big positional advantage.

1 h4!
Black’s pawns must be fixed on white squares.

1 . . . Bd7 2 Bf1 a5 3 Bg2! Bc6.
3 . . . Bf5 leads to zugzwang after 4 Bh1!
4 Bh3!

With every move White improves his position. His bishop is becoming more and more active, while Black’s bishop, which is forced to defend his weak pawns, becomes more and more passive. A bishop whose activity is restricted is called ‘bad’. Thus a “bad” pawn formation leads to a ‘bad’ bishop.

a) 4 . . . b5 (for the game continuation 4 . . . Ba8, cf. variation ‘b’) 5 cxb5 Bxb5 6 Bc8 Bc6 7 h4 a×b4 8 a×b4 Bb5 9 Bb7 g5.

The best chance. On 9 . . . Bd3 there follows 10 Be6 Kf5 (or 10 . . . g5 11 h×g5 Kf5 12 g6 etc.) 11 b5 Kg4 (11 . . . B×b5 12 B×b5 Kg4 13 Kf2 e3+ 14 Kg2! etc.) 12 b6 Ba6 13 Kf2 c3+ 14 Kg2, and wins.
10 B×e4 g×h4 11 g×h4 Ba4, and we reach position 243, which is won for White.

b) 4 . . . Ba8 5 Bd7 Bb7 6 b4 a×b4 7 a×b4 Ba8 8 c5 b×c5 9 b×c5 Kd5.

Or 9 . . . Bd5 10 Be8 Kf5 11 c6! Kg4 12 c7 Be6 13 B×g6 K×g3 14 B×h5 K×h4 15 Bf7! Bc8 16 K×e4 Kg5 17 Kc5 Ba6 18 Be6 Bb7 19 Bh3 Ba6 20 Kd6 Kf6 21 Ke6 etc.

10 Be8 g5!

Or 10 . . . K×c5 11 B×g6 Kd6 12 B×h5 Ke5 13 Bg6 Bc6 14 g4 etc.

11 h×g5 K×c5 12 Bg6! Bd5 13 B×e4 Bg8 14 Kf4 Kd6 15 Kf5 Ke7 16 Kg6, and White wins.

We must once again mention the important feature of a passed pawn—its ability to divert the enemy king. It is this that constitutes its strength.

Lisitsin–Levenfish
Leningrad, 1932
of the h-pawn, or to the advance of the b-pawn.

5 f4 Bb2.

5 ... Kg4 6 Ke4 Be7 7 f5 b4 8 Bxb4 Bxb4 9 Ke3 Kg3 10 Ke2 Kg2 11 f6 leads to a draw.

6 Bd2 Bg7 7 Bb4 Bf6 8 Be1 Be7! (forcing White to move his king) 9 Kf3 Bd6 10 Bd2 Bc7! 11 Bc3 Bxf4 12 Bb4 Be5 13 Ba5 Bf6 14 Be1 Be7! 15 Kg3 Ke4, and Black wins most simply by taking his king directly over to the b-pawn. For example: 16 Ba5 Kd3 17 Be1 Kc4 18 Kf3 Bb4 19 Bg3 Bc3 20 Bd6 Bd4 21 Be7 Be5 22 Bd8 b4 23 Ke2 b3 24 Kd2 Be3+ 25 Kd1 Kd3 26 Bf6 Bd4 27 Bxd4 Kxd4 28 Kd2 Kc4 etc.

But White's 1st move was not the strongest. By 1 f4! he could have drawn, for example:

1 ... Be1 2 f5+ Kf7 3 Kd5! Bf2.

3 ... Bxh4 4 Kc5 Bf2+ 5 Kxh5 h4 6 Kc4 Bg3 7 Kd3!! Bxe5 8 Ke2 h3 9 Kf2 Bh2 10 Kf3, with a draw.

4 Ke6!

Not 4 Bc3 Bxh4 5 Kc5 Bg3 6 Kxb5 h4 7 Bd4 h3 8 Bg1 Kf6 9 Kc4 Kf5 10 Kd3 Be7! (10 ... Kf4? 11 Ke2 Ke4 12 Kf1 Kf3 13 Bf2! h2 14 Bg1/, with a draw) 11 Ke3 Kg4! 12 Kf2 Bxd6 13 Kf1 Kf3 etc.

4 ... b4 5 Kb5 Be1.

Or 5 ... b3 6 Kc4 Bg3! 7 Kxb3 Bxe5 8 Kc4, with a draw.

6 Ke4 Bxh4 7 Kxb4 Be1+ 8 Ke4 h4 9 Kd3. Draw.

The f-pawn played its part by diverting the black king.

In positions where both sides have passed pawns, the evaluation will depend on the proximity of the pawns to the queening squares, and on how effectively the pieces can prevent their advance.
2 b5 e3+ 3 Ke1 d3 4 Bf3 Be6 5 b6 a×b6 6 c×b6 Kd6 7 a4 Bb3! Black wins, since he threatens 8 ... d2+. 9 Kf1 Bc4+ 10 Kg1 e2 etc., and 8 Bd1 Bc4 does not help.

Alatortsev–Levenfish
Leningrad, 1934

269
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269. Here, on the contrary, the flank pawns are more dangerous that the central ones (the analysis is by Alatortsev).

1 ... e4 2 Ba6! Kd8 3 Bb5 g5 (or 3 ... Ke7 4 g5! Kd8 5 c6 e3+ 6 Kg3! Be4 7 Kf4 e2 8 c7+ Kc8 9 B×e2 etc.) 4 c6 b6 5 h3 e3+ 6 Ke2 Be4 7 c7+ Kc8 8 Ba6+ Bb7 9 Bd3! Be6 10 Bd5+ Bd7 11 Kd3, and White wins.

The game in fact went 1 ... g5 2 Ba6 Kd8 3 Bb5 Ke7 4 c6 Kd6 5 c7 Bb7 6 Bd3 Kc5 7 Bf5 K×b6 8 c8=Q B×c8 9 B×c8 e4 10 Bd5 e3+ 11 Kf3 h6 12 Bd3, and Black resigned.

When there are passed pawns on both wings, the most varied situations are possible,

Duras, 1906

270
+

271. 1 Ke3 Kd6 2 Bh3.

Having securely blockaded the enemy pawns, White can get down to the next step—that of activating his bishop before beginning to advance his pawns.

2 ... Ke5.

On 2 ... Ke7 there would have followed 3 Bf5 Kd6 4 Kd4 Ke7 5 Kg4 Kd6 6 g6, when White wins, since the bishop alone cannot cope with two far-advanced and widely-separated pawns.

3 Bd7 Bc4 (on 3 ... Kd6 there follows 4 Be8 Ke7 5 Bh5! Ke6 6 Kd4 Kd6 7 g6 etc.) 4 g6 Kd6 5 Be8 Ke7 6 a6! b×a6 7 b6! Bd5 8 g7 Kd8 9 b7 Ke7 10 Bc6! (the remainder is simple) 10 ...Bg8 11 B×e4 a5 12 Bc6! a4 13 B×a4 K×b7 14 K×f3 Ke7 15 Kf4, and White wins.
Large Number of Pawns

Position 272 could have arisen in the game Fridstein–Averbakh (Tula, 1950). Whose position is better?

Averbakh, 1956

272. White has a protected passed pawn, but all his pawns are on squares of the colour of his bishop, and require defending. Black has an actively placed king and the possibility of creating an outside passed pawn. It becomes clear that White has no winning chances, but does Black? We will consider some possible variations.

1 ... a4 2 Bf5 (if 2 Kc2, then 2 ... Bg6) 2 ... Be2+!! 3 Kc2 a3!

At first sight a surprising decision. Black does not create a passed pawn, but, on the contrary, eliminates the possibility of creating one. In fact, this is the strongest move. Black fixes the weak pawn at a2, and ties White’s king to the defence of it.

4 Kb1 (4 Bg6 loses immediately to 4 ... Bd3+!! 5 Kc1 b3 6 a×b3 Kd4! 7 d6 Kc3 and 8 ... a2) 4 ... Bd3+ 5 Ka1!

Black has markedly improved his position. White’s king cannot move, and his bishop is tied to the defence of his e4 pawn. But how is all this advantage to be realized?

5 ... Kd6!

An unusual solution. By placing his king at g7, Black puts his opponent in zugzwang.

6 Bb7 Ke7 7 Bg6 Kf6 8 Bb7 Kf7! 9 Bf5 Kg7!

The problem is solved, and now White has to advance his d-pawn.

10 d6 Kf6 11 d7 Ke7 12 Bg6 K×d7, and Black wins by advancing his king to d4.

But didn’t White have a stronger alternative? For example: 2 Bg4 Be8 3 a3!, and if 3 ... b3, then 4 Kc3 with a draw. No, in this case Black wins in similar fashion: 3 ... Bb5+ 4 Kc2 b×a3 5 Bf5 Bd3+ 6 Kc3 Kd6!, and the march of the king to g7 is again decisive.

Flohr–Zagorovsky
Minsk, 1952

273. This position is also difficult to evaluate. White has a strong protected passed pawn and the more active king, but his central pawns are on white squares and have to be defended. As for Black, he has the possibility of creating a passed pawn on the K-side. The continuation was:

1 Bd3!

This restricts the black bishop, and in fact prevents it from moving. The exchange of bishops after 1 ... Bg6 leads to a won pawn ending for White.

1 ... a4 2 b4 a3 3 b5!

Cramping Black’s bishop to the maximum extent, so that he has only king moves left.

3 ... Kg8 4 Kf4 Kf8 5 Kf5 Kg8 6 Kf6 h4.
If 6 ... Kf8, then 7 e7+ Kg8 8 Bg6 B×b5 9 B×h5 Bd7 10 B×g4 Be8 11 Be6+ Kh7 12 Bf7 Bd7 13 e8=Q etc.

Black tries his last chance—he attempts to create an outside passed pawn.
Bishops of the Same Colour

7 Ke7!
The game went 7 e7? g3 8 h×g3 h×g3 9 Bf1 Bd7, when the black bishop came to life, after which White no longer had a win.

7 ... g3 8 h×g3 h×g3 9 Be4 B×h5 10 K×d6.
The position is still sharp, but White’s pawns are the more dangerous.

10 ... Kf8 11 Ke5 Be4 12 d6 B×a2 13 e7+, and White wins.

We will conclude this section on passed pawns with an elegant study.

Kubbel, 1934

274.

274. Black has a strong passed pawn, which is threatening to advance. White finds the one possibility of halting its advance. 1 Bd6 + Kf7 2 Be5 Ke6 3 Bd4 Be1! 4 B×e3 Bd2 (Black has created a new threat) 5 Bg5 Kf5 6 f4 B×f4 7 Kh5! B×g5—stalemate!

2.522 Opposing pawns on squares of the colour of the bishop

If in the endgame one side has its pawns on squares of the colour of his bishop, this is normally a defect in the position. Firstly, these pawns can be attacked by the opponent’s bishop, and so have to be defended. Secondly, the squares between the pawns are inaccessible to the bishop, which may allow the enemy king to approach the pawns.

Kamishov–Shamayev
Correspondence, 1936

275

275. Black has a weak pawn at b7, to which his bishop is tied. Thus we see that a pawn weakness can lead to a reduction in the activity of the piece defending it. The bishop becomes ‘bad’.

1 Kd4 h5 2 h3 Kf5 3 Bh7? h4 4 Bk5 Kf4 (or 4 ... Kf6 5 Bf3, and Black is in zugzwang; he has to allow the white king in at e5) 5 Bf3 Kg3 (5 ... B×h3 6 B×b7, or 5 ... g4 6 h×g4 h3 7 g×h3! K×f3 8 Ke5!, and White wins) 6 Ke3 Kh2 7 Kf2! Kh1 8 g3+! Kh2 9 g×h4 g×h4 10 Bg4 etc.
Pawn weaknesses lead to a reduction in the activity of the pieces, which in turn can lead to zugzwang.

Smyslov–Keres
Moscow, 1951

276

276. Black has an undisputed advantage. White’s Q-side pawns need defending, and it follows that his bishop will be restricted. In addition, Black also has the better pawn
Large Number of Pawns

formation on the K-side, and he realized his advantage as follows:

1 ... Bb1 2 a3 a5! (fixing the pawns on white squares) 3 Bd1 Kg6 4 Kg2 Kf5 5 Kf3 Ke5.

White's bishop is immobilized, so that sooner or later he will run out of moves and end up in zugzwang.

6 a4 g5 7 Ke2 Bf5! 8 g4.

Clearly forced. On 8 h4 there would have followed 8 ... Bg4+, with a won pawn ending.

8 ... Bb9 Kf3 f5 10 g×f5.

If White avoids the exchange and plays 10 Ke2, there follows 10 ... Be4 11 Kf2 f4, when after 12 e×f4+ K×f4 he is immediately in zugzwang, and is forced to allow the enemy king into his position.

10 ... K×f5 11 Kf2 Be4 12 Kg3 Kg6.

The last reserve, the h-pawn, goes into action.

13 Kf2 h5 14 Kg3 h4+ 15 Kf2 Bf5 16 Kg2 Kf6 17 Kh2 Ke6.

White resigned, since after 18 Kg2 Ke5 19 Kh2 Bb1 20 Kg2 Ke4 the black king breaks into his position, for example:

21 Kf2 Kd3 22 Kf3 Kd2 23 Be2 Bf5 24 e4 B×e4+ 25 K×e4 K×e2 26 Kf5 Kf3 27 K×g5 Kg3 etc.

The examples considered demonstrate the method of playing for a win in such endings:

1) Fix the opponent's weak pawns.

2) Tie the opponent's forces to the defence of the weak pawns.

3) Improve the position of your own king, by occupying the approaches to the enemy position.

4) The culminating point of the plan is to put the opponent in zugzwang, when any move is bound to lead to a decisive weakening of the position, to a breakthrough by the king, or to direct loss of material.

As usual, a highly important factor in the implementation of the plan is the possibility of a breakthrough by the king.

277. Estrin–Ivashin
Correspondence, 1947

277. White has an obvious superiority, but if it were Black to move he would draw by 1 ... b6, since the white king would be unable to break into the opposing position. Therefore White plays:

1 b4! a×b4 (1 ... b6 2 b×a5 b×a5 3 Bb5! Kf8 4 Kb2, and Black is in zugzwang)

2 Be2! Be6 3 Kb2 b6 4 Kb3 Kf8 5 K×b4 Ke8 6 a5!.

Black resigned, since after 6 ... b×a5+ 7 K×a5 Kd8 8 Kb6 Be8 9 Kc5 Kc7 10 Bd3 he ends up in zugzwang.

Sometimes, when there is no possibility of a direct breakthrough, one has to resort to sacrifices to open the way for the king.

Balslavsky–Kondratiev
Tallinn, 1947

278. Black’s pieces are restricted by his own pawns, but it seems impossible for the white king to break in. White carries out an interesting plan and succeeds in winning.
1 Ke3 Kf7 2 Kd4 Be8 3 Kc3 Ke7 4 Kb3 Kd8 5 Ka4 Kc7 6 Ka5 Bf7.

Black’s king cannot move from its post, and his bishop also has few moves.

7 Bc4! Bg8.

If White could simultaneously attack the e- and g-pawns with his bishop, he would immediately put Black in zugzwang, since he has free moves with his pawns. But this cannot be done, and so, by advancing his pawns, White creates another weakness in Black’s position at b7, to the defence of which the black king is tied. Then he takes his king over to the other side, and breaks through by the pawn sacrifice f4–f5.

8 a4 Bf7 9 b5 a×b5 10 a×b5 Bg8 (or 10 ... c×b5 11 B×b5 Bg8 12 Be8 Bh7 13 Bf7 etc.) 11 b6+! Kd8 12 Kb4 Bf7.

Black’s pieces are cramped, and he is unable to regroup by defending the b-pawn with his bishop and the g-pawn with his king.

13 Ke3 Kd7 14 Kd4 Kd8.

If 14 ... Ke7, then 15 Ba6. The game went 14 ... g5 15 f×g5 Bg6 16 Ke3 Bc2 17 g6 B×g6 18 Kf4 Bf5 19 Be2, when Black resigned.

15 Ke3 Kd7 16 f5! g×f5 17 Kf4 Bg6 18 Kg5 Be8 19 Kf6 f4 20 Be2, and White wins.

In order to win, White has to break into the opponent’s position with his king. How is this to be done?

1 g4!

The invasion square is g6, and it is for there that the white king heads.

1 ... Kd6 2 Kf2 Ke7 3 Kg3 Kf8 4 Kh4 Be6 5 Kh5 Bc8.

If 5 ... Bf7, then 6 B×f7 K×f7 7 f4 Kf8 8 Kg6 Kg8 9 h4 Kf8 10 Kh7 Kf7 11 g5! h×g5 12 h×g5 f5 13 Kh8 Kg6 14 Kg8, and White wins.

6 Bd3 Kf7 7 h3 Kf8 8 Kg6.

The king has occupied the invasion square, but the battle is not yet won: White’s task is to reach the Q-side pawns with his king.

8 ... Kg8 9 Bf1!

White sets the tempo-winning mechanism into operation.

9 ... Kf8 10 Be2! (10 Kh7 is premature in view of 10 ... f5!) 10 ... Kg8 11 Bd3 Kf8 12 Kh7 Kf7 13 Bg6+ Kf8 14 Kh8.

White has conceived a complicated plan of penetrating into the enemy position, involving a piece sacrifice.

Rather simpler was 14 h4 Bd7 15 Bd3 Be8 16 Be2 Kf7 17 f4 Kf8 18 g5 h×g5 19 h×g5 f×g5 20 f×g5 Kf7 21 Bh5+ Kf8 22 g6 Bd7 23 Be2 Bc8 24 Bf1 Bb7 25 Bh3, when Black is in zugzwang.

14 ... Bd7 15 f4 Be8 16 f5 Bd7 17 Bb5 Be8 18 Be8! K×e8.

There is nothing better. Totally bad is 18 ... Bb7 19 Bd7! Ba8 20 Be8.

19 K×g7 h5.

The main variation of the combination was 19 ... Ke7 20 h4! (20 K×h6? Kf7, with a draw) 20 ... Bd7 21 g5! h×g5 22 h×g5 Be8 23 g×f6+ Kd6 24 f7, and White wins.

20 K×f6 h×g4 21 h×g4 Kf8.

Thanks to White’s strong king position, in this position the two pawns prove stronger than the bishop.

22 g5 Kg8 23 g6 Kf8 24 Kg5 Bd7 25 f6 Be8 26 Kf5 Kg8 27 g7 Bf7 28 Ke5 Bg6 29 Kd6 Bd3

8√
30 \text{Kxc6} \text{Kf7} 31 \text{Kd6} \text{Bf5} 32 \text{b5}, and Black resigned.

In carrying out the winning plan, the result will often depend upon whether or not the opponent can be put in zugzwang. Even a big positional advantage may be impossible to realize, if the opponent has adequate defensive resources and does not run out of useful moves.

It seems totally improbable that White could have achieved a draw in position 280, and indeed, analysis shows that Black did not play the strongest moves. Instead of 1 ... \text{Bf7+}, there was an easy win by 1 ... \text{Bb1}!, not allowing the king to defend the pawns, for example: 2 \text{Bf1} (2 \text{Bd3} \text{Ba2+}! 3 \text{Kc5} \text{Kf4} 4 \text{Kd4} \text{Kg3} \text{etc.}) 2 ... \text{Kf4} 3 \text{Kd4} (counterattack does not work: 3 \text{Kd5} \text{Kg3} 4 \text{Kd6 f5} 5 \text{Kf6} \text{Kf2} 6 \text{Bc4} \text{Kxg2} 7 \text{Kxg5} \text{Kxh3} 8 \text{f4} \text{Kg3} \text{etc.}) 3 ... \text{f5}! (zugzwang: White is forced to allow the black king in at f2, which is decisive) 4 \text{Kd5} \text{Ke5} 5 \text{Kc6} \text{Kf2} 6 \text{Bc4} \text{Kxg2} 7 \text{Kf6} \text{Kxh3} 8 \text{Kxg5} \text{Kg3}, and the h-pawn queens.

It is interesting that in the course of the game both players made mistakes.

Thus instead of 8 \text{h}x\text{g}4?, which was the decisive mistake, White should have played 8 \text{f}x\text{g}4! \text{fxg4} 9 \text{Ke3}, which would indeed have drawn, for example: 9 ... \text{g}x\text{h}3 (9 ... \text{Bd7} 10 \text{h}x\text{g}4!) 10 \text{g}x\text{h}3 \text{Bd7} 11 \text{Ke2} \text{Bb5}+ 12 \text{Ke1} \text{Bc6} 13 \text{Ke2} \text{etc.}

Black missed a win on his 9th move. The correct continuation was 9 ... \text{gx}f3! 10 \text{gx}f3, and only then 10 ... \text{Bd7}, when both after 11 \text{f}4 \text{Bg4}! (zugzwang) 12 \text{Ke4} \text{Kf2}, and after 11 \text{Ke2} \text{Bb5}+ 12 \text{Ke1} \text{Bc6} 13 \text{f}4 \text{Be4}! (13 ... \text{Bg}2 14 \text{f}5 \text{h}3 15 \text{f}6) 14 \text{Ke2} \text{Bf5}! 15 \text{Ke1} \text{Bg4}! Black wins.

All this went unnoticed at the time, and Black resigned.

But if White had played 11 \text{Bb5}!, the game would have ended in a draw!
Euwe, who cited position 280 in one of his books, also disregarded these possibilities.

281. White's bishop is trained on two of the opponent's weaknesses—the obvious one at a6 and the potential one at g6. If he succeeds in also fixing this second weakness, he will be able to win, since his bishop will then have freedom to manoeuvre, and Black will inevitably end up in zugzwang.

1 f4 f5.

Now White's task is significantly simplified: there is now a second obvious weakness in Black's position. Correct was 1 ... h6!, which we will consider later.

2 h4 Kd6.

The attempt to block the K-side by 2 ... h5 fails to 3 Bc2, when against Ba4-e8 there is no satisfactory defence.

3 h5 g×h5.

There is nothing better. If 3 ... Kc6, then 4 h6 Kd6 5 Kc3 Kc5 6 Be2 Bb7 7 g4 f×g4 8 B×g4 Kd5 9 f5, and White wins.

4 Kc3!

A step back, so as to then make two steps forward. Black resigned, since after 4 ... Kc5 5 Bf1! Bb7 6 Be2 Be8 7 Bd3! White repeatedly employs this zugzwang mechanism, and easily obtains a decisive material advantage.

But how do events develop after 1 ... h6? If now the white bishop leaves the h1-h7 diagonal, Black immediately plays 2 ... f6! and 3 ... g5, ridding himself of his weakness.

White has two ways to develop his initiative, but both are insufficient:

a) 2 e4 d×e4 3 B×e4+ Kd6 4 Kc4Bg4 5 Kd4 Be2 6 h4Bg4 (6 ... Bb5 7 g4 and 8 g5) 7 Bd3 Bc8 8 g4 B×g4 9 B×a6 f6, and Black plays ... g5 with a draw.

b) 2 h4 Kd6 3 g4 B×g4 (3 ... Bb7 4 Kc3 Kc5 5 g3, with a decisive advantage) 4 B×a6 f6 5 Bb7 g5 6 a6 Kc7 7 B×d5 Kd6 8 h×g5 h×g5 9 f×g5 f×g5 10 Bc4 Be8, with the same result.

Averbakh, 1954

282.

Black's defensive resources are close to exhaustion. His bishop is defending his weak pawns, and his king is preventing the enemy king from advancing. White's problem is to give Black the move, since then he will be forced either to give up a pawn, or to let in the white king. But how is this to be done? We will make a thorough analysis of this position.

1 Be2 Be8!

This is the only correct reply, enabling Black to prolong the resistance. After 1 ... Bg6 2 Bd3 Bh7 3 Bf1! he immediately finds himself in zugzwang: 3 ... Bg6 4Bg2 Bf7 5 Bf3, or 3 ... Bg8 4 Be2 Bf7 5 Bf3.

2 Bd3 Bg6.

Again the best move. On 2 ... Bd7 there follows 3 Bc2 Be6 (3 ... Bc8 4 Bd1, winning a pawn) 4 Bd1 Bf7 5 Bf3.

3 Bc2 Bh7.

You will probably have noticed that all the black bishop's moves are forced. It is therefore not difficult to guess that we have here a typical instance of corresponding squares, where to each move by the white bishop
Large Number of Pawns

there corresponds only one definite reply by the black bishop. It can be said that f3 and f7 are corresponding squares, as are e2–c8, d3–g6 and c2–h7.

By the following instructive manoeuvre White wins the battle for the corresponding squares, and puts Black in zugzwang.

4 Bh3! Bg8 5 Bd1! Bf7 6 Bf3, and the initial position has been reached, only with Black to move.

Black lost because his bishop was restricted to two squares, as opposed to three for White’s. White succeeded in breaking the correspondence by using this third square.

For the solving of complex blocked positions, again one can successfully use the method of corresponding squares.

Let us work through the following example.

Averbakh, 1954

283. White must give his opponent the move, since 1 ... Bd6 or 1 ... Bf8 is met by 2 Bc1 Be7 3 Be3, winning a pawn.

Only a draw results from 1 b4?? c×b4 2 B×b4 B×b4, when the white king cannot break in.

Which square corresponds to b2? Obviously, f6. If the black bishop were at d6, White would win immediately by 1 Bc1 Be7 2 Be3 etc. The only square corresponding to c1 is d8, and to d2–f6. Which square corresponds to e1? Not h8, since after 1 Bf2 the c5 pawn is lost; not d8, since after 1 Bf2 Be7 2 Be3 White immediately gives the opponent the move; again not e7, since after 1 Be3 Bf6 (1 ... Bd6 2 Bd2 Be7 3 Be3) 2 Bb2 Bg7 3 Ba3! Bf8 4 Bc1! Be7 5 Be3 the turn to move is again transferred.

It follows that the only square corresponding to e1 is g7. Then it is clear that c3 and h8 are corresponding squares, as are f2–f8 and a1–g7.

Let us now try to find the square corresponding to g3. This can only be g7. But g7 also corresponds to e1.

We see that White has two identical squares, and moreover he can go from one to the other in one move. It follows that Black is unable to maintain the correspondence.

Let us compile a table of corresponding squares.

<table>
<thead>
<tr>
<th></th>
<th>a3</th>
<th>e7</th>
</tr>
</thead>
<tbody>
<tr>
<td>d2</td>
<td>f6</td>
<td></td>
</tr>
<tr>
<td>b2</td>
<td></td>
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<tr>
<td>c1</td>
<td>d8</td>
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<td>a1</td>
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<tr>
<td>g3</td>
<td>g7</td>
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</tr>
<tr>
<td>e1</td>
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<td></td>
</tr>
<tr>
<td>c3</td>
<td>h8</td>
<td></td>
</tr>
<tr>
<td>f2</td>
<td>f8</td>
<td></td>
</tr>
</tbody>
</table>

From a glance at the table, the solution is immediately apparent:

1 Bh2 Bf6! 2 Be3 Bh8! 3 Be1! Bg7! 4Bg3!! Bf6 5Bf2 Be7 6Be3 etc.

But also possible is 1 Bc1 Bd8! 2 Bd2 Bf6! 3 Be1! Bg7! 4Bg3!!

Incidentally, it will not be out of place to mention that, if in position 283 a white and a black pawn are added at h3 and h4 respectively, g3 will be inaccessible to the white bishop, and so White will be unable to win, since Black can maintain the correspondence.
2.523 Superior king position

In the endgame the king is normally an active piece. It can support passed pawns, or break into the opponent’s position and capture enemy pawns. A superior king position, as we have already seen many times, is of great importance in endings.

Thus in position 284 Black is helpless, since his king is unable to take part in the play on the Q-side.

Ilyin-Zhenevsky–Stepanov
Leningrad, 1932

284.

\[\text{284. 1 Kd2 Kg8 2 Ke3 Kf8 (2 \ldots Bd7}
3 \text{Kf4 Kf8 4 Ke5 Ke8 5 Bd5!) 3 Be6! Bf5}
\text{4 Kf4 Bb1 5 a3 Kg8 6 Ke5 Bc2 7 Bd5 Kf8}
\text{8 Kd6 Ke8 9 Ke7 Bd1 10 b4 c\times b4 11 c\times b4}
\text{Ba4 12 Kb7, and Black resigned.}

In exceptional cases a badly-placed king may even itself become a target for attack. Then even a big material advantage may prove useless.

An example is provided by the following study.

Kubbel, 1926

285.

\[\text{285. Black is three pawns up, but his king is in a dangerous position.}
\text{1 Be7 c5 2 Bf8 Bb6 (2 \ldots g4 3 B\times h6 g3}
\text{4 Bc1 g2 5 b3 mate) 3 Bd6! (of course, not}
\text{3 B\times h6 Bd8 4Bg7 g4 5 Bh6 Bf6 6 Be1}
\text{B\times b2, with a draw) 3 \ldots Ba7 (3. \ldots h5}
\text{4 Be7 g4 5Bg5 etc.) 4 Be7! (now Black is}
\text{forced to move his pawns) 4 \ldots h5 5 Bd6 h4}
\text{6 Be7 h3 7 B\times g5 h2 8 Be1 h1 = Q 9 b3 mate.}
\]
3. Bishops of Opposite Colour

3.1 BISHOP AND PAWN
AGAINST BISHOP

In endings with opposite-coloured bishops, a bishop cannot help a pawn to cross a square attacked by the opposing bishop, and it follows that, as in endings with a bishop against pawns, a bishop on its own can restrain a pawn from afar.

The side with the pawn can win only in the following exceptional cases:

1) If either king hinders the bishop in its battle with the pawn.

2) If the pawn can cross a square of the colour of the enemy bishop before the bishop can attack that square.

Usually the defending side is able to draw.

Berger, 1922

On the basis of these variations Berger rightly considered position 286 to be drawn, but through some misunderstanding Fine gives it as an example of a rare win.

3.2 BISHOP AND TWO
PAWNS AGAINST BISHOP

While in all other endings, with rare exceptions, two pawns constitute a big advantage ensuring a win, in endings with opposite-coloured bishops this is not so.

3.21 Doubled pawns

Against doubled pawns, a draw is most simply achieved if the defending side’s king can occupy a square in front of the pawns and of the opposite colour to that of the enemy bishop.

Berger, 1899

286. At first sight Black’s position seems critical after 1 a6, for example: 1 ... Bf5 2 Kf3 Kd5 3 a7 Be4 + 4 Ke3, and White wins.

But instead of 2 ... Kd5?, there is a draw by 2 ... Bd3! 3 a7 Bc4 4 a8 = Q Bd5 + . White can also play differently: 2 Ke3 Bh3 3 Kf3, but then there follows 3 ... Bf1 4 a7 Bc4 and 5 ... Bd5 + .

287. Black to move plays 1 ... Kd8 and 2 ... Ke8, after which further play is completely pointless, since it is impossible to drive the black king from c8.

If it is White to move, he plays 1 Bg5, not allowing the black king across to c8. After
Bishop and Two Pawns Against Bishop

this White is himself threatening to take his king to b7 or b8, and, after winning the bishop for one pawn, to queen the other pawn. Therefore Black cannot adopt waiting tactics.

For example: 1 ... Bf5 2 c7! Bb3 3 c6 Bg4 4 Kc5 Bb3 5 Kb6 Bc8 6 Ka7, 7 Kb8 and 8 c8=Q etc. For this reason both Berger (1899) and Fine (1941) regarded this position, with White to move, to be won.

But as I. Rabinovich showed as long ago as 1937, Black can draw by defending actively. After 3 c6 Black plays 3 ... Bc8 (also possible is 3 ... Kf7, which transposes) 4 Kc5 Kf7! 5 Kb6 Ke6! 6 Ka7 Kd5! 7 Kb8 Ba6. Draw.

It should be noted that after 2 c7 Bg4 3 Kc6, only 3 ... Bf3+! leads to a draw; bad is 3 ... Bc8 4 Kb6 Kd7 5 Bf4 Ke6 6 Ka7 Kd5 (6 ... Kd7 7 Kb8 Ba6 8 Bd6, and Black is in zugzwang) 7 Kb8 followed by 8 Bd6 etc.

No better for White is 2 Kc7 Be4! 3 Kb7 Bf3 4 Kb6 Be4 5 c7 Kd7, with a draw.

3.22 Connected pawns

A systematic analysis of such endings was made by Tarrasch, and we give here the results of his researches.

When advancing connected pawns it is very important not to allow the opponent to blockade them.

The famous French player Philidor established the following rule: "If my bishop controls the white squares, I must place my pawns on black squares; in this case the bishop can drive away the enemy pieces which attempt to establish themselves between the pawns".

In accordance with this rule, in the endings under consideration one should first advance that pawn which by its move will occupy a square of the opposite colour, the pawns will be blockaded, and, with rare exceptions, it will not be possible to win the ending.

The further advanced the pawns, the more dangerous they are.

3.221 Pawns on the 6th rank

Pawns on the sixth rank are especially powerful.

Tarrasch, 1921

288

288. According to Philidor’s rule, it is the e-pawn that should advance, but this is not possible yet because of 1 ... B×e7. To win, White’s king must reach d7 or f7, in order to support the advance of the pawn. This is achieved very simply. White gives check with his bishop at b5 or h5. If Black plays 1 ... Kf8, the white king goes via d5 and c6 to d7; if 1 ... Kd8, then the king goes via f5 and g6 to f7. Black would be able to forestall this plan only if he could attack the f-pawn with his bishop and prevent the march of the king via d5 and c6 to d7. But this is not possible, since after 1 Bb5+ Kf8 2 Kd5 Bc3 there follows 3 e7+ and 4 e8=Q.

The bishop must not only attack the f-pawn, but also control e7, and therefore it must stand at d8.

Consider the following position.

289. After 1 Bb5+ Kf8 the white king cannot go to d7, but the black bishop’s diagonal is too short. After 2 Kf5 Black loses due to zugzwang.
291. Here the h-pawn cannot be stopped. On 1 ... Kg8 there follows 2 h7+ Kg7 3 Bd4+, and on 1 ... Bg8—2 Bc5+ and 3 h7.

3.222 One pawn on the 6th rank, one on the 5th

Tarrasch, 1921

292. White to move wins easily by 1 Ke5 and 2 f6.

If it is Black to move, he can hinder the realization of the advantage by 1 ... Kd6. Then White brings his king in from the right: 2 Kg5 Be2 3 Bg3+ Kd5 (or 3 ... Ke7 4 Kf4 Kd6 5 Ke3 etc.) 4 e7 (exploiting the fact that the black king is remote and that his pawns cannot be blockaded, White succeeds in queening a pawn) 4 ... Bb5 5 Kg6 Bc8+ 6 Kg7 Kc6 7 f6 Kd7 8 f7 Kxe7 9 f8=Q+ and White wins.

If the white king stood at d4, Black to play would draw by 1 ... Kf6 2 Ke4 Bc2+ etc.

Tarrasch, 1921
Let us shift position 292 two files to the right.

293. If it is White to move, he wins by 1 Kg5 and 2 h6+.

But if it is Black to move, then after 1 ... Kf6! it turns out that there is no square corresponding to g5 in position 292, and hence no possibility of a by-pass. The continuation 2 Bd4+ Kf5 3 g7 Bc4 leads only to the pawns being blockaded. The result is therefore a draw.

But if White’s king stood initially at g4, then after 1 ... Kf6 2 Bd4+ Ke6 3 Kg5 he would win.

Averbakh, 1954

294. White is unable to win, for example: 1 Kh5 Kg8!

1 ... Bd4? loses to 2 Bd5! Bc3 3 g6+ Kh8 4 Kg4!, when the white king goes to f7.

2 Bd5+ Kf8! 3 Kg6 Be3!, with a draw.

If it is Black to move, he draws most simply by 1 ... Be3 and 2 ... B×g5.

3.223 Pawns on the 5th rank

With pawns on the 5th rank, White’s plan is the same as with pawns on the 6th—drive the black king away with the bishop, and then advance the king with the aim of supporting the advance of one of the pawns.

295. With his bishop at c8 or d7, rather than b3, Black can draw.

1 Bg5+!
Bishops of Opposite Colour

Henneberger, 1916

296. In the previous position White needed the h-file (5 Kh6) in order to win. Here it can therefore be expected that White will be unable to win, since he is short of manoeuvring space on the right. For example:

1 Bh5 + Kg7! (on 1 ... Kg7 there follows 2 Ke4, with a by-pass from the left) 2 Bg6 Bb2 3 Kg4 Bc3 4 Kh5 Bg7! 5 Bh7 Kf7. By defending actively, Black has not allowed the white king in on the right.

White can try an alternative method of attack:

1 Kg4 Bb2 2 Kh5 Kg7! (Black loses after 2 ... Bg7 3 Bc4+ and 4 Kg6, or 2 ... Bc3 3 Kh6! Bg7+ 4 Kh7 and 5 Bc4+ or 5 Bh5+) 3 Bh5 Bc3 4 Be8 Bh2 5 Bg6 Bd4 6 Kg4! After forcing the black king to go to g7, White intends after 7 Bh5 to make the king march f3–e4–d5–e6. Passive tactics cannot save Black; determined measures are required. At the present moment White cannot play f5–f6, and Black exploits this factor to improve the position of his bishop. The best place for the bishop is on the d8–f6 diagonal, i.e. at e7 or d8, and so there follows 6 ... Bb6!! (or 6 ... Bc5!) 7 Bh5 Bd8!, with a draw (pointed out by Berger).

With bishop's pawn and knight's pawn, difficulties arise only when the colour of the defending side's bishop is such that it controls the nearby corner square. If this is not the case, the win is straightforward.

Tarrasch, 1921

297. White to move plays 1 Bd4+ Kh7 (1 ... Kf7 or 1 ... Kg8–2 g6) 2 Ke5 etc.

With Black to move, on 1 ... Bh5 there follows 2 Bd4+ Kf7 3 Bc3, when Black is in zugzwang.

The most active position for the bishop at h7 also fails to draw here. There follows 1 Bd4+ Kf7 2 Bc3, and again Black is in zugzwang.

We reach the conclusion that, with bishop's pawn and knight's pawn on the 5th rank, if the defending side's bishop does not control

Tarrasch, 1921

298. Here the draw is obvious: 1 Bd4+ Kf7, and White is powerless to undertake anything.
Bishop and Two Pawns Against Bishop

The black king could also have gone to h7, since on 2 Kg3 there follows 2 ... Be2 3 g6+ Kh6 etc.

3.224 One pawn on the 5th rank, one on the 4th

Since we are examining only positions where Black's bishop is unable to blockade the pawns, the advance of both white pawns to the 5th rank cannot be prevented. It follows that the result will depend on whether or not the weaker side can manage to obtain a drawn position with pawns on the 5th rank.

299. Black plays 1 ... Be8! 2 Bd4+ Kd7! 3 e5 Bf7!, occupying the best position with his bishop.

If White tries to attack the black bishop by 3 Kd4 Bf7 4 Ke5, his plan fails after 4 ... Bg6 5 Ba3 Bh7.

But Black can even play 4 ... Ke8 5 Kf6 Bg8! (5 ... Bh5? 6 e5 Bf3 7 d6 Bg4 8 e6) 6 Kg7 Bf7 7 Ba3 Bh5 8 e5 Bf3 9 d6 Bg4 10 Kf6 Ke7, and the pawns are blockaded.

If position 299 is shifted one file to the right, even an actively placed bishop and king does not help.

300. On 1 ... Bf8 2 Be4+ Ke7 there follows 3 Ke4! (but not 3 f5 Bg7, with a draw) 3 ... Bg7 4 Kf5 Bh6 5 Kg4! (Black is in zugzwang) 5 ... Bf8 6 Kg5 Bg7 7 Kg6 Kf8 (7 ... Bf8 8 f5, or 7 ... Bh8 8 Kh7!) 8 Kh7, and White wins. The black bishop did not have enough space.

In the previous position Black had the move 7 ... Bh5, but here there is no corresponding square.

With bishop's pawn and knight's pawn an active bishop position again does not help, if the defending side's bishop does not control the nearby corner square (cf. example 297).

Against the correct placing of the defending side's pieces, a win with rook's pawn and knight's pawn on the 4th and 5th ranks is impossible, since it cannot be achieved even with both pawns on the 5th rank.

301. White can win if he succeeds in cutting off the black king from the corner, reaching h7 with his king, and then advancing his g-pawn. But against correct defence this plan cannot be carried out.

Salvioli, 1887
Bishops of Opposite Colour

1 Be4 Bd4 2 g5 Be3! (the only move; if 2 ... Bb2, then 3 Kh7 followed by g5--g6, h5--h6 and g6--g7) 3 h6 (3 ... Bxg5 was threatened) 3 ... Bd2 4 Kh5 Be3 5 g6 Bd4!, and we reach position 290.

3.225 Pawns on the 4th rank

Against pawns on the 4th rank, Black has even better drawing chances.

If the pawns are on the central files, the defending side is able to draw in two cases:

1) When he can set up a defensible position against pawns on the 4th rank.

2) When he can set up a defensible position against pawns on the 5th rank.

Averbakh, 1954

To set up the first defensible position, Black's bishop must immediately reach c6, so as to prevent d4--d5.

To set up the second defensible position, the black bishop must succeed in reaching f7 when the white pawns cross to the 5th rank.

A straightforward analysis shows that, if Black begins, he can draw, provided only that his bishop is not at g2 or h1, since then he is unable to set up the necessary defensible position.

302. We will consider one of the most difficult cases, when the black bishop is at f1.

1 ... Be4!

1 ... Bb5? loses to 2 Bb4+! (2 Bg3+? Ke7! 3 d5 Be8 4 e5 Bf7 5 Kd4 Kd7, with a draw), when Black is unable to set up the necessary position, for example: 2 ... Kc7 3 d5 Be8 4 e5 Bf7 5 e6, or 2 ... Ke6 3 d5+ Ke5 4 Bc3+ Kd6 5 Kd4 Be8 6 e5+ and 7 e6.

2 Bg3+! Ke6!

The only move. If 2 ... Kd7?, then 3 d5, 4 Kd4 and 5 e5. On 2 ... Ke6 White wins by 3 Kd2 Bb3 4 Kc3 Ba2 5 Bh2, when the black pieces are in each other's way. It is for this reason that 2 ... Ke6 is the best move: Black's king does not interfere with his bishop's manoeuvring. It should be noted that, if White had not played 2 Bg3+, but 2 Bb4+, then after 2 ... Ke6 3 Kd2 Bb3 4 Kc3 Ba2 5 Ba3 Black could have played 5 ... Bb1! 6 d5+ Ke5, with a draw.

3 Kf4 Bg8 4 Ke5 Kd7 5 d5 Bb7!

This is simpler than 5 ... Bf7 6 Kf6 Ke8! 7 Bf4 Bg8!

6 Kf4Bg6 7 e5 Bf7! etc.

If the bishop stands initially at g2, then on 1 ... Bf1 or 1 ... Bh3 there follows 2 Bb4+ Kd7 3 d5, when Black is unable to regroup.

With a bishop's pawn and a central pawn, two basic cases can be picked out:

1) The defending side's bishop controls the nearby corner square. The defending side draws if he is able immediately to set up the necessary defensible position.

303. Black draws if his bishop can reach the d6--b8 diagonal in one move. Squares from which this is possible are marked on the diagram with crosses.

Averbakh, 1954
If the bishop is on an unfavourable square, or it is the stronger side to move, the game is lost.

With the bishop at d2, for example, after

1 ... Be3 2 Bb3+ Kd6 3 Kg4 Bg7 4 Kf5 Ke7 5 e5 position 300, which is won for White, is reached.

2) If the defending side's bishop does not control the nearby corner square, he is able to draw if he can set up a basic defensible position on the 4th or the 5th rank.

Averbakh, 1954

304

304. Analysis shows and that Black draws with his bishop on any square, except h1.

1 ... Bc2! (1 ... Ba2 2 Bh4+ Ke6 3 f5+ Ke5 4 Bg3+ Kf6 5 Kf4 etc.) 2 Bb4+ Kf7! 3 f5 Ba4! and 4 ... Bd7!, with a draw.

Against a bishop's pawn and knight's pawn, when the defending side's bishop controls the nearby corner square, it is insufficient to take up the first defensible position, since the defender ends up in zugzwang. Thus with the bishop at h6, on 1 ... Kf6 there follows 2 Bd3, and Black is forced to break up his formation. But he can regroup to the second defensible position by 2 ... Bf8 3 g5 Kg7 4 f5 Be7 etc.

Consider the case when the bishop is at h2.

305. A draw is given by 1 ... Bg1 2 Bd3+ Kg7 (the simplest, but also possible is 2 ... Kf6 3 g5+ Kg7! 4 Kg4 Be3 5 f5 Bd4 6 Kf3 Bb2 7 Ke4 Bc1! 8 f6+ Kg6, with a draw) 3 g5 Be5 4 f5 Be7 etc.

In general, if the bishop controls the corner square, the defending side can almost always set up a defensible position in time.

But if the bishop does not control the corner square, a draw can be achieved only if the defender can immediately occupy the best position with his bishop.

With rook's pawn and knight's pawn, if Black defends correctly it is impossible to win. The method of setting up a defensible position was considered earlier.

3.23 ISOLATED PAWNS

If the pawns are isolated, the distance between them is of great importance for evaluating the position.

Salvioli, 1887

306

306. Here the distance between the pawns is one file. White is unable to win, for example:

1 Ke6 Bd4 2 Be4 Kd8 3 Kf7 Ba3 4 e6 Bd4 etc.
From d8 the black king can simultaneously prevent the advance of both pawns. In position 307 the king cannot do this.

Salvioli, 1887

307. After 1 Bf3 Kd8 2 Ke6 Bb4 3 f6 Ba5 4 f7 Bb4 5 Kf6 Bc3+ 6 Kg6 Bb4 7 Kg7 White wins.

On the basis of these two positions, certain theorists began asserting that two pawns separated by two files or more always win. But it can be shown that this condition, although necessary, is not sufficient.

Consider the following two positions. They differ only in that Black’s king and bishop change places.

308. Here White wins: 1 f4 Bh4 2 Kd5 Bd8 3 Ke6 Bh4 4 f5 etc.

Changing the places of the black pieces alters the evaluation.

309. White is unable to win, since the black bishop, with the support of the king, halts the advance of both pawns. White’s king cannot support the advance of his pawns. If it goes to b7, the black king will stand at d8, and the balance is maintained.

Thus if the defender can deploy his bishop so that from one diagonal it restrains both pawns, and simultaneously prevents the invasion of the stronger side’s king, the game ends in a draw.

Chéron, 1957

310. Compared with the previous example, the white king is much more active. Nevertheless Black can maintain the balance.

1 Kf5 Kd4 2 Ke6 (2 f4 Ke3) 2 ... Kc5 3 Kd7 (if 3 Be8, then 3 ... Bc7) 3 ... Kb6 4 Be8 Be7! 5 Ke8 Bd6 6 Kd7 Bc7. Draw.

If it is Black to move, the only move to draw is 1 ... Bc7! (bad, for example, is 1 ... Bh2? 2 Kf5! Kd4 3 f4 and 4 c7) 2 Kf5 Kd4! 3 Ke6 Kc5 4 Kd7 Kb6 5 Be8 Bb8! 6 Ke6 Kc5 7 Kf5 Kd4 8 Kg4 Ke3 9 Bh5 Be7!

The following position can be assigned to the same group.
311. Here the distance between the pawns is three (!) files, and yet the position is drawn, since White’s king is powerless to help the pawns.

312. White to play wins easily: 1 Kb6 Kd7 2 Ka7 Bd5 3 Kb8, and the pawn has a free advance.

Lisitsin showed that Black to move can draw by 1 ... Kd7. Now 2 Kb6 achieves nothing after 2 ... Kc8.

After 2 d5 Black’s bishop is immobilized, and White can attempt to obtain a zugzwang position: 2 ... Ke7 3 Kd4 Kd7 4 Bb8 Kc8 5 Bd6 Kd7! (5 ... Kd7 is bad because of 6 Ke5 Kc8 7 Ke6 Kd8 8 Be5 Kc8 9 Bf4 Kd8 10 d6 Bc6 11 a7) 6 Ke4 Kc8 7 Ke5 Kd7 8 Bb8 Kc8 9 Ba7 Kd7! 10 Bb6 Kc8. Draw.

Here an important part was of course played by the fact that a8 was inaccessible to the white bishop. From time to time Black threatened to reach this square, and this prevented White from setting up a zugzwang position.

313. White’s bishop controls a8, but nevertheless Black succeeds in maintaining the balance.

1 Bb5 (if 1 Bf3, then 1 ... Kb6) 1 ... Bb4 2 Be6 Kb6 3 Bb5 Kc7! 4 Bc6 Kb5 5 Bb7 Ke7. Draw.

Here Black’s king fought successfully on two fronts—it controlled the a-pawn, and supported the bishop in the battle with the d-pawn.

But if in position 313 White’s king were at b5, the result would be different.

314. By 1 Bf3!, threatening 2 d6, White wins, for example: 1 ... Bd6 2 Be4 Bg3 3 d6+ Kb8 4 d7 Bh4 5 Kc6 Ka7 6 Bd3 Bd8 7 Kd6 Kb8 8 Ke6 Bh4 9 Kf7 Kc7 10 Ke8 Bg5.
Bishops of Opposite Colour

It remains for White to overcome the last line of defence.

11 Be4 Kb6 12 Bb7 Kc7 13 Bc8!

The rest is obvious—Black can defend against the threat of 14 a7 only by moving his king to b6 or b8, and this allows 15 d8=Q+.

Positions exist where the opponent’s bishop controls only one pawn, but a win is not possible, because the king cannot break through to support the advance of the pawns.

Berger–Kotlerman
Arkhangelsk, 1948

315

315. 1 Ke2 b3 2 Kd1 Kb4 3 Bh7 Ka3 4 Bg6 Kb2 (if 4 ... b2, then 5 Bb1!, and the black king cannot break through to the pawn’s queening square, and hence cannot support its further advance) 5 Bf7! Ka2 6 Be6 Ka3 7 Bf5! Draw.

We can now formulate a rule for endings with opposite-coloured bishops, where one side has two isolated pawns:

1) When the distance between the pawns is one file, the game ends in a draw.

2) When there are two or more files between the pawns, the stronger side wins if it is possible to break through to one of the pawns with his king, and ensure its advance to the queening square.

Positions with a rook’s pawn are exceptions to the rule. If one of the pawns is a rook’s pawn, and the queening square is of the colour of the weaker side’s bishop, then, as was shown by Berger, if the weaker side’s king can reach that square, the game naturally ends in a draw, since the bishop can then be sacrificed for the other pawn.

3.3 BISHOP AND THREE PAWNS AGAINST BISHOP

With opposite-coloured bishops, even three extra pawns do not guarantee a win.

Tripled pawns win if the opposing king is unable to reach a square invulnerable to the bishop in front of the pawns.

Three connected pawns normally ensure an easy win, but in advancing them a blockade should not be allowed. If they are blockaded the win is considerably more difficult, and in exceptional cases may altogether prove impossible.

Chéron, 1952

316

316. 1 Kf2!

An essential move. If 1 Bf2, then 1 ... Bb5! 2 Be3 Kg3! 3 Bf2+ Kg2 4 Be3 f2+! 5 B×f2 Kf3 6 Bc5 e3, then ... Ke4 and ... d4, with an easy win. After 1 Kf2 it is pointless for Black to attempt to approach via the K-side. In order to advance his pawns, he must break through on the Q-side.

1 ... Ke4 2 Bd4 Bh3 3 Bc5 Ke5 4 Ke3 Bf1 (not 4 ... f2 5 Bd4+!, with a draw) 5 Ba7 Kd6 6 Kd2 Kc6 7 Kc3 Kb5 8 Kb3.
White's king is on guard, and prevents the entry of the black king.

8 ... Bc4+ 9 Kc3.
If 9 Ka3, then 9 ... Ba2! 10 Kxa2 Kc4 11 Kb2 d4 etc.
9 ... Ka4 10 Bc5 Ba6 11 Bg1 Ka3!
Step by step the king invades the opposing position.
12 Kd4 Bc4 13 Kc3 Ka2 14 Bd4 Kb1 15 Kd2 Bb5 16 Kd1 Be6 17 Kd2 Ba4.
For the umpteenth time White is in zugzwang, and is forced to allow the black king even further into his rearguard.

18 Ke3.
Or 18 Bf2 Kb2, and the black king reaches c4, allowing ... d4.

18 ... Kc1 19 Bg1 Kd1 20 Kd4 Ke2 21 K×d5 e3 22 Kd4 f2, and Black wins.

We have seen that for his manoeuvring Black required the rook's file. Let us shift position 316 one file to the left, and see whether or not Black can carry out his winning plan.

Chéron, 1952

317.

317. Can the black king now break through on the Q-side?

1 Ke2! Ke4 2 Bc4 Bg3 3 Bb5 Kd5 4 Kd3 Be1 5 Ba6 Kc6 6 Kc2 Kb6 7 Be4 Ka5 8 Kb3, and the way is closed to the black king. There was insufficient space to achieve the win.

Positions obtained by shifting position 317 one or two files to the left will similarly be drawn.

Averbakh, 1954

318. Black's pawns are blockaded, and the result will obviously depend upon whether or not he can break through with his king to the support of the pawns and lift the blockade.

1 ... Kf5! 2 Ke3!
The bishop is immune. 2 K×d5 is decisively met by 2 ... c3 3 B×c3 e3.

2 ... Bb7!
The further approach of the king is pointless, since it can only get as far as f1.

3 Bc3! Bc6! 4 Bd2 (if 4 Bb2, then 4 ... Ke6 and 5 ... Kd5) 4 ... Ke5! 5 Bc3+ Kd5 6 Bb4 Be8!
The bishop has to be switched to the h7–f5 diagonal.

7 Bd2 Bg6 8 Bb4 Bh7 9 Be1 Ke5 10 Bd2 Bg6!
If immediately 10 ... Kb5, then 11 Kd4, and Black has not achieved anything.

11 Be1 Kb5 12 Kd4 Ka4!! 13 K×c4 e3, and Black wins.

Averbakh, 1954

319.
But if position 318 is shifted one file to the left, in the resulting position this winning plan no longer works.

319. Black’s king is unable to break through on the Q-side.

The position obtained by moving position 319 one file to the left will similarly be drawn.

Finally, we must point out yet another type of drawn position.

Averbakh, 1954

320. The attempt to approach with the king again fails: 1 ... Kb4 2 Kc2, or 1 ... Kd6 2 Bc2 Ke6 3 Bd1 Kf5 4 Be2 Kf4 5 Ke2 etc.

The characteristic feature of all the drawn positions we have examined was that the black king was unable to break through to support the advance of the pawns. These positions demonstrate clearly the strength of the blockade, neutralizing a big material advantage.

If one of the pawns is a rook’s pawn, and its queening square is inaccessible to the stronger side’s bishop, this creates additional drawing possibilities.

321. Black cannot win, since on 1 ... c3 there follows 2 B×c3!

If the pawns are separated, the win is fairly simple. Only in the event of a blockade, with the stronger side’s king being unable to break through to the pawns, may it prove impossible to win.

The following study shows one such exceptional position.

Chekhover, 1950

322. 1 Be8! Kc6 2 Ke2 Bc1 3 Kd1 Bb2 4 Ke2 Bd4 5 Kd1 Kd6 6 Bf7! b2 7 Bg6 Ke5 8 Ke2 d5 9 Bf5 Kb4 10 Bg6 Ka3 11 Bb1! Kb3 12 Kd1 Kc3 13 Ke2 Bc5 14 Kd1 d4 15 Ke2 Kb3 16 Kd3, with a draw.

Averbakh, 1954
3.4 BOTH SIDES HAVE PAWNS

In endings with opposite-coloured bishops, an extra pawn, and sometimes even two, does not always lead to a win.

323. The position is very similar to a typical position with bishops of the same colour (No. 248). There White won easily, whereas here we have an elementary draw. Let us check:

1 Kf1.
White improves the position of his king, and prepares to create a passed pawn on the Q-side.
1 ... Kf8 2 Ke2 Ke8 3 Kd3 Be6.
The first unpleasantness. The king cannot go to c4.

4 h3.
If 4 a4, then 4 ... Bb3 5 a5 Ba4, and the extra pawn has no part to play.

4 ... Kd7 5 Bb4.
The second unpleasantness—White's bishop cannot help in the creation of a passed pawn.

5 ... g6 6 Kc3 Kc6 7 a4 Kb6 8 Bf8 h5 9 b4 Bd5 10 g3 Be6.
White has no way of obtaining a passed pawn. But perhaps it is worth immediately taking the king over to the K-side?

11 Kd4 Bb3! (it is useful to stop the opposing pawns) 12 a5+ Kb5 13 Ke5 Be6 14 Kf6 Kc6.

White has diverted the black king to the Q-side, but even without the help of the king the black bishop can cope with the defence of the K-side pawns, since not one of the pawns can be attacked by the white bishop.

15 Kg5 Kb5 16 h4 Kc6 17 f3 Bd5!
Black is on the alert. If 17 ... Kb5, then 18 g4! hxg4 19 fxg4, and White creates a dangerous passed pawn, obtaining a won ending.

18 Kf4 Kh5 19 g4 Kc6 20 gxh5 gxh5 21 Kg3 Kb5 etc. There is nothing that White can do.

In this example the special features of endings with opposite-coloured bishops are clearly apparent.

The first feature is that the advance of a passed pawn cannot be supported by the bishop, since squares attacked by the enemy bishop are inaccessible to it.

The second feature is that the bishop cannot attack enemy pawns which are on squares of the opposite colour.

Therefore, if the weaker side can occupy a square in front of a passed pawn which is invulnerable to the enemy bishop, and defend his pawns on both flanks with his bishop, a win will not be possible, provided only that the stronger side cannot create another passed pawn.

The following diagram shows the first typical drawn position.

Averbakh, 1954

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Nimzowitsch–Tarrasch
Kissingen, 1928

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122
324. Black draws by adopting passive tactics. The white king has great scope for manoeuvring, but here this is worthless.

325. The position appears to satisfy the typical symptoms of a drawn position. Black's king is on the Q-side, where White is threatening to create a passed pawn, and his K-side pawns are on squares of the colour of his bishop, so it seems that the black bishop should be able to defend them all simultaneously.

Let us see how the game went.

1 Kh2 c4 2 Kg3 Ke8 3 Kf4 Kd7 4 Bb4 Ke6 5 Bc3 Kd7.

Why does Black avoid the thematic 5 ...Bg6? It turns out that after 6 Kg5 Kd5 7 g3 b5 8 h4 Ke6 9 b3 cxb3 10 cxb3 Kb6 11 a4 bxa4 12 bxa4 Ka6 13 a5 Kb5 White plays 14 h5! Be8 15 Kxf5 Bxh5 16 Kx e4, and with another passed pawn he wins. But now, to defend his f-pawn, Black has to bring up his king. True, he hopes that his bishop will be able to prevent the creation of a passed pawn on the Q-side.

6 g3 b5 7 Kg5 Kf7 8 h4 Bc8 9 Kh6 Kg8 10 b3 cxb3 11 cxb3 Bd7 12 Be5!

Black is in zugzwang. On 12 ... Bc8 there follows 13 a4, and on 12 ... Be8—13 Kg5 Bd7 14 Kf6 Kf8 15 Bd6+ Kg8 16 Ke7 Bc8 (16 ... Bc6 17 Ke6) 17 a4, and White's king can support the advance of his a-pawn. White wins.

Can our first impression have been incorrect? Couldn't Black have played more strongly?

White's basic plan was to approach the opponent's weak pawns with his king. This can be prevented only by attacking the weak white pawns at g2 and h3.

Let us play 1 ... Bh5!! 2 Kg3 (2 g4 f×g4 3 h×g4 Be2 4 Kg3 Bf3) 2 ... Bf1!! After 3 h4 h5! 4 Kf4 B×g2 5 K×f5 the black bishop on its own copes excellently with the defence of the K-side pawns. White is unable to win.

It is curious that position 325 has been given in a number of books on the ending as a win for White.

The basis of the first method of defence is a strict division of functions: the bishop defends the pawns, and the king deals with the enemy passed pawn.

If the stronger side can break through to his own passed pawn before the enemy king is able to blockade it, then, as in other endings, this leads to a win, provided that the king can ensure the advance of the pawn.

Kazantsev, 1950

326. White wins if he reaches g7 with his king, since he wins the bishop for one of the h-pawns, and queens the other.

Black draws if his king can reach g8, since then the enemy pawns will be stopped. Thus the battle resolves itself into a usual king race. Who will arrive first?

1 Bh8!! (the study theme "path-laying"; White clears the way for his king) 1 ... Kb7 2 Kb2 B×d3 (a forced move, which, however, leads to a loss of time, and the white king outstrips his opponent) 3 Ke3 Bf5 4 Kd4 Ke6 5 Ke5 Kd7 6 Kf6 Ke8 7 Kg7 e5 8 h6 e4 9 h7 e3 10 Kh6 e2 11 Bc3 etc.

327. White will win if he can succeed in approaching the Q-side pawns with his king and supporting their advance. Let us try doing this.

1 Kg6 Bc6 2 Kg7 Bd5 3 Kf8 Kd7!! (3 ... Bc6 loses to 4 Bg1 Kd7 5 Kf7 Be4 6 Kf6
Both Sides Have Pawns

Averbakh, 1951

327

followed by 7 a8=Q B×a8 8 K×f5 etc.)
4 Bb4 Ke8! 5 Ke7 Kb7!, and Black has set
up a basic defensible position. White cannot
win.

Let us change the position slightly, by mov-
ing the b6 pawn to a6 (position 328). This
apparent worsening of White’s pawn forma-
tion leads to a change in the evaluation.

White wins, since Black is unable to reach
a8 with his king and set up a defence.

Averbakh, 1951

328

9 Kg5 Kc6 10 Bf2 Kb5 11 a7 Ka6! 12 f5
Kb7 13 f6 Bd5 etc.

7 ... Kd7 8 Be5! Ke7 (the black king is
gradually pushed back) 9 Ke6 Kd8 10 Bb6+!
Ke8.

If 10 ... Kc8, then 11 Ba5!, and the f5
pawn is lost.

11 Kd6, followed by 12 Kc7 and 13 Kb8.

Kotov–Botvinnik
Moscow, 1955

329

329. The position appears to satisfy all
the symptoms of a first type of drawn posi-
tion—White’s king is dealing with the passed
pawn, and his bishop is defending the pawns
in the centre and on the K-side.

But in fact White’s fortress is easily ‘pulled
down’: by a pawn sacrifice Black creates
another passed pawn, which decides the
issue.

1 ... g5!! 2 fxg5.

Totally bad is 2 h×g5 h4 3 Bd6 Bf5 4 g6
B×g6 5 f5 B×f5 6 K×b3 Kg2, when the
h-pawn will cost White his bishop.

2 ... d4+!

Precisely played: it is extremely important
for Black to retain his b-pawn.

3 e×d4 Kg3 4 Ba3.

No better is 4 Be7 K×h4 5 g6+ Kg4.

4 ... K×h4 5 Kd3 K×g5 6 Ke4 h4 7 Kf3
Bd5+, and White resigned.

If the king succeeds in breaking through
to a passed pawn and ensuring its advance,
Bishops of Opposite Colour

does this lead to a win, with only very rare exceptions.

Position 330 is one such exception: after the sacrifice of the bishop for the passed pawn, a draw nevertheless results.

Marshall–Lewitt
Cobourg, 1904

330

W

330. White cannot prevent the advance of the opposing king to b2, so he heads for the opposing pawns with his king.

1 Kf3! Ke3 2 Ke4 Kb2 3 Ke5 Bf6+ 4 Kd6 a2 5 B×a2 K×a2 6 Ke6 Kb3 7 Kf7 Bc3 8 Kg6 Bf6 9 g5! h×g5 10 h6! g×h6 11 K×f6 g4 12 Kg6! g3 13 f6 g2 14 f7 g1=Q+ 15 K×h6. Draw.

In endings with opposite-coloured bishops, the fact that the king is able to break through to a passed pawn does not in itself signify anything. It is important that the king should be able to support the advance of the pawn. If the opposing king and bishop are able jointly to stop the pawn, then in the absence of any weaknesses in the position this is also sufficient to draw.

The following diagram shows the second typical drawn position.

331. Here both black pieces are battling against the passed pawn, with the bishop simultaneously defending its own pawns.

On 1 Kb6 it is wrong to play 1 ... Bd3 2 Ke6!, when White wins, but after 1 ... Bd7! White cannot achieve anything.

However, the presence of just one weakness in the defender's position can change the evaluation decisively.

Averbakh–Lyublinsky
Moscow, 1950

332

W

332. After 1 Kb6 Black was faced with the problem of where to move his king: to e8 or to e6? If the black pawns were at f5 and g6, both moves would be equivalent, since White would have absolutely no prospects on the K-side.

1 ... Ke6.

This move is the decisive mistake.

2 Kc7 Be8 3 h4!

Black cannot play 3 ... g6 because of 4 B×f6!

3 ... Bd7 4 g4!

This is the point. Thanks to the unfortunate placing of Black's K-side pawns, White is able to create another passed pawn.

4 ... h×g4 5 f×g4 Be8 6 h5. Black resigned, since on 6 ... Bd7 White wins by 7 B×f6! g×f6 8 h6.
Because of the poor placing of his bishop and king, Black was unable to hinder White's K-side play.

What if Black had played the correct 1 ... Ke8! 2 Kc7 Be6—could White then have won? Let us examine a possible continuation.

3 h3! Bf5 4 g4 hxg4 5 fxg4 Bd7.

The impression is that White has no way of approaching Black's one weakness—his g7 pawn. After all, the white bishop cannot reach f8!

6 Bd4 Be6 7 Ba7 Bd7 8 Bb8.

At first sight the manoeuvres of the white bishop seem absurd.

8 ... Be6 9 Kb6.

Let us suppose that Black continues to adopt passive tactics.

9 ... Bd7 10 Bc7 Kf7 11 Bd8!

Surely the bishop cannot force its way through to the g-pawn?

11 ... Ke8 12 Be7 Kf7 13 Kc7 Ke8 14 Bf8!!

Unbelievable, but true!

14 ... g6 15 Bg7 f5 16 g5! f4 17 h4 f3
18 Bd4 Bf5 19 Bf2! Be6 20 h5 gxh5 21 g6, with an easy win.

But perhaps Black could have played more strongly? The answer, unfortunately, is yes. The correct continuation was 9 ... Kd7!

10 Kxh5 Bb3! 11 Bc7 Bd1.

If White's b-pawn stood at b4, he would win easily, whereas now the unfortunate placing of his pieces leads to draw, in spite of the two extra pawns. For example: 12 Kc5 Bf3 13 Ba5 Bg2! (it is important to eliminate the threats on the K-side) 14 b4 Bf3 15 g5 fxg5 16 hxg5 Bd1 17 Bc3 g6 18 b4 a×b3
19 Bb2 (by sacrificing a pawn, White has created another passed pawn) 19 ... Be2
20 a4 Bd1 21 a5 Be2 22 Ba3 Bf1 23 Kd5 Be2
24 Ke5 Bf1 25 Kf6 Bd3 26 Kf7 b2, with a draw.

There is also a draw by 9 ... Bd7 10 Bc7 f5!! 11 g×f5 B×f5 12 K×b5 Bc2 13 Kc6 Be4+ etc.

It should be noted that Black gained a draw only because White had a backward b-pawn. If this pawn had been at b4, Black would have been unable to avoid defeat.

When the bishop and king are dealing jointly with a passed pawn, it is very important that their actions should be co-ordinated, and that their manoeuvrability should not be too restricted.

Herbstman, 1930

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333. If Black had time to play 1 ...Bg7 or 1 ...Bg5, it would be a draw, but it is White to move...

1 f6+! K×f6 2 Kd7 Bf8.

We have reached a familiar set-up, with both black pieces stopping the opposing pawn. It turns out that the pawn at d6 has an exceptionally unfortunate role to play.

3 Ke8! Be7 (or 3 ... Kg7) 4 h3!, and Black is in zugzwang.

In endings with opposite-coloured bishops, the advance of passed pawns can be supported.

Averbakh, 1951
only by the king. Therefore, if the defender should succeed in preventing the opponent’s king from approaching these pawns, it will normally be impossible to win.

334. This position is a third typical drawn position. In spite of his two extra pawns, White cannot win, since the black king prevents the approach of the opposing king.

1 Ke5 Ke6 2 Kb6 Kd7 3 h5 Ke8!, with a draw.

It would be wrong to play 3 ... Bf3 4 a8=Q! B×a8 5 Ka7 Bf3 6 Kb8! (by sacrificing a pawn, White has broken through with his king, and now he promotes his b-pawn) 6 ... Bg2 7 b6 Kc6 8 Ka7 etc.

In the drawn positions examined earlier, the defender stuck mainly to passive tactics. The third drawn position is typified by active play with the king.

Averbakh, 1954

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+/−

335. If it is White to move, he penetrates on the K-side, and then puts Black in zugzwang.

1 Kc3 Bf1 2 Kd4 Be2 3 Ke5 Kd7 4 Kf6 Bd3 5 Kf7!

Nothing is given by 5 a6 B×a6 6 K×g6 Be4 7 Kg7 Ke8 8 g6 Bd3! 9 Kh6 Bc4!, with a draw, as in position 315.

5 ... Kd8 6 Bd4! Kd7 7 Bc5 Kd8 8 Bb6+ Kd7 9 Bc7, and White wins.

But if it is Black to move, he succeeds in regrouping, and in setting up the third drawn position. This is how it is done:

1 ... Kd7! 2 Kc3 Ke6 3 Kd4 Bb7!

Black is not afraid of the enemy king going to the Q-side.

4 Kc5 Kd7 5 Kb6 Bf3 6 a6 Kc8!

Accurate defence is required. If 7 ... Bg2, then 8 Ka7 Kc8 9 d7+ K×d7 10 Kb8, and White wins.

7 Ka7 Bg4!

Again the only move to maintain the balance. Bad is 7 ... Bc6? 8 Bb4!, when Black is in zugzwang. After 8 ... Bd7 9 Kb6 Bf5 White wins by 10 d7+! K×d7 (10 ... B×d7 11 a7) 11 Kb7.

8 Kb6 Bf3! 9 Kc5 Kd7 10 Kd4 Ke6!

It is easy to see that White cannot break through. By accurate manoeuvring, Black’s king succeeds in defending all the invasion points.

The stronger side can nevertheless win in positions of the third type, if he succeeds in hindering the active manoeuvring of the enemy king. How this can be done, we will now see.

Euwe–Yanofsky
Groningen, 1946

336

B

336. Here Black played the careless 1 ... Bc2?, and after 2 Be5! he was forced to part with another pawn. The game continued:

2 ... Bd3 3 B×d3 B×e4 4 a6 c5! 5 B×c5 h5!

Black will be saved if he can set up the third drawn position.

6 Kf2 Bd3!
Both Sides Have Pawns

It is important that the white king should not be able to reach a7.

7 a7 Be4 8 g3 Ke6 9 Ke3 Bg2?

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337. It seems improbable, but now White succeeds in breaking through to the Q-side pawns, by first initiating play on the K-side, and then cutting off the black king.

9... Kf5!, defending the important invasion square f4, would have drawn, for example: 10 Bf8 g6 11 Kd4 Ba8 12 Ke5 Ke6! 13 Kb6 Kd7.

10 Kf4! g6 11 g4! h×g4 12 K×g4 Bh1 13 Kg5 Kf7 14 Bd4 Bg2 15 h4 Bh1 16 b4 Bg2 17 h5 Bh1 18 Bf6!

The main move in White’s plan. The bishop cuts off the black king from the Q-side pawns, and controls the advance of the h-pawn.

19 h5! g×h5 20 Kf5! Black resigned, since he is powerless to prevent the approach of the Q-side by the white king.

Solomenko-Bessmertny
Sverdlovsk, 1952

338

338. The direct attempt by Black to take his king over to the Q-side does not succeed here, but the same plan as in the previous game is possible.

1... Kh4! 2 Kf2 Bd4+ 3 Kf1 Kg3 4 Bg8 h5 5 Bh7 g5 6 Be6 c6 7 Bc4 g4 8 h×g4 h×g4 9 f×g4 K×g4 10 Be6+ Kg3 11 Bc4 Bf2!

A familiar device. Black cuts off the white king.

12 Be6 f3 13 g×f3 K×f3 14 Bg8 Ke3, and after 15... Bh4 the black king goes to b2.

The situation is more complicated in the following example, but Black wins in similar fashion.

Makarichev–Averbakh
Lvov, 1973

339

339. 1... Ke5 2 Bc2 Kf4 3 Bb1 Bh2 4 Kf2 Bg1+!

An important point. The bishop cannot be taken: after 5 K×g1 Ke3 6 Kf1 Kd2 Black's king goes to the support of his Q-side pawns.

5 Ke2 Kg3 6 Kf1 Bf2! 7 Bc2 f5! 8 Bb1. If 8 B×f5, then 8... Kf4 9 Bc2 Ke3 etc.

8... f4 9 Bg6 Be3 10 Bc2 b5 11 Bf5 e5

12 Bg6 h4 13 Bf5 g4! 14 h×g4 (or 14 f×g4 f3 15 g×f3 K×h3) 14... h3 15 g×h3 K×f3 16 g5 Kg3 17 g6 Bd4 18 h4 f3

19 h5 Bg7 20 Ke1 f2+.

White’s connected pawns are halted, and after 21 Kf1 Kf3 the black king crosses over to the Q-side. White resigned.

The diversion of the enemy king from the task it is fulfilling—be it blockading a passed pawn or defending invasion squares—is one
of the typical ways of playing for a win in such endings. The diversion can be carried out in various ways. If there are weaknesses on other parts of the board, which can be defended only by the king, an attack on them will divert the king. This aim can also be served by the creation of a second passed pawn.

Henkin–Dubinsky
Moscow, 1963

340. White can cope successfully with the passed a-pawn, but if Black should succeed in creating a second passed pawn on the K-side, this will decide the game.

1 Kd3 Kd6 2 Bg8 Ke7 3 Bc4 Kf8 4 Kc2 Kg7 5 Kh3 Bb2 6 Bb5.

White intends to stop the passed pawn with his king, and to use his bishop to prevent ... f5 and the penetration of the black king into his position. If with this aim he plays 6 Be6 Kg6 7 Bg4, the black king reverses its steps—7 ... Kf7! 8 Kc2 Ke7 9 Bh5 Kd6 10 Bf7 (otherwise the threat of ... Ke5–d4 cannot be parried), and now the break 10 ... f5! 11 e×f5 e4 12 f×e4 Ke5 is possible, for example: 13 Kd3 Kf4 14 Bd5 Kg3 15 Kc2 g4 16 Kf1 Kh2, and one of the black pawns queens.

6 ... Kf7 7 Kc2 Bd4 8 Kh3 Bb2.

But why not 8 ... Bc5? Henkin erroneously thought in this case White would save the game after 9 Bd7, since Black's bishop prevents the advance of his king to d4.

But after 9 ... Ke7 10 Bg4 Kd6 11 Bf5 Bb4 12 Bg4 Kc5 13 Be6 Black can play 13 ... Kd4! 14 K×b4 Ke3 15 K×a3 K×f3, and wins.

9 Kc2 Kg7.

Here the break is not dangerous: 9 ... f5 10 e×f5 e4 11 f×e4 Kf6 12 Kb3 Ke5 13 Be2 etc.

10 Kb3 Kg6 11 Be8+ Kh6! 12 Bf7.

If instead 12 Kc2, then 12 ... Bd4! 13 Kb3 Be5 14 Bf7, and the break is possible—14 ... f5! 15 e×f5 e4 16 f×e4 g4 17 Be4 Kg5 18 Bf1 Kf4 19 Bg2 Kg3 20 Bh1 (20 e5 Kf4) 20 ... Kh2 21 e5 K×h1 22 f6 Bd4.

12 ... Kg7 13 Bh5.

13 Be8 Kf8 14 Bb5 Kc7 15 Bc4 Kd6 16 Kc2 Kc5 17 Kd3 no longer helps, because of 17 ... f5! 18 e×f5 g4! 19 f6 e4+ 20 f×e4 g3, when Black wins.

13 ... Kf8 14 Bg6 Ke7 15 Kc2 Kd6 16 Bf7 f5! 17 e×f5 e4 18 f×e4 Ke5 19 Bc4 K×e4 20 Bd3+ Ke3, and White resigned, since after 21 Bc4 Be5 22 Kb3 Bd6 he has to give up his bishop for the g-pawn.

The question arises: couldn't White have set up the third drawn position, watching the passed pawn with his bishop, and using his king to prevent both the pawn breakthrough, and the penetration of the enemy king into his position?

Let us return to the initial position, and consider this system of defence.

1 Kd3 Kd6 2 Bc4 Ke7 3 Ke2 Kf8.

Here the 3 ... f5 break does not achieve anything: 4 e×f5 Kf6 5 Be6 e4 6 f×e4 g4 (6 ... Ke5 7 Kf3) 7 Kf1 Ke5 8 Kg2 Kf4 (8 ... K×e4 9 Kg3) 9 Bd5 Be5 10 Kf2 Bd6 11 Kg2 Bd4 12 Be6!, with a draw.

4 Kf1 Kg7 5 Kg2 Kgg 6 Be6 Kh5 7 Kg3.

The black king must not be allowed to reach h4, since White will end up in zugzwang. For example: 7 Kh2? Kh4 8 Kg2 Bc3 9 Kf2 Bd2 10 Kg2 (10 Ke2 Kg3!) 10 ... Be1 11 Kh2 g4! 12 f×g4 Kgg 13 Kg2 Kf4 14 Bd5 K×g4
15 Kf1 Bb4 16 Ke2 Kf4 17 Kd3 f5, and Black wins.

Black tries to gain a tempo.
7 ... Kb6! 8 Ba2 Kg6 9 Kg4!
If 9 Be6, then 9 ... Kg7! 10 Kg2 Kf8
11 Kf1 Ke7 12 Ba2 f5!, and here the break
is decisive: 13 c×f5 Kf6 14 Be6 e4 15 f×e4
Ke5 16 Bd5 Kf4 17 Kg2.

This interesting and critical position de-
serves a diagram. Black’s pawns prove to be
stronger than White’s.

17 ... Ke7 18 Kc4 Kf8 19 Kd3!
It is too late to go to the K-side: 19 Kd3
Kg7 20 Kc2 Kg6, and the black king breaks
through to h4.
19 ... Bb2 20 Kc2 Kg7 21 Be6 (otherwise
the threat of the king breakthrough cannot
be parried) 21 ... Kg6 22 Bg4 Kf7! 23 Bh5+
Ke6 24 Bg6 Kd6 25 Bf7.

342. We have already considered a simi-
lar position in the note to White’s 6th move
in the game. Here the break is possible:
25 ... f5! 26 e×f5 e4 27 f×e4 Ke5 28 Kd3
Kf4 29 Bd5 Kg3 30 Ke2 g4 31 Kf1 Kh2, and
Black wins.

Averbakh, 1951

343. This position could have occurred
in the game Smyslov—Averbakh (Moscow,
1950). It constitutes a highly subtle study.
1 Kg5 Ke7.
If 1 ... B×f3, then 2 K×g6 Ke5 3 Be3
Ke6 4 Bf4, and Black loses one of his pawns,
after which the win is simple.
2 f4!!

A strange and surprising move. White's plan is, in the end, to break through to the Q-side pawns. Therefore he first ... shuts in his king on the K-side. What nonsense!, the reader may say. But see what happens next.

Incidentally, we should mention that nothing is achieved by 2 g4 h×g4! 3 f×g4 f×g4! 4 K×g4 Ke6 5 Kg5 Be4! 6 a8=Q B×a8 7 K×g6 Kd7 8 h5 Kc7, when Black draws by giving up his bishop for the h-pawn.

2 ... Be4! 3 Bf2!

3 Bd4 Bf3 4 g4 h×g4! 5 h5 g×h5 6 K×f5 h4 leads to a draw.

3 ... Kg7.

If 3 ... Bf3, then all the same 4 g4! h×g4 (4 ... f×g4 5 Bg3! Kg7 6 f5 g×f5 7 K×h5 f4 8 B×f4 g3+ 9 Kg5 g2 10 Be3, and White wins easily by transferring his king to the Q-side) 5 h5! g×h5 6 K×f5, winning more easily than in the main variation.

4 g4!! h×g4.

On 4 ... f×g4 there follows 5 f5 g×f5 6 K×h5 Kf6 7 Bg3 Bf3 8 Kh6 Be4 9 h5 Bf3 10 Bh4+ Kf7 (10 ... Ke5 11 Kg5 f4 12 h6) 11 Kg5 Be4 12 Bg3 Kg7 13 Be5+ Kf7 14 h6 etc.

5 h5! g×h5 6 a8=Q! B×a8 7 K×f5 Kf7.

344. White has given up his extra pawns, and now wins an ending with an equal number of pawns.

8 Kg5 Bf3.

If 8 ... Ke7, then 9 f5 Kd7 10 f6 Bd5 11 a7 etc.

9 a7 Ba8 10 Bh4 Bf3! 11 f5 (11 K×h5 g3+ and 12 ... g2 leads only to a draw) 11 ... Kg7 12 Bg3 Ke7 13 Be5! Be4!

If 13 ... Ke8, then 14 Kf6 h4 15 Bd6+ Kg8 (or 15 ... Ke8 16 Kg7) 16 Ke7.

14 K×h5!! g3 15 B×g3 Kf6 16 Kg4! B×f5+ 17 Kf4!, and the a-pawn queens.

We have already examined a couple of examples where both sides had passed pawns, but one side's were the more dangerous. We will now dwell in more detail on such positions.

Berger, 1895

345. White has two connected passed pawns against one.

1 Ke5 Ke7 2 Ke6! (If 2 Bh5, then 2 ... Kd7 3 a6 Ke7 4 b5 Bf2++, with a draw; therefore it is important not to allow the black king across) 2 ... K×e8 3 a6 Bf2 4 b5 g4 5 b6 g3 6 a7 g2 7 a8=Q+ Ke7! 8 Qa3+ Ke8 9 b7, and White wins.

Had Black played 1 ... g4, then 2 Kc6 g3 3 Bd7+ Ke7 4 Bh3 Kd8 5 a6 Bf2 6 b5 etc.

Norlin
346. Here White has two separated passed pawns against one. If he takes his king over to the g-pawn immediately, Black will begin advancing his a-pawn. In order to win, White must position his bishop such that it blockades the a-pawn and defends the pawn at e7, i.e. at a5. By accurate manoeuvring, White achieves this.

1 Kc3 Bf7 2 Kb4 Be6 3 Be5 Kc8.

If 3 ... Bf7, then 4 Kc5 Bb3 5 Kd6! Kc8 6 Bc3 and 7 Ba5, or 4 ... Kc8 5 Kc6! Be8 + 6 Kd6 Bf7 7 Bc3 etc.

4 Kb5! (threatening 5 Ka6) 4 ... Kb7 5 Kc5 Bb3 6 Kd6 Kc8 7 Bc3, and so on.

In positions with passed pawns it is very important to allocate correctly the duties of the pieces. As in endings with bishop and pawns against pawns, it is best to control the enemy pawns with the bishop, and aim to support one's own passed pawn with the king.

We have already seen many times that, when there are passed pawns on both sides, it is important to blockade the enemy pawns and to try not to allow one's own pawns to be blockaded. The following two examples show instructive mistakes.

Polner-Chigorin
St Petersburg, 1881

347

347. 1 ... b5! 2 a×b5 a×b5 3 c×b5.

From a formal viewpoint White has a material advantage, but in fact Black's two pawns are much more dangerous than the three white pawns. Black's bishop is blockading all the enemy pawns, so that his king is free and can go to the help of his own pawns.

3 ... Kd7.

This is a mistake, after which Black should not have been able to win. Correct is 3 ... c4!

4 Ba2 c3 5 Bb1 Kd7, when the king heads for the c-pawn.

4 Bd3 Kc7 5 Bf1 Kb6 6 Kg2.

A mistake in reply. It was essential for White to regroup his forces. He could have maintained the balance by 6 Kc3! Ka5 7 Kd2 Kb4 8 Kc2 c4 9 Bg2 K×b5 10 Bf3, and if Black penetrates with his king to f2, and wins the bishop, White can eliminate the last black pawn by advancing his d-pawn.

6 ... Ka5 7 Kf3 Kd4 8 b6 c4 9 b7 c3 10 Bd3 Kb3 11 Kg2 c2, and Black won.

Kotov-Botvinnik
Moscow, 1947

348

348. Black has an outside passed pawn and also the possibility of creating a second passed pawn on the Q-side.

1 b×c5 b×c5.

An error. Black forgot that passed pawns on opposite wings can become more effective if they can be supported by the king. But here Black's pawn at d6 is weak, so that his king is unable to go to the help of his pawns.

The game continued: 2 Be1! (correct, otherwise the e4 and d5 pawns are lost) 2 ... h3 3 Bg3, and Black was unable to improve his position.

Instead of 1 ... b×c5, Black could have
Bishops of Opposite Colour

won by 1 ... d×c5!! , for example: 2 Be1 h3 3 Bg3 b5 4 Kd3 a5 5 Bh2 a4 6 Bg3 a3 7 Bh2 b4 8 Kc4 B×e4 etc.

To win in an ending with opposite-coloured bishops, it is normally sufficient to create two connected passed pawns. True, one must take care that the opponent does not blockade them.

Leonhardt–Schlechter
San Sebastian, 1912

349

349. Black easily realized his advantage, by creating two connected passed pawns.
1 ... d5! 2 e×d5 c×d5 3 b4 Ke6 4 Bc5 a6 5 Bb6 Kf5 6 Bc7 Bb5! (the bishop is transferred to h5, so as to attack the f-pawn)
7 Bd6 Be8 8 Be7 Bb5 9 Bb4 e4! 10 f×e4
d×e4 11 c4 Bf7 12 c5 Be8 13 Be7 e3+
14 Ke1 Kg4. White resigned, since on 15 Bd6 there follows 15 ... f3 16 Bg3 Kh3 17 Kf1 Bb5+ 18 Ke1 Kg2 and 19 ... f2+.

Certain peculiarities of the battle with a rook’s pawn are demonstrated by the following examples.

350

This position could have occurred in the game Sherwin–Gufeld (Helsinki, 1961).

It appears that Black should win easily, for example: 1 B×e3 a4 2 Kf3 a3 3 Bc1 a2
4 Bb2 Kc4 5 Ke3 Kb3 6 Bf6 Kc2, and after 7 ... Kb1 Black wins the bishop and the game.

But Black correctly did not go in for this continuation. White can in fact play more strongly: 1 Bb6!! (in this way he wins an important tempo) 1 ... a4 2 Kf3 a3 3 K×e3
Kc4 4 Bd4 Kb3 5 Kd2 Ka2 6 Ke1!, and the king is not in time to help the pawn to queen.

Vorotnikov–Kaminsky
Leningrad, 1973

351

351. Black’s bishop, defending both pawns, is of course badly placed, but if it were his move he would easily draw by 1 ... c4!
The pawn sacrifice enables him to set up the first drawn position, for example: 2 d×c4 Bf2 (it is important for the bishop to escape to freedom) 3 c5 Be3 4 Kd6 Bf4+ 5 Kc6 Be3
6 Kd5 Kc7, and Black has achieved his goal.

But it was White to move, and he played 1 c4!, not allowing the opponent to free his bishop, and creating a position of zugzwang.

1 ... Ke7 2 Bb3 Kd8 3 Bf5 Ke7 4 d4!
c×d4 5 c5 Ba5 6 Kb7 Kd8.

Black is pinning all his hopes on 7 K×a7? Kc7, with a draw.

7 Bd3!
The only move to win. If immediately
Both Sides Have Pawns

7 c6, then 7 ... d3! 8 B×d3 Bb6 9 c7+ B×c7 10 K×a7, and any move on the d6-h2 diagonal leads to a draw. It is extremely important for White that the a7-g1 diagonal should be closed.

7 ... Kd7 8 c6+ Kd6.

If 8 ... Kd8, then 9 c7+! (by forcing the bishop to capture the pawn, White prevents Black from occupying c7 with his king) 9 ... B×c7 10 K×a7 Kc8 11 Bf5+ Kd8 12 Kb7, and the a-pawn queens.

9 Bb5! Bb6 10 c7! B×c7 11 K×a7 Ke5 12 Kb7 Bb6 13 Bd3, and Black resigned.

But Black did not exploit all his defensive possibilities. As was later shown by Voronkov, Black could have drawn by 1 ... Ba5!, when by sacrificing a pawn he improves the position of his bishop. For example: 2 K×c5 Bb6+ 3 Ke6 Be3!

Now, in order to advance his pawns, White must retreat his king to the 5th rank, and this allows the black king to occupy c7.
4 e5 Bf2 5 Kd6 Bg3+ 6 Kd5 Ke7! 7 Ke4 Be5 8 d4 Bf6 9 d5 Be7!

Black’s defensive set-up is complete. After 10 d6+ B×d6 11 c×d6+ K×d6 the draw is obvious, and White has no other way of improving his position.

If a bishop on its own is battling against a passed pawn, it is very important that it should be free in its movements, otherwise the pawn may queen even without the support of the king.

Gorgiev, 1935

Herbstman & Gorgiev, 1929

352. 1 c6! Be4+! 2 f3! B×f3+ 3 Kh2 d×c6 4 a6 c5.

If 4 ... d4, then 5 Kg3 Bd5 6 Bc5! d3 7 a7 d2 8 a8=Q d1=Q 9 Qf8+ K×h5 10 Qe8+ Kg5 11 Be7+ Kh6 12 Bf8+ Kg5 13 Qe7+ Kg6 14 Qg7+ Kh5 15 Qh6 mate.

5 Kg3 Be4 6 Kb4! (an unexpected danger; 7 Bf8 mate is threatened) 6 ... Kg7 7 Be5+ Kf7 8 Bd4.

In rare instances, a badly placed king may itself become a target for attack. Here a restricted bishop may play an unfortunate role, not only doing nothing to aid the defence, but even depriving the king of important squares.

Gorgiev, 1935

353

353. After 1 b4+ Ka6 2 Ke6 e4 (2 ... Ka7 3 Bd5) 3 Be6! e3 4 Bc4+ Ka7 5 b5 Ka8 6 Bd5 Ka7 (6 ... e2 7 b6) 7 Bf3 Ka8 White gives mate in two moves: 8 b6 c×b6 9 K×b6 mate.

Herbstman, 1954
354. Here the object of attack is the restricted white bishop.

1 Ka3 Bg5 2 b4 Be1+ 3 Kb3 Bb2 4 b5 Bf6
5 Ka3 Be7+ 6 Kb3 Be5.

White is in zugzwang, and is forced to give up his bishop. But after 7 Ka4!! K×a2 it is stalemate.

But perhaps it would have been stronger to play 1 ... Bf6 2 b4 Bb2+ 3 Kb3 b5?
White is again in zugzwang, but after 4 Bb1!! K×b1 it is again stalemate.
PART II

Knight Endings

Yuri Averbakh, Vitaly Chekhov
4. Knight Against Pawns

4.1 Knight Against Pawn

If the opposing king can blockade the pawn, the position will be an elementary draw.

Winning chances appear for the side with the pawn when the opposing king is remote, and the knight on its own has to combat the pawn supported by the king. It is with such positions that we will begin our analysis.

A knight can stop a pawn by attacking one of the squares in its path. To do this it must be not far away.

Note that the placing of the knight close to the pawn does not necessarily mean that it is able to stop the pawn.

355. After 1 a6 the pawn queens, since the knight cannot attack a square in front of it, and is also preventing its own king from stopping the pawn. This position is an exception.

Let us move it one file to the right.

356. Here White can no longer win, since after 1 a6 Na6 Black controls a square in front of the pawn.

357

357. Here too White is unable to win:
1 Kd6 Nb8 2 Ke7 Na6 + 3 Kb6 Nb8 etc.

It is easily established that moving position 357 one or two files to the right has no effect on the result. But if it is moved one file to the left, the resulting position will be lost for Black.
Knight Against Pawn

358. 1 Ke6 Na8 2 Kb7, and the knight has no square analogous to a6 in the previous example.
A lone knight cannot stop a rook's pawn, if it has reached the 7th rank.

359

360. Here White can draw.
1 Ne2+! (1 Nd3+ loses after 1 ... Kd2 2 Nc5 Kc3 3 Ne4+ Kd4 4 Ng3 Kd3 etc.)
1 ... Kd1 (if 1 ... Kd2, then 2 Nd4! c1=Q 3 Nb3+, with a draw) 2 Ne3+ Kd2 3 Na2.
White has occupied a square which is unapproachable to the black king.

Moving position 360 one or two files to the right does not change the evaluation, but if it is moved one or two files to the left, Black wins.

361

359. But against a rook's pawn on the 6th rank, a knight copes excellently with its duties.
1 Kc5 Na7 2 Kb6 Ne8+ 3 Kb7 Nd6+ 4 Kc7 Nb5+ 5 Kb6 Nd6!
The only move, but sufficient. White can make no progress, since on 6 a7 there follows 6 ... Ne8+ and 7 ... Nxa7.

It can be stated that a knight can independently stop any pawn, with the exception of a rook's pawn on the 7th rank, if it can once occupy a square in front of the pawn.

We will now examine a number of positions where the knight is not able to occupy a square in front of the pawn, but can attack the square.

Chéron, 1924

360

361. 1 Nd2+ Kc1 2 Nb3+ Kd1, and here there is no square corresponding to a2 in the previous position.

If the pawn has not reached the 7th rank, and the knight is some distance away, it is easy to determine whether or not it can catch the pawn. Here the following rule may prove useful: if a pawn has not yet advanced beyond its 4th rank, a knight can catch up with it from any square on the board.

This rule is correct for all pawns except rooks' pawns.
The problem becomes more complicated if the opposing king stands in the knight’s path. Thus in diagram 362 Black’s position appears critical. But he is saved by the fact that a pawn at b7 can be stopped by a knight not only from c6 and d7 (which in the given case are inaccessible), but also from a6.

362. 1 ... Nd3! 2 b6 (if 2 Kd5, then 2 ... Kf3 3 Kd4 Nf4 4 b6 Ne6+ and 5 ... Nd8) 2 ... Nb4 3 b7 Na6. Draw.

Rey Ardid, 1926

363. Here Black loses, since the squares from which the knight could stop the pawn, b6 and c7, are inaccessible.

Sometimes, when the knight cannot directly catch the pawn, he is helped by ... the enemy king.

364

365. Black threatens by 1 ... Kc5 to drive away the knight and then advance his pawn.

White’s problem is to manœuvre with the knight so that, when the black pawn reaches b2, he can play his knight to a3, c3 or d2.

This is achieved as follows: 1 Ne7+ Kc4 2 Ne8! (the knight occupies a key square; depending on the position of the black king it will choose its route to b1, which may vary from c7-b5-a3 to f6-e4-d2; Black is unable to prevent this) 2 ... Kc5 (if 2 ... b3, then 3 Nd6+ Kb4 4 Ne4 and 5 Nd2, or 3 ... Kd3 4 Nb5 and 5 Na3) 3 Nf6 Kd4 (3 ... b3 4 Ne4+ and 5 Nd2) 4 Ne8! Ke5 5 Ne7! Kd6 6 Ne8+! (again the saving check; 6 Nb5+ loses to 6 ... Kc5 7 Ne7 b3 8 Ne6+ Kc4 etc.) 6 ... Ke5 7 Nf6 Kd4 8 Ne8 b3 9 Nd6 Ke3 10 Ne4+! (but not 10 Nb5+ Kb4! 10 ... Kc2 11 Nd6! b2 12 Ne4! b1=Q 13 Na3+ etc.

366. In this position too White draws by saving checks: 1 Kd1 b2 2 Nf4+ Ke3 3 Ne2+! (3 Nd6+? Kb3) 3 ... Kb3 4 Ne1+!

In certain positions an accurate choice of
Knight Against Pawn

Blatter & Hefele, 1944

square for the king can determine the result of the game.

Prokop, 1925

Marwitz, 1937

368. 1 e6 Ne2+ 2 Kh2!
Now the knight cannot stop the pawn, but White must not play 2 Kf2 Nc3 3 c7 Nc4+ and 4 ... Nf6, or 2 Kg4 Nc3 3 e7 Nd5 4 e8=Q Nf6+.

Moravec, 1938

369. 1 d6. Now Black has two main continuations:

a) 1 ... Nc3 2 Ke6! (the only move; all others lead to a draw, as can easily be checked) 2 ... Ne2 3 d7 Nd4+ 4 Kd5!

b) 1 ... Nd2 2 Ke7! (but not 2 Ke7? Nc4 3 d7 Ne5 4 d8=Q Nc6+) 2 ... Ne4 3 d7 Ne5 4 d8=Q+.

White only won thanks to the unfortunate position of the opposing king.

We have already seen that a rook's pawn presents the greatest danger to a knight: the proximity of the edge of the board tells on its fighting qualities. We will examine such positions in more detail.
Knight Against Pawns

It follows from the analysis of position 358 that a lone knight cannot cope with a rook's pawn on the 7th rank. The help of the king is needed in order to obtain a draw.

370. It is easy to show that Black gains a draw here, if his king is inside the rectangle a8-a5-e5-e8. For example, with the king at e5 there follows 1 ... Kd6! 2 K×a8 Ke7, with a draw.

This rule is an important guide, enabling the result to be determined and a plan established in endings with rook's pawns, if the king is some way from the pawn, and the knight is restraining it only on the penultimate rank.

Chéron, 1952

371. Thus here White wins: 1 h6 Nd6 2 h7 Nf7+ 3 Ke7 Nh8 4 Kf6!, and by taking the opposition White does not allow the black king into the drawing zone.

Another important property of a knight should also be known—its ability to erect 'barriers' in front of the enemy king.

In positions 372 and 373 the squares marked with crosses are inaccessible to the white king. In position 372 it turns out that the white king can get from e6 to b7 not in three moves, but only in five. Similarly in position 373, the king can reach b7 from e5 only in five moves instead of three.

Crosses signify squares which are inaccessible to the white king.

If the black king is on one of the squares marked by a dot, White wins.

The white king is forced to by-pass the 'barrier' created by the knight.

An analysis of positions 372 and 373 allows an extremely valuable conclusion to be drawn: in both positions, if it is White to move, he wins only if the black king is on the 1st rank, when it is unable to reach the drawing zone.

143
Knight Against Pawn

An interesting point is that in position 372 with the black king at h1, White can win by taking either of these two routes with his king: f7–e8–d8–c7–b7, or e5–d4–c5–c6–b7. For other positions of the black king on the 1st rank, only the e5–d4–c5–c6–b7 route wins. At the same time, in position 373 only the route f6–e7–d7–c6–b7 leads to a win.

Below we give a number of studies where the weaker side saves the draw, thanks to the fact that the opposing king has to waste time in making a by-pass. As a result the weaker side’s king has time to reach the drawing zone.

Grigoriev, 1932

374

374. 1 Nf7! h3 2 Ng5 h2 3 Ne4+ Kc2.
If 3 ... Kd3, then 4 Ng3! with a draw, or 3 ... Kd4 4 Nf2! with the same result.

4 Ng3!
The only way. 4 Nf2 fails to 4 ... Kd2 5 Kd6 Ke2 6 Nh1 Kf3, when White is too late.

Selman, 1941

375

4 ... Kd1 5 Kd6 Ke1 6 Ke5 Kf2 7 Kf4 etc.
The same theme is treated in positions 375 and 376.

375. 1 Nf7 h3 2 Nd6+ Kb6! 3 Ne4 h2 4 Nf2! Kc6 5 Kb8! Kd6 6 Kb7 Ke6 7 Kc6 Kf5 8 Kd5 Kf4 9 Kd4, as considered earlier.

Chéron, 1926

376

376. 1 a4 Ng7 2 a5 Ne8 3 a6 Nc7 4 a7 Kg2 5 Kf6 Kf3 6 Ke7 Ke4 7 Kd7 Na8 8 Kc6 Ke5, with a draw.
If the kings are disregarded, a rook’s pawn which has not yet crossed the 4th rank can be overtaken by a knight from any square, apart from the diagonally opposite corner to the pawn’s queening square.
As we already know, in catching the pawn the knight is sometimes helped by ... the opposing king!

Prokop, 1925

377

377. Thus after 1 Ng6! a4 2 Nf4 Kc3 (2 ...
Knight Against Pawns

a3 3 Nd3! Kc2 4 Nb4+, with a drawn position) 3 Nd5+ Kb3 4 Nf4 White gains a draw.

Rey Ardid, 1926

378

378. Here too Black’s knight catches the pawn: 1 a4 Ng5 2 Kd6 (2 a5 Nf3! 3 a6 Nd4 etc.) 2 ... Nh4! 3 Kd5 Nb4! 4 a5 Nf5! 5 Ke6 Nd4+ 6 Kb6 Nf5! Draw.

Grigoriev, 1932

379

379. White has to be able to stop the pawn either from g4 or from f1. But for the moment it is impossible to reach f1, so initially the knight heads for g4.

1 Nb4! (but not 1 Ne3? h5 2 Nd5+ Kf3 3 Ne7 h4 4 Ne6 Kg4, and the pawn cannot be stopped) 1 ... h5 2 Ne6! Ke4 (in the battle with a knight it is useful for the king to take the diagonal opposition; if 2 ... h4, then 3 Ne5 h3 4 Ng4+ etc.) 3 Na5!!

The only move, although at first sight it is incomprehensible. White finds the key square, from which his knight can reach either g4 or f1. The black king is powerless to prevent this.

3 ... h4 4 Ne4! h3 5 Nd2+ and 6 Nf1, with a draw.

It is not always that the side with the knight is the defender. If the opposing king is in a corner and shut in by its own pawn, it may be possible to cast a mating net around it.

Mate in 3 moves

380

380. 1 Nb4+ Ka1 3 Ke1 a2 3 Ne2 mate.

This position was known as long ago as the 13th century!

Troitsky

381

381. Troitsky’s study is more complicated.
1 Kf3! (after 1 Kf2 Kh1 White cannot give the opponent the move, since the knight alone is unable to win a tempo) 1 ... Kh1 2 Kf2 Kh2 (2 ... h2 3 Ng3 mate) 3 Ne3 Kh1 4 Ne4 Kh2 5 Nd2 Kh1 6 Nf1 h2 7 Ng3 mate.
Knight Against Two Pawns

4.2 KNIGHT AGAINST TWO PAWNS

4.21 Connected pawns

Connected pawns on the 6th rank can be stopped by a knight only in conjunction with the king.

382

382. 1 ... Ng6!

The only move! Alternatives lose:

a) 1 ... Ke8? 2 f7+ Kf8 3 e7+! Kxf7 4 Kd7.

b) 1 ... Nf3? 2 f7!, and Black ends up in zugzwang, for example: 2 ... Nd4 3 e7+ Kxf7 4 Kd7, or 2 ... Kg7 3 Ke7.

c) 1 ... Nf5+? 2 Kd7 followed by 3 e7+.

2 Kd7.

If 2 f7, then simply 2 ... Ne7, while 2 e7+ can be met by 2 ... Ke8 or 2 ... Nxe7.

2 ... Ne5+ 3 Kd8 (3 Ke7 Ng4) 3 ... Ne6+ 4 Ke7 (4 Kc8 Nd4) 4 ... Nd4 5 Kd7 (5 e7+ Ke8 and 6 ... Nf5) 5 ... Nxe6! 6 Kxe6 Ke8, with a draw.

Connected pawns on the 5th rank can be stopped by a knight on its own. In this case the result will depend on the positions of the kings.

383. The pawns are halted as follows: 1 Nb3! (1 Ne2? fails to 1 ... f3 2 Ng3 e3, when Black wins) 1 ... f3 (1 ... e3 2 Nd4) 2 Nd2 f2 3 Nf1, and the draw is obvious.

In exceptional cases a knight on its own can cope with two pawns, if, on account of the unfortunate position of the opposing king, it is able to eliminate one of them, after which a drawn ending with knight against pawn results.

Chekhover, 1955
(conclusion of a study)

384

384. At first sight White’s position seems hopeless, but there follows: 1 Ne6! g4 2 Ng7! f4 (if 2 ... g3, then 3 N×f5 g2 4 Ne3+) 3 Nh5! f3 4 Nf6! g3 (4 ... f2 5 N×g4 f1 = Q 6 Ne3+) 5 Ne4! g2 (5 ... f2 6 N×g3) 6 Nd2+ and 7 N×f3, with a draw.

Salvio, 1634
A general characteristic of knight endings is the use of the ‘fork’.

If one of the pawns is a rook’s pawn, then, if the opposing king is badly placed, the side with the knight may even be able to create a mating net.

385. White succeeds in mating the black king: 1 Nf6 Kh1 (1 ... g5 2 Ng4+ Kh1 3 Kf1 h2 4 Nf2 mate) 2 Ng4 h2 3 Kf1 g5 4 Nf2 mate.

If it is Black to move, two variations are possible:

a) 1 ... g5 2 Nf6 g4 (2 ... Kh1 3 Ng4 h2 4 Ne3! g4 5 Nf1 g3+ 6 N×g3 mate) 3 N×g4+ Kh1 4 Kf1 h2 5 Nf2 mate.

b) 1 ... Kh1 2 Nf6 Kh2 3 Ng4+ Kh1 4 Kf1 g5 5 Kf2 h2 6 Ne3 g4 7 Nf1 g3+ 8 N×g3 mate.

4.22 Isolated pawns

Against two widely separated pawns, the side with the knight can draw only if the king comes to its aid. Here co-ordinated action is highly important: the king must deal with one pawn, and the knight with the other. As in endings with knight against pawn, it is very important to find the key square from which the knight can catch the pawn. This proves possible in the following position.

Grigoriev, 1934

386. 1 Kd3 Kf7 2 Kc4 Kg6! (if 2 ... Kg7, then simply 3 K×b4 K×h7 4 Kc4, and the king arrives in time; but now on 3 K×b4 there follows not 3 ... K×h7?, but 3 ... h5! 4 Nf8+ Kf5, and the knight cannot stop the pawn) 3 Nf8+ Kf5 4 Nd7 h5 (4 ... b3 5 Kc3!) 5 Ne5!! (the key point is found, and the knight heads for f1; after 5 Nb6? h4 6 Nd5 Kc4! the h-pawn queens) 5 ... h4 6 Nh3!! (bad is 6 Nd3? h3 7 Nf2 h2 8 K×b4 Kf4 9 Kc4 Kf3 10 Nh1 Kg2 11 Kd3 K×h1) 6 ... h3 7 Nd2 h2 8 Nf1! h1=Q 9 Ng3+, with a draw.

A knight can stop two isolated pawns on the 6th rank, if there is not more than one file between them; otherwise one of the pawns queens.

387

386. a5 is decisive after 1 ... Kd4 2 a6 Ne8 (2 ... Nb5 3 d6) 3 d6! Nb6 (3 ... N×d6 4 a7) 4 a7 Kc5 5 d7, when one of the pawns queens.

With isolated pawns too, if one of them is a rook’s pawn a mating position can arise.

Jaenisch, 1837
Knight Against Three Pawns

388. White to play gives mate not later than the 10th move.
   1 Ne5! Kh2 (1 ... h2 2 Ng4) 2 Kf2 f3
   (or 2 ... Kh1 3 Ng4 f3 4 Kf1 f2 5 Nxf2+ Kh2 6 Ne4 Kh1 7 Kf2, transposing into the main variation) 3 Ng4+ Kh1 4 Kf1 f2!
   5 Nxf2+ Kh2 6 Ne4 Kh1 7 Kf2 Kh2 8 Nd2 Kh1 9 Nf1 h2 10 Ng3 mate.

If the black king tries to approach from the side, the white king prevents any further advance by occupying c2. Note that the evaluation does not depend on who it is to move, and is not affected by moving the position to the right.

Averbakh, 1954

4.3 KNIGHT AGAINST THREE OR MORE PAWNS

Only with complete co-ordination between king and knight, and even then not always, can the advance of the pawns be stopped.

Against three pawns a draw is possible if the total co-ordination of king and knight enables the pawns to be blockaded, or if a pawn can be won and a drawn ending with knight against two pawns obtained, or if the knight can be given up for two of the pawns, and a drawn pawn ending reached. Of course, we have listed here only the most basic cases.

4.31 Connected pawns

If the pawns are connected, there are two basic drawn positions for which the defender should aim (389 and 391).

Averbakh, 1954

389. The defence here is very simple. The knight manoeuvres between a2 and b4.

390. Here too Black is unable to win. On 1 ... Ke6 the simplest way to draw is by 2 Kc2! Kh5 3 Kb3 etc.

Averbakh, 1954

391. Here White's task is more difficult. If it is him to move, there is only one way to draw: 1 Ne3+! Kd4 (1 ... Kc6 2 Kc4 a2 3 Nc2 etc.) 2 Ne2+! Kd3 3 Na1! (3 Ne1+ loses to 3 ... Ke2 4 Nc2 Kd2 5 Na1 Kc1 6 Ka2 c4) 3 ... Kd2 4 Kc4! Kc1 5 Nb3+ Kb2 6 Nxc5 a2 7 Nb3.

But if it is Black to move, he wins in highly instructive fashion.

1 ... Ke6!! (1 ... a2? only draws after 2 Ne3 + Ke4 3 Nc2 Kd3 4 Na1 Kd2 5 Kxa2

148
c4 6 Nb3+ Kc2 7 Nd4+ Kd3 8 Nb3 etc; similarly, nothing is achieved by 1 ... Kd4? 2 Nd6 Kd3 3 Nc4 Ke2 4 Nd6 Kd1 5 Ne4 c4+ 6 K×b4) 2 Ke2! (2 Ne3 Kb5 3 Ne4 a2) 2 ... Kb5 3 Nd6+ Ka4 4 Nc4 b3 + 5 Kc3 a2 6 Kb2 Kb4 7 Ne3 c4 8 Nd5+ Ke5 9 Ne3 Kd4.

We have reached position 392, which was analyzed as long ago as 1880 by Horwitz.

392

392. Here we have position 391 moved down the board by one rank. This alters the assessment, since the knight lacks the space to regroup, and Black wins.

a) 10 Ne2+ (Horwitz considers 10 Ka1 b2+! 11 K×b2 a1=Q+; if 10 Na4, then 10 ... c3+ 11 N×c3 a1=Q+ 12 K×a1 K×c3) 10 ... Kd3 11 Nc1+ Kd2 12 Ka1 b2+ 13 K×b2 a1=Q-+

b) 10 Nb5+ Kd3 11 Ka1 Kc2 12 Nd4+ (12 Na3+ Kc3! 13 Nb5+ Kd3 14 Kb2 c3+ etc.) 12 ... Kd2! (12 ... Kc3? 13 N×b3!, with a draw) 13 Kb2 Kd3 14 Nb5 c3+, and Black wins.

Marble, 1914

393

393. White must impede the opponent’s pawns, and he achieves this as follows:

1 Ne4 a4 2 Ne5! Ka5.

If 2 ... Kc7, then 3 Ke5 a3 4 Nb3! a2 5 Kd4 Kd6 6 Kc3, picking up the a2 pawn.

3 Kc3 b4+ 4 Kc4 b3 (on 4 ... a3 there follows 5 Nb3+ Ka4 6 Ne5+) 5 Ke3! Kb5 6 N×b3 a×b3 7 K×b3. Draw.

But the position obtained by shifting position 393 one rank down the board will be lost for White.

Chéron, 1952

394

394. 1 Ne3 a3.

Now White does not have the important blockading move Ne4 because of ... a2. He is therefore powerless to prevent the advance of the pawns.

2 Kc2 c4 3 Nd1 (3 Nd5 b3+ 4 Kc3 a2 5 Kb2 Kc5 6 Ne3 Kd4 leads to the losing position 392) 3 ... b3+ 4 Kc2 a2 5 Kb2 Kb4 6 Ka1 Ka3 7 Nb2 c3 8 Ne4+ Kb4 9 Na5 b2+ 10 K×a2 K×a5.

Fine puts forward the rule that three con-
Concentrated pawns win against a knight, if at least two of them have reached the 5th rank. It follows from positions 389 and 391 that this is not altogether correct. It would be correct to say that three connected pawns win if all of them can be advanced to the 5th rank.

395. White to move is able to win.

1 f5+!

But not 1 g5? Nd5 2 Ke4 Ne7! 3 Ke5 Kh5! 4 f5 K×h4 5 Kf6 Nd5+ 6 Kg6 Ne7+, with a draw, or 5 g6 Kg5 6 g7 Ng8 7 Ke6 Nf6, with the same result.

1 ... Kg7 2 g5 Nd5 3 h5 Nc3 (or 3 ... Kf7 4 h6 Nc3 5 h7 Kg7 6 g6, and wins) 4 Kf4 Nc2+ 5 Ke5 Ng3 6 f6+ Kg8 7 h6 Nh5 8 g6 Ng3 9 h7+ Kh8 10 f7, and White wins.

It is a quite different picture with Black to move.

1 ... Nd5!, with two variations:

a) 2 f5+ Kf6 3 Ke4 Nc3+ 4 Ke3 (4 Kd3 Nb5 5 Kc4 Nd6+, or 4 Kd4 Ne2+ 5 Ke3 Ng3 also leads to a draw) 4 ... Ke5 5 h5 Nd5+ 6 Kf3 Nf6 7 h6 Nb7, and a basic drawn position (389) is reached.

b) 2 h5+ Kh6! (bad is 2 ... Kf6? 3 h6 Kg6 4 g5 Ne7 5 Kg4 Nf5 6 h7, and wins) 3 Ke4 (3 Kg3 Ne3 4 Kh4 Ng2+, or 4 Kh3 Nd5 5 f5 Kg5, with a draw) 3 ... Ne3+ 4 Ke5.

If 4 Kd4, then 4 ... Nd1, threatening ... Nf2, while a draw also results from 4 Kd3 Nd5, or 4 Ke3 Nd5+ 5 Kf3 Ne3 6 Kg3 Ne2+ 7 Kh4 N×f4, or 4 Kf5 Nd5 5 Ke5 Ne3 6 g6+ K×h5 7 Kf6 Nd5+.

4 ... Nd1 5 Kf6.

White also fails to win after 5 g5+ K×h5 6 f5 Nf2 7 f6 Kg6 8 Ke6 Ne4, or 5 f5 Ne3 6 Kf4 Nd5+ 7 Ke4 Nf6+.

5 ... Ne3 6 g5+ K×h5 7 g6 (7 f5 Ng4+) 7 ... Ng4+ 8 Kg7 (8 Kf7 Nh6+) 8 ... Nh6 9 Kh7 Nf5 10 g7 N×g7 11 K×g7 Kg4. Draw.

396. The white king is a long way from the pawns, and it seems that Black should win easily. But thanks to the unfortunate position of the opposing king, White is able to win one pawn, and then draw with the help of some subtle points.

1 Nd5.

Now Black has four possible replies:

a) 1 ... e2 2 Nc3+ Kb3 3 N×e2 Kg4 4 Nf4!

Other continuations lose, for example: 4 Ng3? f4 5 Nh5 g5 and then ... Kd5–e4, or 4 Kb7? g5, or 4 Ng1? Kd3.

4 ... g5.

On 4 ... Kc3 there can follow 5 Ne6 g6 6 Nh4 g5 7 Ne6 g4 8 Ng7 f4 (8 ... g3 9 Nh5! g2 10 Nf4 g1=Q 11 Ne2+) 9 Nh5 f3 10 Nh6 f2 11 Ne4+ followed by 12 N×f2 g3 13 Nh3.

5 Ne6, and for the continuation cf. position 384.

b) 1 ... g5 2 N×e3 f4 3 Ng4 Kb3 4 Nh2. Not 4 Kb7? Kc4 5 Kc6 Kd4 6 Kd6 f3 7 Ke6 Kc4 8 Kf6 Kf4, when Black wins.

4 ... Ke2.

Obviously 4 ... Kc4 is now met by 5 Nf3 g4 6 Ne5+.

5 Kb7 Kd1 6 Ke6 Ke2 7 Kd5 Ke3 8 Ke5 f3 9 Kf5. Draw.

c) 1 ... f4 2 N×f4 Kb3 3 Kb7 Kc4 4 Ke6 g5 5 Ng2 e2 6 Kd6 Kd4 7 Ke6 Ke4 8 Kf6 Kf4 9 Ne1+ Kf2 10 Nd3+ Ke3 11 Ne1 g4
12 Kg5 g3 13 Kg4 Kf2 14 Nd3+ Kg2 15 Nf4+ Kf1 16 N×e2. Draw.

d) 1 ... Kb3 2 N×e3 f4 3 Nf5 g5 4 Nd4+! Kb4(b2).

4 ... Kc4 5 Nf3 g4 6 Ne5+, or 4 ... Kc3
5 Ne6 f3 6 N×g5 f2 7 Ne4+, or, finally,
4 ... Ka4 5 Kb7 g4 6 Kc6 f3 7 Nf5 f2 8 Ng3
Kb4 9 Kd5 Kc3 10 Ke4 Kd2 11 Kf4 all
lead to a draw.

5 Nf3 g4 6 Ne5 g3 7 Nd3+ and 8 N×f4.
Draw.

4.32 Isolated pawns

It is even more difficult for a knight to
draw against three isolated pawns than against
three connected pawns, since here it is more
difficult to co-ordinate the king and knight.
A draw is possible if the pawns are not
widely separated.

Sidorov–Aleksandrovich
Riga, 1954

397 B

397. White succeeds in co-ordinating his
pieces, and Black is unable to win. The game
continued:

1 ... Kg2 2 Nf3 c3 3 Nd4 Kg3 (if 3 ... c2
4 N×c2 f3+ 5 Kd3 f2, then 6 Ne3+ Kf3
7 Nf1, with a draw) 4 Nf5+ Kg4 5 Nd4.
Here a draw was agreed, since on 5 ... f3+
there follows 6 N×f3! c2 7 Ne5+ and 8 Nd3.

398. If it were White to move he would
win easily after 1 c6 Nd5+ 2 Kc5 Ne7
3 d5 Na6 + 4 Kb6 Nb4 5 d6.

Hug–Calvo
Palma de Mallorca, 1972

But it was Black to move, and the game
continued: 1 ... Nd5+! 2 Kc6 Ne7 + 3 Kd6
Nf5 + 4 Ke5 Ne7 5 d5 Kd7 6 a6 Nc8.

Black has succeeded in co-ordinating his
king and knight, and all White’s winning
attempts are easily parried.

7 Kd4 Na7 8 Kc4 Kc7 9 Kb4 Nc8 10 Ka5
Na7 11 Kc4 Nc8 12 Kb3 (White is convinced
that his king cannot approach from the left,
and he returns it to the centre) 12 ... Na7
13 Kc3 Nc8 14 Kd3 Kd7 15 Ke4 Na7 16 Kf5
Nc8 17 Kf6 Ne7! 18 Ke5 (if 18 a7, then
18 ... N×d5+ 19 Ke5 Nc7) 18 ... Nc8
19 Ke4 Na7 20 Kf4 Nc8 21 Ke5 Na7 22 Kf6
Nc8 23 Kf7 Na7 24 Kf8 Nb5 25 c6+ Kd6
26 Ke8 Ne7+. Draw.

Three widely separated pawns normally
prove stronger than a knight. Thus if in
position 397 the c4 pawn were at b4, the
result would be different.

Averbakh, 1954
Knight Against Three Pawns

399. 1 ... Kg2 2 Nf3 b3 3 Nd2 b2 4 Kd1 Kf2! (of course, not 4 ... f3 5 Kc2 f2 6 K×b2 f1=Q 7 N×f1 K×f1 8 Kc3, with a draw) 5 Kc2 Ke2 6 Nb3 f3 7 Nd4+ Ke3 8 Nf5+ Kf4, and Black wins.

The presence of doubled pawns undoubtedly eases the defender's task.

Grigoriev, 1938

400. Despite the fact that White's forces are scattered, he manages to draw, since Black has doubled pawns.

1 Na5 Kf3.

In other variations a pawn is immediately lost, and the other is stopped by the knight:
   a) 1 ... Kd2(e3) 2 N×b7 b3 3 Na5 b2 4 Nc4+.
   b) 1 ... Kd1 2 N×b7 b3 3 Nc5 b2 4 Na4 b1=Q 5 Nc3+ (the black king blocks the 1st rank, so that the pawn has promoted without check).
   c) 1 ... Kc1(f2) 2 N×b7 b3 3 Nc5 b2 4 Nd3+.
   d) 1 ... Kd3 2 N×b7 b3 3 Ne5+ etc.
   e) 1 ... b6 2 Nc6 b3 3 Nd4+.
   f) 1 ... Kf1 2 N×b7 b3 3 Nc5 b2 4 Nc4 b1=Q 5 Nd2+ (also possible is 3 Na5 b2 4 Nc4 b1=Q 5 Nd2+).

2 Kh2.

Now 2 N×b7? no longer works: 2 ... b3 3 Na5 b2 4 Nc4 b1=Q+, and White has no time to play Nd2+.

2 ... Kg4.

If 2 ... Kf4, then 3 N×b7 b3 4 Nc5 b2 5 Nd3+.

3 Nb3 b6.

Or 3 ... Kf4 4 Nc5! Kg4 5 Nb3, and Black has not achieved anything, while if 3 ... b5, then 4 Nd4 Kf4 5 N×b5 Ke5 6 K×h3 Kd5 7 Nc7+ Kc4 (7 ... Kd6 8 Ne8+) 8 Ne8! b3 9 Nd6+ Kd5 10 Nb5, with a draw.

4 Nd2 Kf5.

Or 4 ... Kf4 5 Nc4 b5 (5 ... b3 6 N×b6 b2 7 Nd5+ and 8 Nc3) 6 Nd6 Ke5 7 N×b5 Kd5 8 Ne7+ with a draw (cf. position 365).

5 K×h3 Ke6 6 Kd3 Kd5 7 Kf3 Kc4 8 Ke2 Kc3 9 Kd1 b3 10 Kc1 b2+ 11 Kb1. Draw.

We are already acquainted with the valuable property of the knight in being able to create "barriers" in front of the opposing king. The following position is a good illustration of this.

Chekhov, 1938

401. White's forces are scattered, but Black is not able to exploit this. The black king is unable to cross the c-file without losing one of his K-side pawns, as the reader can check for himself.

Squares on the diagram marked with a cross indicate that the occupation of them leads to the loss of a pawn.

On 1 ... Kb3 there follows 2 Ne4 f5 3 Ng3 f4 4 Ne2 f3 5 Nd4+, with a draw.

Even against a large number of pawns, it is possible to win if the opposing king is in a mating net.
Knight Against Pawns

Mendheim, 1832

402. White gives mate not later than the 9th move.

1 Ng4 f3 (no better is 1 ... e5 2 Nxe5 Kh2 3 Kf2 Kh1 4 Ng4 f3) 2 Kf2 e5 3 Nxe5 Kh2 4 Ng4+ Kh1 5 Kf1 f2 6 Kxf2! h2 7 Ne3 g4 8 Nf1 g3+ 10 N×g3 mate.

The cramped position of the opposing king may provide the basis for a surprising save, even when resignation seems due.

Selezniev, 1930

403. White can no longer catch the e-pawn, but he nevertheless draws: 1 Kf7 e3 2 Nf6+ Kh8 3 Nd5 e2 4 Nf4 e1=Q 5 N×g6+ Kh7 6 Nf8+ Kh8 7 Ng6+, with perpetual check!

4.4 KING, KNIGHT AND PAWN AGAINST KING

With a lone king against king, knight and pawn, it is possible to draw in the following three cases:

1) If the pawn can be won.

2) If against a rook's pawn on the 7th rank the king can occupy the square in front of it, from which it cannot be evicted.

3) If the opposing king occupies the square in front of a rook's pawn on the 7th rank, and cannot escape from the corner.

404. White is unable to defend his pawn: 1 ... Kd3 2 Nc6 Kc3 3 Na5 Kb4, with a draw.

But if position 404 is shifted one file to the right, White manages to win.

405. White's problem is to defend his pawn with his knight from as far away as possible. Then, when the opposing king is attacking the knight, he can approach the pawn with his own king and defend it. This plan is carried out as follows: 1 ... Ke3 2 Nb6! Kd3 3 Na4! Ke4 4 Kg2 Kb3 5 Kf3! K×a4 6 Ke4, and White wins.

If the king is remote, the pawn must be defended by the knight from behind.
406. White wins by 1 Nb2! Kb3 2 a4, followed by the approach of his king to the pawn. Not 1 Nb6? Kb3 2 a4 Kb4 3 Kd2 Ka5, or 1 Nc5? Kc3 2 Ke2 Kc4 and 3 ... Kb3, with a draw.

407. The pawn is defended by the knight from the rear, and White wins by bringing up his king: 1 Ke4 Kb6 2 Kd5 Ka7 3 Ke6 Ka8 4 Kb6 etc.

But if this position is moved up the board by one rank, White can no longer win, since the attempt to evict the king from the corner leads to stalemate.

408. 1 Kc5 Kb7 2 Kd5 Ka8 3 Kc6—stalemate. Therefore it is not always advantageous to advance a rook’s pawn to the 7th rank.

We will consider two further positions on this theme.

Chekhov, 1952

409. After 1 Ke4! Black is unable to win, for example: 1 ... Ng4 2 Kf3 Kg7 3 Kg3 h2 4 Kg2, or 1 ... Kg7 2 Kf4 Nf1 3 Kf3 Kg6 4 Kf2 h2 5 Kg2.

410. On 1 Kf2 Black must not play 1 ... h2? 2 Kg2 Nf3 3 Kh1 with a draw. He wins by 1 ... Ne2!, creating a ‘barrier’, and not allowing the white king to approach the pawn.

411. This position demonstrates the third case.

In order to win, White must free his king. If it is his move, this is possible: 1 Nd3 Kf8 2 Ne5 etc. But if it is Black to move, the king cannot escape from the corner: 1 ... Kf8
2 Nd3 Kf7 3 Ne5+ Kf8. It is White to move, and he is forced to concede f7 to the opposing king. Draw.

In order to win, White would have to give his opponent the move, and this is impossible.

Here we have encountered a significant negative property of a knight: a knight on its own is unable to gain a tempo.

For positions such as No. 411 it is useful to remember this rule: the weaker side draws if, when he moves, he is able to place his king on a square of the same colour as that occupied by the knight.

4.5 KNIGHT AND PAWN AGAINST PAWN

King, knight and pawn usually win easily against king and pawn. The winning plan is simple:

1) If the pawn is passed, the stronger side's king will normally support the advance of the passed pawn, and the knight will blockade the enemy pawn.

2) If the pawn is not passed, the enemy pawn must first be won before one's own pawn can be queened. Positions sometimes occur in which the implementation of this plan encounters certain difficulties, and is sometimes altogether not possible.

412. Since White's pawn is a rook's pawn, his king alone is unable to help it to queen, since the black king will blockade it. It follows that White must first win the black pawn, in order to free the knight.

But the direct approach of the king to the b2 pawn does not win, for example: 1 Kg5 Kh7 2 Kf4 Kh6 3 Ke3 Kh5 4 Kd2 Kh4 5 Kc2 Kh3, with a draw. Therefore White must transfer his knight to d2, so as to have the possibility of defending his h2 pawn by Nh1.

Let us try 1 Nb1. There follows 1 . . . Kf6! 2 Kg4 (2 Nd2 Kf5 3 Kh4 Kf4 4 Kh3 Kg5, with a draw) 2 . . . Kg6 (also possible is 2 . . . Ke5 3 Kf3 Kf5, again with a draw, but not 3 . . . Kd4 4 Kc2 Ke4 5 Nd2+ Kd4 6 Kd1 Kd3 7 h4 Ke3 8 Kc2 Kf4 9 Nh3, when White wins) 3 Nd2 Kh6, and White is unable to win the black pawn without losing his own.

This means that White must play 1 Kg5!, for example: 1 . . . Kf7 2 Nb1 Kg7 (if 2 . . . Ke6, then 3 Kg6 Ke5 4 h4 Ke4 5 h5 Kd3 6 h6 Kc2 7 h7 Kxh1 8 h8=Q, winning) 3 Nd2 Kh7 4 Kf5 Kb6 5 Ke4 Kh5 6 Kd3 Kb4 7 Kc2 Kh3 8 Nh1, and White wins.

Clearly, if the white pawn were at h3, it would not be possible to defend it with the knight, and hence White would be unable to win.
This example shows another interesting possibility in positions with a passed rook's pawn.

White is unable to queen his pawn, but, if it is his move, he is able to mate the black king.

1 Na2! Kf8 2 Kf6!

If 2 Kg6?, then 2 ... Kg8 3 h7+ Kh8 4 Nb4 a2 5 Nxa2 stalemate. No better is 3 Nb4 Kh8 4 Nc6 a2 5 Ne5 a1=Q 6 Nf7+ Kg8 7 h7+ Kf8, when the black queen defends h8.

2 ... Kg8 3 Kg6 Kh8 4 Nb4 Kg8 5 h7+ Kh8 6 Nc6 a2 7 Ne5 a1=Q 8 Nf7 mate.

If it is Black to move, he draws by 1 ... Kg8! 2 Kg6 (2 Kf6 Kh7 3 Kg5 Kg8) 2 ... Kf8 3 Na2 Kg8, as considered above.

Fine, 1941

White’s task is more difficult if it is Black to move: 1 ... Kd5 2 Kf7 Kd4 3 Ne1! (not 3 Ne1 Kc4 4 Kf6 Kb3 5 Nd3 Kc2, with a draw) 3 ... Ke3 4 Nb3! Kd3 5 Na5! Kc2 6 b4! Kc3 7 Nc6 Kc4 8 Kf6 Kd5 9 Na5, and White wins.

Kubbel, 1914

After 1 h3 Kg3 2 Ng5 White manages to defend his pawn, but Black continues 2 ... Kf4 3 Ne4 Kf3! 4 Kd4 Kf4! 5 Kd5 Kf5!, tying up the white pieces, and not allowing the king to approach the h4 pawn.

The one winning possibility consists now of sacrificing the knight with the aim of diverting the black king. But if 6 Nf2 Kf4 7 Kd4 Kf3 8 Kc5 K×f2 9 Kf4, then after 9 ... Ke2 10 Kg4 Ke3 11 K×h4 Kf4 the result is a draw.

The knight must be sacrificed at g1, by playing 6 Nc3! Kf4 7 Ne2+ Kf3 8 Ng1+ Kg2 9 Ke4! K×g1 10 Kf3! Kf1 11 Kg4 Ke2 12 K×h4, and White wins.

It should be mentioned that the diversion of the king by a knight sacrifice is typical of such positions. We will consider a few more examples.
416. By subtle play White succeeds in winning.

1 e4! (not 1 N×e6 Kf2 2 e4 Ke3 3 Ng5 Kf4, with a draw) 1 ... Kf2 2 Nd5!!

An important move, depriving the black king of the square e3. If 2 Nb5, then 2 ... Ke3 3 Nc3 Kd3! 4 Kb2 Kd2! 5 Kb3 Kd3 6 Kb4 Kd4, and White can do nothing, for example: 7 Kb5 K×c3 8 Kc5 Kd3, and he has to play 9 Kd6, since 9 e5?? loses to 9 ... Ke4.

2 ... Kf3 (2 ... Ke2 3 e5 Kd3 4 Nf6 Kd4 5 Nd7 etc.) 3 Ne3 Ke3 4 Ka2!!

We have here a typical case of corresponding squares: d2 and b2 correspond, as do d3–b3 and e3–a2.

4 ... Kd3 5 Kb3! Kd4 6 Kb4 Kd3 (or 6 ... e5 7 Kb5! K×c3 8 Kc5 Kd3 9 Kd5, winning) 7 Ke5! K×c3 8 Kd6 Kd4 9 e5, and White wins.

417. White to move wins: 1 Kf2! g5 (1 ... Ke4 2 Ng2) 2 Ke2 Ke4 3 Kd2 Kf4 4 Kd3 Kf3 5 Kd4 Kf4 6 Kd5!

If it is Black to move, after 1 ... Kg3! he occupies the corresponding square, and White is not able to improve his position, for example: 2 Kd1 Kf3! 3 Kd2 Kf2! 4 Kd3 Kf3 5 Kd4 Kf4, with a draw.

Ebralidze–Bondarevsky
Tbilisi, 1937

418. White’s task is somewhat complicated by the fact that he has to reckon with the advance of the black pawn. But even so, if it is his move he is able to win. The game continued: 1 Ke5!

Not 1 Ke4? h5!, with a draw, since it is now White to move. For example: 2 Ke5 Kg5 3 Ke6 Kg6 (Black retains the opposition) 4 Ke5 Kg5 5 Ne3 h4 6 g4 h3 etc.

1 ... Kf3.

Now on 1 ... h5 White plays 2 Ke4, when it is Black to move, and after 2 ... Kg5 3 Ne3 h4 4 g4 h3 5 Kf3 White wins. The result is the same after 1 ... Kg5 2 Ne3 h5 3 Ke4, or 1 ... h6 2 Kf6! Kh5 3 N×h6! (but not 3 Ne3?—stalemate) 3 ... K×h6 4 g4.

2 Kf6.

An inaccuracy. White should have played 2 Ke6! Kg4, and only then 3 Kf6 Kh5 4 Ne3.

2 ... Kg4 3 Ke6?

He could have repaired his mistake by again playing 3 Ke5 Kf3, and then 4 Ke6. Now it is no longer possible to win.
Knight and Pawn Against Pawn

3 ... Kg5! 4 Ke5 (or 4 Ne3 h5 5 Nf5 Kg6!, taking the opposition, with a draw) 4 ... h5 5 Ke6 Kg6 6 Ne3 (or 6 Ke5 Kg5 7 Ke4 Kg4, with a draw) 6 ... Kg5, with a draw: 7 Ke5 h4 8 g4 h3.

In conclusion we will consider several positions with rooks' pawns.

419. Here we have a typical 'fortress'. After 1 Kg1 Nf2 2 Kf1 a draw is inevitable since Black cannot evict the white king from the corner.

Incidentally, the position obtained by moving position 419 one file to the left is no longer a 'fortress'.

420. 1 Kf1 Kd2 2 Kg1 Ke2 3 Kh1 Nf3! Black destroys the 'fortress', and gives mate. Also possible, incidentally, is 1 ... Nf3 2 g×f3 K×f3 3 Kg1 g2 etc.

421. White wins by sacrificing his pawn and creating a mating net.

1 Kd3 Ka1 2 Nb5! Kb2 3 Kd2 Kb1 4 Kc3 K×a2 5 Kc2 Ka1 6 Nd4 Ka2 7 Ne2 Ka1 8 Nc1 a2 9 Nb3 mate.

If the defender's pawn is a rook's pawn, drawn positions are possible even with pawn against knight and two pawns. Thus in the following position, in spite of his considerable material advantage, Black is unable to win.

Chekhov, 1952 (conclusion of a study)

422. 1 Kd3 Ke6 2 Kd2 f2 (2 ... Ke5 3 K×d1 Ke4 4 Kd2 Kd4 5 Ke1 Ke3 6 Kf1 f2—stalemate) 3 Ke2 Ke5 4 Kf1 Ke4 5 Ke2 Kf4 6 Kf1 Ne3+ (6 ... Ke3—stalemate) 7 K×f2 Ng4+ 8 Kg1, and the drawn position 419 is reached.
Knight Against Pawns

Chekhov, 1952
(conclusion of a study)

423. White wins the c-pawn by giving up his h-pawn, after which a familiar drawn position is reached.

1 Ke6! (not 1 Kb6? Ne4 or 1 Kd6? Na4, and Black wins) 1 ... Ne4 (or 1 ... Kg7 2 K×c5 Kf6 3 Kd4 Nd1 4 Kd3 Kf5 5 Ke2, with a draw) 2 Kd5 Ng5 (2 ... Kg7 3 K×e4 Kf6 4 Kd5 Kf5 5 K×e5 Kf4 6 Kd4 does not affect the result) 3 K×c5 Nf3 4 Kd5 N×h2 5 Ke4 Ng4 6 Kf3 Kg7 7 Kg3 h2 8 Kg2. Draw.

4.6 KNIGHT AND PAWN AGAINST TWO OR MORE PAWNS

A knight and pawn are stronger than two pawns, and therefore, if the weaker side does not have some serious positional advantage, he loses. The winning plan, in its most general form, is as follows:

1) If the pawn is passed, it must be queened, while simultaneously neutralizing the threat of the opposing pawns advancing.

2) If the pawn is not passed, it is necessary first to eliminate the obstructing enemy pawns, and then to queen one’s own pawn.

When the opponent’s pawns are connected and passed, a knight on its own can stop them, if they have not yet advanced beyond the 5th rank.

424. After 1 Nb3! White stops the opposing pawns, and wins. For example: 1 ... f3 (1 ... e3 2 Nd4) 2 Nd2 f2 3 Nf1. Note the strict division of duties between the white pieces: the knight stops the opposing pawns while the king supports the advance of its own pawn.

425. If the pawn is a rook’s pawn, it is not possible to queen it with the support of the king alone. White wins only if he can mate the opposing king.

Therefore in reply to 1 Nb3 Black must not play 1 ... f3? 2 Ne5+ Ka7 3 N×e4 Ka6, since after 4 Nd2 Kb7 5 Kb5 Ka7 6 a6 Ka8 7 Kb6 Kb8 8 Ne4 Ka8 9 Ng5 f2 10 Ne6 f1=Q 11 Ne7+ Kb8 12 a7+ Ke8 White gives mate in three moves: 13 a8=Q+ Kd7 14 Qe8+ and 15 Qe6 mate.

But by continuing 1 ... e3 2 Nd4 f3! (this sacrifice is also possible after the preliminary 2 ... Kb7 3 Kb5 Ka7 4 a6) 3 N×f3 e2 Black draws, since the knight can no longer reach c7 in time.
Knight and Pawn Against Two Pawns

Yakhontov, 1950

426 =

426. How can White possibly save this hopeless position? After all, the black pawn is bound to queen, while the white pawns can easily be stopped.

But let us look at the solution:
1 h6 Kf6 2 h7! Kg7 3 Kc7 h4 4 Kd6!

White has also acquired some threats. On the direct 4 ... b3 there follows 5 Ke7 b2 6 h8=Q+ and 7 Kf7, with a draw.

4 ... Ne3 5 Kc5! b3 6 Kb4! b2 7 Ka3!

b1=Q(R) 8 h8=Q+ K×h8 9 g7+ K×g7—stalemate.

This stalemating idea was first implemented in a study by Troitsky (cf. position 463).

Against isolated pawns it is very important to deploy the knight in such a way that it can stop both of the opposing pawns. Thus in the following position White must reach f2 or f1 with his knight, after which he wins by approaching with his king.

Kubbel, 1924

427 +

427. 1 Nd6!

It is essential to deprive the black king of b5. If 1 Ne5?, then 1 ... Kb5! 2 N×f3 Kc4 3 e4 h5 4 Kb2 h4 5 Kc2 (5 N×h4 Kd4 or 5 e5 Kd5—draw) 5 ... h3 6 Kd2 h2 7 N×h2 Kd4, with a draw. 2 d3 also fails to win after 2 ... Kc4 3 Ne2 Kc3 etc.

1 ... f2 (the best chance, otherwise, Ne4, Kb3 etc.) 2 Ne4+ Kf5 3 Nd2 f1=Q!

An interesting possibility, which complicates the game. If 3 ... h5, then 4 Kb3 h4 5 Kc3 h3 6 Nh1, and White wins.

4 N×f1 Kc4 5 Kb2 Kd3 6 Ke1 Ke2! (otherwise 7 Kd1, winning) 7 e4 K×f1.

It now appears that Black will draw, since after 8 e5 h5 9 e6 h4 10 e7 h3 11 e8=Q h2 a theoretically drawn position is reached.

8 Kd2! (this surprising manoeuvre ensures the win) 8 ... h5 (8 ... Kf2 9 e5 h5 leads to similar variations) 9 Ke3! Kg2.

This has to be played, since on 9 ... h4 there follows 10 Kf3 h3 11 Kg3, when White wins, while if 9 ... Kg1, then 10 Kf3! (but not 10 Kf4? Kg2 11 Kg5 Kg3!, with a draw).

10 e5 h4 11 e6 h3 12 e7 h2 13 e8=Q h1=Q 14 Qg6+ (Black loses due to the poor position of his king) 14 ... Kh3 (14 ... Kh2 15 Kf2, or 14 ... Kh1 15 Qf5+ Kg2 16 Qg4+ also loses) 15 Qh5+ Kg2 16 Qg4+ Kh2 (16 ... Kh1 17 Qe2+ Kg1 18 Qf2 mate) 17 Kf2, and White wins.

Isolated pawns, separated by a distance of four files or more, cannot be stopped by a knight.

In this case one of the pawns must be tackled by the king, when the best position for the knight will be one from which it simultaneously defends its own pawn and stops the enemy pawn. This is how the knight is deployed in position 428.
Knight Against Pawns

Reti–Marshall
Baden-Baden, 1925

Reti–Marshall
Baden-Baden, 1925

Philidor–Bowdler
London, 1749

428. White's problem is to win the g-pawn and free his king. If it were Black to move, he would lose his g-pawn immediately, since 1 ... Kg6 fails to 2 d6. White must therefore give his opponent the move, and this is most simply done by means of 'triangulation': 1 Kg3 Kf5 2 Kf3 Kf6 3 Kg4 etc.

Ekdorn–Lindolf
Stockholm, 1964

430. It is a counter-attack that saves White.

1 Ne3! a3 2 Nd5!! (not 2 e7 f1=Q! 3 N×f1 a2, and Black wins) 2 ... f1=Q 3 Ne7+ Kf8!

Of course, not 3 ... Kd8 4 e7+ Kc8 5 e8=Q+ Kb7 6 Qa8+ Kb6 7 Nd5+ Kb5 8 Qc6+ Ka5 9 Qb6+ and 10 Qb4 mate.

4 e7+ Kg7 5 e8=Q Qf8+ 6 Q×f8+ K×f8 7 Ne6+, and the knight catches the pawn.

We will now examine some examples in which the stronger side does not have a passed pawn.

Ekdorn–Lindolf
Stockholm, 1964

431. White must create a passed pawn, i.e. win the g3 pawn. But the direct 1 Ke3 achieves nothing after 1 ... Ke2! 2 Kf3 Kb3, since the a-pawn is too dangerous. The a-pawn must first be eliminated, without the

Fleischmann–Mieses
Monte Carlo, 1904

431. White must create a passed pawn, i.e. win the g3 pawn. But the direct 1 Ke3 achieves nothing after 1 ... Ke2! 2 Kf3 Kb3, since the a-pawn is too dangerous. The a-pawn must first be eliminated, without the
Knight and Pawn Against Two Pawns

The g2 pawn is lost. This plan is most simply carried out as follows:

1. Nd6! Ke1 (1... Kc1 2 Kc3 and 4 Kb4)
2. Nf5 Kf2 3 Nb4 etc.

432. Again White must first eliminate the opposing passed pawn. But on 1 K×f5 there follows 1... c5, exchanging White's only pawn. Therefore White must first improve the placing of his pieces.

The first move is forced, since the black king must not be allowed to go to d5.

1. Ke5 Kd3.

What to do next? If 2 K×f5, then 2... Ke3! 3 Kg4 Ke4 and then... c5. A draw also results from 2 Kd6 Ke3 3 K×c6 K×f3 4 d5 f4 5 d6 Kg2.

Black is threatening to play... Ke3 followed by... f4, and it follows that the knight must first be transferred to f4.


It turns out that 2... Ke3 fails to 3 Ne2+ Kd3 4 Nb4+ Ke3 5 N×c6 f4 6 Kd5! f3 7 Ne5! etc.

3. Ng2! Kd3 4 Nf4+ Kc3 5 Ne6!

White has transferred his knight to the most advantageous position: it defends the d4 pawn, prevents... c5, and hinders the advance of the pawn to f4. Now he can capture the f-pawn.

5... Ke4 6 K×f5 Kd5 7 Kf6 Kd6 8 Nf4! (the final finesse) 8... c5 9 d5 c4 10 Kf5 c3 11 Ke4 c2 12 Ne2, and White wins.

433. Nothing is promised by 1 Nd3 a4 2 Kf7 a3 3 Nb4 Kh7 4 Na2 Kh8. White can win only by combining threats of zugzwang and mate.


If 1... Kh7, then 2 g6+ Kh6 (2... Kh8 3 Nd3 a3 4 Ne5 a2 5 Kf8 leads to mate) 3 Nd3 a4 4 Nb4 a3 5 Na2, and the g7 pawn is lost.

2. Ng6+ Kh7 3 Ne5! a3 4 g6+! Kh6 (on 4... Kh8 there follows 5 Kf8 and 6 Nf7 mate) 5 Ng4+ Kg5 6 Ne3 a2 7 Ne2, and White wins.

434. Black must eliminate the opposing passed pawn, but this can be done only by the king. It follows that the king and knight must exchange roles: the knight must defend the f4 pawn, and the king win the a-pawn.

If it is Black to move, then by 1... Ne4 2 Kg4 Ne3+ 3 Kg5 Ng2 4 a5 Kd5 the exchange of roles succeeds, and Black wins.

But if it is White to move, then after 1 Kg4

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Knight Against Pawns

Ne4 2 Kg5 Black is unable with his knight alone to win a tempo and give the opponent the move, so the position is drawn.

Ilyin, 1947

435. The e-pawn cannot be stopped, and White appears to have no possibility of counter-attack. But even so, by constructing a ‘fortress’ and confining the black king inside it, White manages to draw.

1 Ne7+ Kh7 (otherwise White stops the pawn, for example: 1 ... Kf7 2 Nc6 e2 3 Ne5+, or 1 ... Kh8 2 Ng6+ and 3 Nh4) 2 g6+ Kh8 (but not 2 ... Kh6 3 Nh5+). Now there are no more checks, the pawn cannot be stopped, and it seems time for White to resign. But there follows 3 Kb4! e2 4 Ke5! 1-0 Q 5 Kd6, and it turns out that the black king is shut out of the game, while the queen alone is unable to force the white king away from the knight—draw. An elegant finish!

If there are no passed pawns, the stronger side’s task is firstly to deprive the opposing pawns of their mobility, and then to eliminate them. This typical plan is carried out by White in the following example.

436. 1 Nh2! Ke5 2 Kf3 Kf5.

Black attempts to maintain the active position of his king. No better is 2 ... Kf6 3 Ng4+ Kg7 4 Ke4 Kh7 5 Ke5 Kg7 6 Ke6, when White quickly eliminates the opposing pawns.

436 +

3 Ng4 h5 4 Nh6+ Ke6! 5 Ke4!

After 5 Kf4 Kf6 it is White who is in zugzwang.

5 ... Kf6 6 Kf4 Kg7 7 Kg5, and White wins.

It is useful to note that, instead of 4 Nh6+, White can also win, albeit more slowly, by 4 Ne3+, for example: 4 ... Ke5 5 Ne4+ Kf5 6 Nd6+ Ke5 7 Ne4 Kf5 8 Ng3+ Ke5 9 Ke3, and if 9 ... g5, then 10 hxg5 h4 11 Ne4 h3 12 Kf3 etc.

Reti & Mandler, 1924

437 +

437. In order to win White must win both of the enemy pawns. To do this he must take his king up to the d-pawn. But White is cramped, and it proves no easy matter to carry out this plan, especially since he has constantly to reckon with the threat of ... d3.

1 Ne1 Kh2.

Or 1 ... Kc4 2 Kc2, and White wins. After 1 ... Kb3 2 Nd3 Kc3 the main variation is reached.
Knight and Pawn Against Two Pawns

2 Nd3+ Kc3.

2 ... Kb1 leads to a transposition of moves: 3 Nc1 Kb2 4 Na2 etc. On 2 ... Kb3 there follows 3 Nh4 Kc3 (3 ... Kb2 4 Nd5 shortens the solution) 4 Ke1 Kc2 5 Nd3! (but not 5 Kf1 Kd2 6 Kg2 d3!, with a draw) 5 ... Kc3 6 Kf1 Kd2 7 Nf4, and Black is in zugzwang. White wins by approaching the black pawns via g2 and f3.

3 Nc1 (3 Kc1 Kb3 4 Kb1 Kc3 achieves nothing) 3 ... Kb2 4 Na2! Kb1.

If 4 ... K×a2, then 5 Kc2 and 6 Kd3, while on 4 ... Kb3 there follows 5 Kc1. Thanks to the move 4 Na2, White has deprived the black king of c3.

5 Nb4 Kb2 6 Nd5 Kb3 (after 6 ... Kb1 7 Nc7 Kb2 8 Nb5 the pawn is lost) 7 Ne7! Kc3 8 Nb5+ Kd4 9 Nd6+ Kc3.

Or 9 ... Kd5 10 Nf7, and the white king reaches c2. 9 ... Kb3 transposes after 10 Ne4 Kb2.

10 Ne4+ Kb2 (10 ... Kb3 11 Kc1 and 12 Kc2) 11 Ne5 Ke3.

Black has all the time been manoeuvring so as not to allow the white king to reach c2. He has succeeded in doing this, but now the king approaches from the other side.

12 Ke1 Kc2(c4) 13 Nd3 Ke3 14 Kf1 Kd2 15 Ne4.

Black is in zugzwang. Any king move is answered by 16 Kg2, when White takes his king to e4 and wins.

The knight had to accomplish a considerable amount of work, in making the journey c1–d3–c1–a2–b4–d5–c7–b5–d6–e4–c5–d3–f4!

438. This position is obtained by moving position 437 two files to the right. Here the white king is unable to approach from the right, and hence White wins only if he is able to reach c2 with his king.

1 Ng1 Kd2!

If 1 ... Kd3, then 2 Nf3 Ke3 3 Ne1 Kd2 4 Ne2!!, joining the main variation after the 10th move.

2 Nf3+ Kd3! 3 Ke1.

On 3 Ne1+ there follows 3 ... Ke3 4 Nc2+ Kd2 5 Nb4 Ke3 6 Nd5+ Ke4 7 Nf6+ Ke3, when White has achieved nothing, since ... f3 is threatened.

3 ... Ke3 4 Ne5 Ke4.

If 4 ... Kd4, then 5 Ng4 Kd3 6 Kd1, and the white king goes to e2, since 6 ... f3 fails to 7 Ne5+.

5 Ne4 Kd3 (5 ... Kd4 is decisively met by 6 Kc2) 6 Nd2 Ke3 7 Nf3 Kd3 8 Kf1.

The same position is reached as on the 2nd move, but now it is Black to move, and this is of decisive significance.

8 ... Ke3 9 Ne1 Kd2 10 Ne2! Kd1 11 Nb4! Kd2 12 Nd5, and White wins.

In the following example the active position of the black king prevents White from winning.

Reti & Mandler, 1924

Smejkal–Smyslov
Leningrad, 1977

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439. 1 Ng2 Kf5 2 Nf4 Kg5 3 Nh3+ Kf5 4 Nf2.

The only way to evict the black king from the fifth rank is by 4 g4+, but then comes 4 ... Kg6 5 Ke4 (if 5 Kf4, then 5 ... h5 6 g5 f6, or 5 Nh4+ Kg5, with the threat of 6 ... f5) 5 ... f6, and 6 Kd5 can be met by 6 ... f5 7 g5 h6, exchanging White's only pawn.

White leaves his pawn where it is, and tries to drive the opposing king off the fifth rank by piece manoeuvres, but this proves to be impossible.

4 ... Kg5 5 Ke4 h6 6 Ke3 Kf5 7 Kf3 Kg5 8 Ke4 h5 9 Kf3 Kf5 10 Nh3 f6.

Black has advanced his pawns, but this has not improved White's chances, since the threat of exchanging his pawn has increased.

11 Nf4 Kg5 12 Ne6+ Kf5 13 Ne5 Kg5 14 Ne4+ Kf5 15 Nf2 Kg5 16 Nh3+ Kf5 17 Nf4 Kg5 18 Ne6+. Drawn.

Although theoretically a knight and pawn are stronger than three pawns, all things being equal the weaker side has considerable possibilities both in attack and defence. We will consider several typical examples.

Smorodsky—Breitman
1933

440. Here we see a familiar pattern. The knight has stopped the pawns, and in two moves can reach f7. Therefore, if Black should retreat his king, he will end up being mated. It follows that Black has to give up one of his pawns, but in such a way as to avoid falling again into a mating net.

Black played 1 ... a3?, and after 2 N×a3 c3 3 Ne2 h5 4 Nh4 Kh7 5 Kg5 Kg7 6 h6+ Kf7 7 Kf5 Kg8 8 Kg6 Kh8 9 Ne6! c2 10 Ne5 c1=Q he was mated in five moves: 11 Nf7+ Kg8 12 h7+ Kf8 13 h8=Q+ Ke7 14 Qd8+ Ke6 15 Qd6 mate.

But Black could have drawn by 1 ... c3, since after 2 N×c3 a3 3 Na2 h5 4 Nh4 Kh7 5 Kg5 Kg7 6 h6+ Kf7 7 Kf5 Kg8 8 Kg6 Kh8 9 Ne6 a2 10 Ne5 a1=Q 11 Nf7+ Kg8 12 h7+ Kf8 the h8 square is defended by the black queen.

Kashdan—Flohr
Hamburg, 1930

441. White must win the e-pawn, which can be done only by reaching f6 with the king. The game continued:

1 Nf3 Ke4 2 Kg5!

Why not 2 Nh4 Kd5 3 N×f5 e×f5 4 K×f5 h4 5 e6 h3 6 e7 h2 7 e8=Q h1=Q 8 Qa8+? It turns out that Black can save the game by 5 ... Kd6 6 Kf6, and only then 6 ... h3.

2 ... Kd5 3 Kf6 f4 4 Nh4.

The white knight is ideally placed, blocking both pawns. Black is in zugzwang and has to give up his e-pawn, but his passed pawns are dangerous.

4 ... Ke4 5 K×e6 f3 6 N×f3! K×f3 7 Kf5! h4 8 e6 h3 9 e7 h2 10 e8=Q Kg2 11

12 165
Knight and Pawn Against More Pawns

**Kg4.** Black resigned, since on 11 ... h1=Q there follows 12 Qe2+ Kg1 13 Kg3, with inevitable mate.

As we have seen, in knight endings it is sometimes possible to create a mating net. The following position provides another example.

**Troitsky, 1906**

442

442. Black is threatening to exchange White's only pawn by 1 ... h4. The direct attempt does not work: 1 Kf3 h4 2 g4 h5 3 g5—stalemate! White wins as follows:

1 Ne3, with two variations:

a) 1 ... h4 2 g4 h5 3 g5 Kh2 4 Nd5 h3 (if 4 ... Kh3, then 5 Kf3 Kh2 6 Nf4 Kg1 7 N×g6 h3 8 Nf4 h2 9 Nh3+, winning) 5 Nf4 h4 6 N×g6 Kh1 7 Ne7! h2 8 Nf5 h3 9 Ng3 mate.

b) 1 ... g5 2 Kf3 g4+ (2 ... Kh2 3 Nf5 g4+ 4 Kf2 Kh3 5 Nh4 Kh2 6 Ng6 Kh1

Fine-Najdorf
New York, 1949

7 Nf4 Kh2 8 N×h5 Kh3 9 Nf6, and White wins) 3 Kf2! h4 4 Ng2!! h×g3+ 5 Kg1 h5 6 Kh1 h4 7 Nf4 mate!

If the pieces are badly placed, three pawns may sometimes prove stronger than a knight and pawn.

**443.** The black pawns are not very far advanced, but White's pieces are powerless to contain them. There followed 1 Ke2 h5 2 Ng5 h4 3 Ne6 g5!, and White resigned, since after 4 N×g5 h3 5 N×h3 K×h3 6 Kf2 (or 6 Kd3 Kg2 7 Ke4 Kg3) 6 ... Kh2 the f3 pawn is lost, and Black wins.

Four pawns are normally superior to a knight and pawn. The following two examples are exceptions.

**Korolkov, 1946**

444

444. White creates a "barrier" along the d-file.

1 Ke2 a3 2 Ne3! Kh7 3 Ng4 Kc6 4 Ne5+ Ke5 (4 ... Kd5 5 Nf3 g4 6 Nh2 g3 7 Nf1 g2 8 Ne3+) 5 Kh1 Kb5 2 Ke2 Kb4 7 Ng4 Ke4 8 Ne5+. Here we have a positional draw, since the black king cannot cross the d-file without the g-pawn being lost.

445. White wins one of the pawns by force, since the black king runs into a fork.

1 Ne4!

Other moves lose, for example 1 Nc3? g5! 2 N×a4 g4 3 Nc3 Kd3! 4 Nd5 Ke4 5 Ne3+ Kf3 6 Nb5 g3 7 Nd4+ Kg4 8 a4 g2 9 Ne2 f4 10 a5 f3 11 a6 f×e2 12 a7 c1 =Q 13 a8 =Q Qf2+ 14 K×b3 Qf3+ etc.
1 ... g5.

Or 1 ... Kb5 2 Ne6 g6 3 Kc3, and the black king cannot approach the K-side pawns without losing one of them, while if he wins the knight for the g- and f-pawns, a theoretical draw results.

2 Ne6 g4 3 Ng7! f4 (3 ... g3 4 N×f5 g2 5 Ne3+) 4 Nh5 f3 5 Nf6 g3.

If 5 ... f2, then 6 N×g4 f1=N! 7 Ne5+ Kb5 8 Nf3 Ne3 9 Nd2 Nd1+ 10 Kc1 Nf2 11 Kb2 Nd3+ 12 Kc3 Ne5 13 Kd4, with a draw.

6 Ne4 g2 7 Nd2+ followed by 8 N×f3. Draw.

4.7 ENDINGS WITH A LARGE NUMBER OF PAWNS

In this section we will be considering endings in which the side with the extra knight has not less than two pawns. The basic principles, expounded in the preceding chapters, of playing endings where a knight opposes pawns, are also perfectly applicable here, but the large number of pawns naturally introduces certain special features, to which we will endeavour to draw attention in the analysis.

446. White has both a material and a positional advantage: he has a knight for two pawns, and his pieces are well placed.

In order to realize his advantage, White must create a passed pawn. This is most easily done on the K-side, where the black pawns are undefended. Thus White's problem is to eliminate the opposing pawns there, and to queen his g-pawn.

1 Ne4 b4 2 g4!

This pawn is destined to become a queen, therefore it must be retained.

2 ... h3 3 Kf3 b4 (if 3 ... c4, then 4 b4! Kc6 5 Ne3!, with a straightforward win) 4 N×g5 c4 5 Ne4! c×b3 (5 ... c3 6 Nf2) 6 g5 h2 7 N×d2 Kc5 8 g6 h1=Q 9 Kg2 Kd4 10 g7 Kd3 11 g8=Q K×d2 12 Qa2 Kc2 13 Qc4+ Resigns.

Kuchuk, 1953
Large Number of Pawns

447. For White to win here, it is insufficient to capture the a5 pawn and create a passed pawn, since without the support of the king it is unable to advance. His task is therefore to manoeuvre with the knight so as to win the g3 pawn without losing both of his pawns. This plan proves feasible.

1 Nd6 Kb6 2 Nc4+ Ka6 3 Kg2! Ka7
4 N×a5 Ka6 5 Nb3! Kb6 6 a5+ Kb5 7 a4+
Ka6 8 Kh1! Kb7 9 Nc5+ Ka7 10 Kg2! Ka8
11 Ne4 Ka7 12 N×g3 Ka6 13 Ne4 K×a5
14 Nc3, and White wins.

Oltetsian-Chekhov
Leningrad, 1953

448. Here too Black succeeds in creating a passed pawn, by winning the h5 pawn.
1 ... Nd3 2 e6+ Ke7 3 c7.
Interesting variations arise after 3 Kc4
Nf4, for example:

a) 4 e5 N×h5! 5 e6 Ng3 6 c7 N×f5
7 c8=Q Nd6+.

Botvinnik-Thomas
Nottingham, 1936

b) 4 Kc5 Kd8 5 Kb6 Kc8 6 e5 f×e5
7 f6 Nd5++.

c) 4 Kb5 Kd8 5 e5 f×e5 6 f6 Ne6 7 f7
Kc7, and Black wins.
3 ... Kd7 4 e8=Q+ K×e8 5 Ke6 Nf4+
6 Kf7 N×h5, and Black won.

449. White has a knight for two pawns, but the activity of his pieces is restricted by the opponent's strong protected passed pawn. If Black's b-pawn stood at b5, White would altogether have no possibility of improving his position, and the game would end in a draw. For example (with the black pawn at b5): 1 a×b5 a×b5 2 Nh3 b6!
3 Kg4 Kg6 4 Kf4 Kf6!, and the white king cannot break through to the c6 pawn.

But White has a strong possibility involving the advance of his b-pawn.

1 b5! a×b5 2 a×b5 Ke7.

A great achievement by White. In view of the threat of 3 b6 and 4 N×d5 Black is forced to keep his king close to the c6 and b7 pawns, thus allowing the white pieces to penetrate into his position.

It should be noted that 2 ... c×b5 is no better. Fine gives the continuation 3 N×d5+ Kf5! 4 Nb4! h5 5 d5 h4+ 6 Kf2 Kc5 7 d6
Kc6 8 Nd5! Kd7 9 Nc3 b4 10 N×c4 Kc6
11 K×f3 b3 12 Kg4 b2 13 Nd2 b6 14 c×b6
K×b6 15 K×h4 Kc6 16 Kg4 K×b6 17 Kf3
Kb5 18 e4 Kb4 19 Ke3, when White wins.

3 b6! Kd7 4 Nh5 Kd8.

4 ... Ke7 is slightly more accurate, although after 5 Ng7 Kd7 6 Nf5 Kc8 7 Nd6+ Kb8 8 Ne8 all the same White's knight reaches f6.

5 Nf6 h6 6 Ng4 h5 7 Nf2 Kd7 8 Kb4 Kd8
9 K×h5.

Now the win is comparatively simple.

9 ... Ke7 10 Kg4 Ke6 11 Kg3 Kd7.

As was shown by Dcedrle, the simplest now was 12 Ng4 Ke7 13 Ne5 Kd8 14 N×f3
e×f3 15 K×f3 Ke7 16 e4 d×c4 17 K×e4
Ke6 18 d5+! c×d5+ 19 Kd4 Ke7 20 K×d5
Kd7 21 Ke5, and White wins easily.
White chose a different way: 12 Nb3 Kd8
13 Nf4 Kd7 14 Nb5 Ke6 15 Ng7+ Kd7
16 Nf5 Ke8 17 Nd6+ Kb8 18 Nf5 Kc8 19
Kf4 Kb8 20 Ke5 Kc8 21 Ke6 Kb8 22 Kd7
Ka8 23 Ng3! Kb8 24 Nf1 Ka8 25 Ke8, and
Black resigned.

In this ending White’s basic problem was
to neutralize Black’s passed pawns. Things
did not even get as far as him creating his
own passed pawns.

Even in endings with a larger number
of pawns, there can be a danger of all the
pawns being exchanged.

**Bron, 1935**

![Chessboard diagram]

450. Black is threatening to force a draw
by ... Kd4×e4–d5–e6.

It appears that White can play 1 Ka2 Kd4
2 Kb3 K×e4 3 Kc4, but then there follows
3 ... f5! 4 e6 f4 5 Nc3 Ke3, with a draw.

The only way to win is by 1 e6! f×e6
(1 ... f6 2 N×f6! Kd4 3 Nd7 K×e4 4 Kc2
Kf5 5 Nf8 etc.) 2 e5! Kb3 3 Ke1!

Not 3 Ka1 Kc4! 4 Kb2 Kd5 5 Kc3 Kc6
6 Nf8 Kd5 7 Ng6 Ke4, with a draw.

3 ... Kc3 4 Kd1 Kd3 5 Ke1 Ke3 6 Kf1 Kf3
7 Kg1 Kg3.

Black tries not to release the king from the
back rank.

8 Kh1! Kh3 9 Nf8 Kg4 10 Kh2! Kh4 11 Nd7
Kg4 12 Kg2 Kf4 13 Kh3, and White wins.

**Nimzowitsch–Rubinstein**

**Karlsbad, 1911**

![Chessboard diagram]

451 W

451. White played 1 Nd3? and after 1 ...
f6! 2 e×f6 K×f6 3 Nf2 K×g5 4 Kb4 e5 5 Kc4
e4 the game ended in a draw.

Gawlikowski showed that 1 Kb4! would
have won, e.g. 1 ... Kf4 2 N×d3+ K×g4
3 Ne5 and 4 Nd7, or 1 ... f5 2 g×f5 K×f5
3 Nd3 Ke4 4 Ke5.

**Euwe, 1956**

![Chessboard diagram]

452 W

452. White is faced with a difficult problem:
he has to win the b5 pawn without losing his
own pawns. The main thing here is to neu-
tralize Black’s passed pawns.

1 b4!

This fixes Black’s pawn and restricts his
king. Thus on 1 ... Kc4 there follows 2 Nc7,
when Black is immediately in zugzwang. Also
bad is 1 ... Kd4 2 Nc7 Kc4 3 Kf4 4 Kf3
h3 5 Kg3 f4+ 6 K×h3 Kd3 7 N×b5 f3
8 Kg3 Ke3 9 Nc3, and White wins.

1 ... Kc6 (or 1 ... Kd6) 2 Kf4 h4 3 Ne5
Kd5 4 Nb7? Kc6.
Large Number of Pawns

4 ... Kc4 again loses to 5 Nd6+ Kd3 6 N×b5 h3 7 Kg3 f4+ 8 K×h3 f3 9 Kg3 Kc3 10 Nc3.
5 Nd8+ Kd5 6 Nf7!

453
+/-

453. Now, in view of the knight check at d6, the invasion of the king at c4 is not possible, while on 6 ... Ke6 there follows 7 Ng5+ Kd5 (or 7 ... Kf6 8 Nf3 h3 9 Kg3 Ke6 10 Nd4+ etc.) 8 K×f5 Ke4 (here this attempt at active play is easily parried) 9 Ke4 Kc3 (no better is 9 ... Kb3 10 Kd4 K×a3 11 Kc5 Ka4 12 Nb3 etc.) 10 Kd5 Kd3 11 Kc5 Ke3 12 K×b5 Kf4 13 Nb3+ Kg3 14 a4!, and White’s pawn queens first.

White’s problem in the diagram position is more difficult if it is his turn to move. Then 7 Ng5 fails to win after 7 ... Kc4 8 Ke5 f4! 9 Kc4 (9 K×f4 Kb3) 9 ... Kc3!, and if 10 Kd5, then 10 ... Kd3.

The winning path is highly instructive—White has to arrange a strict division of duties between his pieces.
7 Ne5! h3.

On 7 ... Kd4 there can follow 8 K×f5 h3 9 Ng4 Kc3 10 Ke4 Kb3 (10 ... Kc2 11 Kf3 Kb3 12 Ne5 K×a3 13 Ne6, and wins) 11 Kd4 Kc2 12 Ke5 Kd2 13 K×b5 Ke2 14 a4 Kf3 15 Nh2+! Kg2 16 a5 K×h2 17 a6 Kgl 18 a7 h2 19 a8=Q, and wins.
8 Nf3 Ke4 10 Kg3! Kb3 10 Nd4+.

White’s plan is a typical one—his king deals with the K-side pawns, while his knight sets off to defend the b4 pawn.

10 ... K×a3 11 Ne6 Kb3 12 K×h3 Kc4 13 Kg3 Kd5 14 Nb8 Ke4.

Very simple is 14 ... Kc4 15 Na6 Kd5 16 Kf4 Ke6 17 Nc7+.
15 Kf2 f4 16 Na6 Ke5 17 Kf3, and White wins.

Euwe, 1956

454
W

454. This position is similar to the preceding one, but Black’s pawns appear stronger. Nevertheless, here too White is able to win.

1 Ne5 Kd5 2 Nb7!

White’s plan is the same as in example 452—to approach with his knight from the rear with the aim of creating a zugzwang position.

2 ... Ke5.

Weaker is 2 ... Kc6 3 Nd8+ Kd5 4 Nf7 g4 5 Kf4 Ke6 6 Ng5+ Kd5 7 Ne4 h4 8 Nf6+ Kc4 9 N×g4 Kb3 10 Ne5 K×a3 11 Ne6 etc.

3 Nd8! g4 4 Nb7 Kd5 5 Kf4 Ke6 6 Nc5 Kd5 7 Ne4!

Note how successfully the knight manoeuvres around the key square d6. Black is now in zugzwang.

7 ... h4 8 Nf6+.

Also possible is the sharper line suggested by Euwe: 8 Ne3+ Kc4 9 N×b5! g3 (9 ... h3 10 Nd6+ and 11 Nf5) 10 Nd6+ Kd5 11 Nf5! g2 12 Ne3+ Kc6 13 N×g2 h3 14 Kg3!

8 ... Kc4 9 N×g4 Kb3 10 Ne5 K×a3 11 Ne6, and White wins.

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455. Exploiting the unfortunate position of the enemy knight, White succeeds in exchanging all the black pawns. The solution of the study* is as follows: 1 d5+! Ke5 2 Kc3 f5.

If 2 ... Kd6, White loses after the immediate 3 Kb2 f5! 4 e×f5 g×f5 5 K×a1 K×d5 6 Kb2 Kd4 7 Kc2 Ke3 8 Kc3 f4. But he draws by 3 g4!, and only then 4 Kb2.

3 d3! K×d6 4 e×f5 g×f5 5 g4! f×g4 6 Kd4!, and White eliminates the last black pawn.

In the endgame an active king position can more than compensate for a material deficit, and this is fully applicable to knight endings.

Zukertort

456. White has only one possible plan—to attempt to create a passed h-pawn and to queen it. But the black king has already approached the Q-side pawns, so that this typical plan leads only to a draw.

1 Kg4 K×a3 2 Nd3! Kb3 3 K×g5 Kc3 4 K×g6 K×d3 5 h4 e5 6 b×e5 h4 7 h5, with a draw.

If the opponent has a strong passed pawn, this can restrict the activity of the pieces and prevent the realization of a knight advantage.

Kotov–Bondarevsky
Moscow, 1946

457. Black is a knight up, but White’s passed pawn creates considerable difficulties in the realization of the advantage.

1 ... Kd1 2 a5 Ke1 3 a6 Nb5 4 g4 Kf1 5 K×c4 Kg2 6 Kh3 (of course, not 6 Kh5 Nc7+) 6 ... Kf3 (if 6 ... K×h2, then 7 Kc4 Nc7 8 a7 h5 9 g×h5 g×h5 10 Kc5 h4 11 Kc6 Na8 12 Kb7 h3 13 K×a8, with a draw) 7 Kc4 Ne7 8 a7 Ke4 9 Kg5 Ke5 10 Kc6 Na8 11 Kb7 Kd6 12 K×a8 Kc7 13 h4, with a draw.

As was later shown by N. Kopayev, Black should have immediately eliminated the a-pawn.

After 1 ... N×a4! 2 K×e4 Nc5+ 3 Ke5 (3 Kd5 Kd1 4 K×c5 Ke3, with a won pawn ending) 3 ... Kd3 4 Kf6 g5 5 Kg6 Ke4 6 K×h6 Kf5 7 Kd5 Ne6 8 g4+ Kf4 9 h4 Ng7+ Black wins.
Large Number of Pawns

Sakharov–Vasyukov
Alma-Ata, 1969

458. Here again White’s basic problem is to neutralize the opposing passed pawn. The most exact move was 1 Nd2, trying to avoid any expansion of the operational arena. For example: 1 ... fxg4+ (1 ... Kf6 2 Ke3 fxg4 3 hxg4 Kg5 4 Kf3 comes to the same thing) 2 hxg4 Kf6 (2 ... h3 3 Kg3 h2 4 Ne4+ Kh6 5 Kxh2) 3 Kf4! (White can no longer win after 3 Ne4+ Ke5 4 Ke3 h3 5 Ng5 d2! 6 Nf3+ Kd5 7 Kxh2 Ke4) 3 ... Ke6 (3 ... h3 4 Ne4+/ Ke7 5 Kg3) 4 Kc6 h3 5 Nh3 Kf6 6 Kxd3 h2 7 Nh4 Kg5 8 Ke3 Kh4 9 Kf4, and White wins.

But White played the weaker 1 gxf5 Kxf5 2 Ne3+ Ke5 3 Kg4.

This plan, aimed at winning the h4 pawn, proves to be unsuccessful. It later turns out that the d-pawn gives Black sufficient counterplay.

3 ... Kd4 4 Nd1 Ke4!

Subtle play. If Black had played 4 ... d2 5 Kxh4 Kd3 immediately, after 6 Kg5 Ke2 7 Nb2 Kf3 8 h4 Kg5 9 Nd1 Kh3 10 Ne3! (or 10 Ne3) he would have had to admit defeat.

5 Nb2 d2 6 Nd1.

An immediate draw results from 6 Kxh4 Kf4! 7 Nd1 g5+ 8 Kh5 Kg3.

6 ... Ke5.
6 ... Kd3 was also possible, for example: 7 Kxh4 Ke2 8 Nb2 Kf3 9 Kg5 Kg3 10 h4 Kh3 11 Nd1 Kg3 12 Ne3 Kf3, with a draw. 7 Nf2 Ke6 8 Kxh4 Kf5 9 Kg3 g5 10 Kf3.

459. The first impression is that White must win: he has won one pawn, and is now ready to eliminate the second. But Black has perfectly adequate defensive resources.

10 ... Kg6! 11 Ke2 Kh5 12 Kxd2 Kh4 13 Ke1 Kg3 14 Kf1 Kh2. Draw.

But nevertheless White could have won! Let us return to the position after Black’s 1st move.

Averbakh, 1969

460. White has a study-like way to win.
1 Ke3! g5 (1 ... Kf6 is met by 2 Kxd3, and 1 ... Kg5 by 2 Kc4 Kf6 3 Kxd3) 2 Kf3 Ke6 (2 ... g4+ 3 hxg4+ Kg5 4 Nd2 h3 5 Kg3 h2 6 Nh3+) 3 Kg4 Kf6 4 Nd2 Kg6 5 Ne4 Kh6 6 Kf5 Kh5 7 Nh6+ Kh6 8 Ng4+ Kh5.

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If Black leaves his pawn to its fate and replies 8 ... Kg7, then after 9 K×g5 d2 10 Nf2 and 11 K×h4 White's king heads for the d2 pawn, while his knight will defend the pawn at h3. But now the black king finds itself in a mating net.

9 Kf6!! d2 10 Kg7 d1=Q 11 Nf6 mate.

Checkover-Bondarevsky
Moscow, 1945
(variation)

461. If it were White’s move, by 1 g4 + Ke5 2 Ke3 h5 3 Nd3 + Kd5 4 g×h5 g×h5 5 Kf4 he would win the h-pawn, and in the end give mate.

But it is Black’s move, and he plays 1 ... h5!, preventing the advance of the g-pawn. Now White must win the c-pawn, which is restricting his actions, and the whole question is whether or not Black can do anything in the meantime.

2 Nd3 Kf6 3 Kf4 Ke6 4 Nc1 Kf6 5 Ne2 Kf7 6 Ke3 (6 Kg5 Kg7 7 Nc1 Kf7 8 Kh6 Kf6 9 Kh7 Kf5 10 Kg7 g5, with a draw) 6 ... Kf6 7 Ke4 Kf7 8 Nd3 Kf6 9 K×c2 g5!

The only move. 9 ... Kf5 loses after 10 Kd3 g5 11 Nd4 + Kg4 12 h×g5 K×g5 13 Ke4 Kg4 (13 ... h4 14 Nf3+) 14 Nf5 Kg5 15 Ke5 Kg4 16 Kf6.

10 Nd4 g×h4 11 g×h4 Ke5 12 Kd3 Kf4 13 Ke2 Kg4! 14 Nf3 Kg3 15 Ke3 Kg4 16 Kf2 (no better is 16 Kc4 Kg3 17 Kf5 K×f3 18 Kg5 Ke4 19 K×h5 Kf5) 16 ... Kh3. Draw.

Stekbauer, 1976
Stalyoraitis, 1976

462. This position shows the conclusion of a study by Stekbauer. After the composer’s solution 1 ... Ke7 2 Kd5 Kd7 3 Nb1 c6 + 4 Ke5 Ke7 5 Nd2 Kd7 6 Kf6 White wins easily.

3 ... Ke7! 4 Kc6 Ke6 is undoubtedly better, but even in this case White wins by 5 Nd2, when the e5 square is ‘mined’, for example:

a) 5 ... Kc5 6 Nc4 + Kd4 7 N×b2 d2 8 Kb5 Kc3 9 Nd1 + Kd4 10 c6 Kd5 11 Nb2 Kd4 12 Ka6 Kd5 13 Kb7 Kd6 14 Nc4 +.

b) 5 ... Kf5 (this by-passing manoeuvre also fails to save Black, since White queens first) 6 K×c7 Kc5 7 c6 Kd4 8 Kd6 Kc3 9 Nb1 + Kc2 10 c7 K×b1 11 c8=Q d2 12 Qf5 + Kc1 13 Qc5 + Kd1 14 Qb4 Ke1 15 Qe4 + Kf2 16 Qb1 Kc3 17 Kc5 etc.

But even so, the idea of taking Black’s king to the support of his pawns is correct, but, as shown by Stalyoraitis, it must be carried out immediately.

A draw results from 1 ... Kg6! 2 Ke6 Kg5 3 Kd7 Kf4 4 c6 Kg3 5 K×c7 Kf2 6 Kd6 Ke1.

But White does not have to hurry over approaching the c7 pawn. It is worth while first trying to neutralize Black’s passed pawns. Let us see:

2 Kd4 Kf5 3 K×d3 Ke5 4 Kc4 c6!

The only move to maintain the balance. Bad is 4 ... Ke6 5 Kd4 c6 6 Nb1 Kf6 7 Nc3 Ke6 8 Kd3 Ke5 9 Kc4! (9 Kc2? Kd4 10 Na4
Large Number of Pawns

Kc4 11 K×b2 Kb4 leads only to a draw.

9 ... Kf5 10 Kb3 Ke5 11 K×b2 (now this is possible) 11 ... Kd4 12 Na4 Kc4 13 Ka3 Kb5 14 Kb3 Ka5 15 Ne3, and White wins.

5 Nb1 Ke4 6 Nc3+ Ke5 7 Kd3 b1=Q+!
8 N×b1 Kd5, with a draw.

Troiisky, 1898

463

463. Black is intending to carry out the standard plan of winning the K-side pawn, creating a passed pawn, and queening it.

White’s position appears hopeless, but he has an amazing saving possibility.

1 f3 Ne5 2 Kg7 N×f3.

If 2 ... f5, then 3 Kf6 g4 4 K×c5 g×f3 5 Kd6, and it is White who wins.

3 K×f6 g4.

What should White do now? On 4 Ke6 there follows 4 ... g3 5 Kd6 g2 6 b7+ K×b7 7 Kd7 Ne5+ 8 Kd8 Nc6+ and 9 ... Na7.

4 Kf5! g3 5 Kg4! g2 6 Kh3! g1=Q (or 6 ... g1=R) 7 b7+ K×b7 8 c8=Q+ K×c8. Stalemate!!

Horwitz, 1880

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464. After 1 Kf2 Kf5 2 Kg3 K×e5 3 Kg4

Kd6 4 Kf4 Kd5 5 Ng3 White wins.

If it is Black to move, he can exploit the cramped position of the knight by 1 ... Kf3!

2 Kd1 Kf2 3 Nb2 Kg3 4 Nf1+ Kh3! 5 Ke1 Kg2. White loses his knight, and with it the game.

Bledow, 1843

465

465. The knight is tied down by the a-pawn, and on the K-side White has constantly to reckon with the ... g4 breakthrough. This forces us to evaluate the position in Black’s favour.

1 Ke2 Kf6 2 Kd3 g4 3 f×g4 h×g4 4 h×g4 Kg5 5 Ke2 K×g4 6 Kf2 f3 7 Na1 Kf4 8 Nb3 Ke4 9 Kf1 Kd5 10 Kf2 Ke4, and Black won.

White fails to save the game by 1 Kc4 g4!

2 f×g4 Ke4 3 g5 f3 4 g6 f2 5 Nd2+ Kf4

6 g7 f1=Q+ 7 N×f1 a1=Q 8 g8=Q Qa2+, or 1 Na1 Kf5 2 Ke2 g4 3 h×g4+ h×g4 4 Nb3 g×f3+ 5 K×f3 Ke5, when White is helpless.

1 Kc2! is possible, for example:

a) 1 ... Kf5 2 Kb2 g4 3 h×g4+ h×g4 4 f×g4+ K×g4 5 K×a2, with a draw.

b) 1 ... Kd5! 2 Kb2 (2 Kd3 g4 3 f×g4 h×g4 4 h×g4 f3 5 g5 f2 6 Ke2 Kc4 7 Na1 b3 8 g6 b2 9 g7 f1=Q+ 10 K×f1 b×a1=Q+)
2 \ldots Kc4 3 K\times a2 Kd3 4 Nc5+ Ke3 5 Ne6 K\times f3 6 N\times g5+ Kg2 7 Kb3 f3, and wins.

In conclusion we will examine an example where a draw proves possible, in spite of the opponent's strong passed pawns.

466. It appears that one of the black pawns must inevitably queen, but White nevertheless manages to draw.

1 f7 Ke7 2 Ne6! K\times f7 3 Ng5+ Kf6 4 N\times f3! (of course, not 4 Ne4+ Ke5 5 N\times c3 f2, when Black wins) 4 \ldots c2 5 Ng1! c1=Q (R). Stalemate!
5. Knight Against Knight (With Pawns)

5.1 KNIGHT AND PAWN AGAINST KNIGHT

We will begin our analysis with positions where the pawn has already reached the seventh rank.

467

468. This position demonstrates the basic method of defence. Black to play gives perpetual check: 1 ... Nf8+ 2 Kd8 Ne6+! etc. This is the only saving possibility if the opposing pawn is on the seventh rank, and the king supporting it controls the queening square. Being tied to the pawn, it is unable to escape from the pursuit of the knight.

White can defend against the threat of perpetual check if his knight is at c7, c5, d4 or f4, controlling e6. In this case he wins.

468. 1 ... Nf6+ (Black reverts to passive defence, and attempts to maintain control of the queening square) 2 Kd8 Ne8 (any king move would be answered by 3 Nd7, diverting the knight from the defence of e8) 3 Ne6! (the decisive move) 3 ... Nd6 (if 3 ... Nf6, then 4 Ng5+ and 5 Ne4!, diverting the knight) 4 Kd7 Ne8 5 Ng5+, and White wins.

In order to understand better this typical winning method, consider the following example.

Kling, 1867

469

469. White has to divert the opponent’s pieces from the defence of b8. This is most simply achieved by:

1 Ne6.

Threatening to win immediately by 2 Nf8, so that Black’s next move is forced.

1 ... Kd5 2 Nf8! Ne5 3 Ka8 Ne6 4 Nd7 Ke6.

Or 4 ... Kd6 5 Nb6! Kc7 (5 ... Kc5 6 Nc8 and 7 Na7) 6 Nd5+ and 7 Nb4.
Knight and Pawn Against Knight

5 Nb6!

The seizure of this key square (the equivalent of e6 in example 468) is an important feature of White’s plan: from the key square the knight can best carry out its task of diversion.

5 ... Kd6 6 Ne8+ Kc7 7 Na7 Nb8 8 Nb5+, and White wins.

Here the diversion of the black pieces from control of the queening square is achieved by the sacrifice of the knight. This is a typical device in such endings.

Kling began his solution with 1 Ng6, accompanying it with an exclamation mark, and then: 1 ... Kd5 2 Nf8 Ne5 3 Kb6 (again with an exclamation mark) 3 ... Nc6 4 Nd7 Kd6 5 Ne5 Nb8 6 Ka7 Kc7 7 Nc4 Nc6+ 8 Ka8 Nb8 9 Nb6 (only now!) 9 ... Na6 10 Nd5+ and 11 Ka7.

But in position 469 almost any knight move wins. It is important to be able to divert the enemy pieces, and this is most simply achieved if the knight reaches b6.

If the pawn is on the 6th rank and the defender’s king is in front of it, the result will depend upon how effectively the defender’s knight can support his king.

Averbakh, 1956

1 ... Ke8 2 Kd5 Kd7.

The attempt to approach with the knight, 2 ... Nc3+ 3 Ke6, leads immediately to defeat.

3 Nb8+! Ke8 (3 ... Kd8 4 Ke6 Nb4 5 d7) 4 d7+ Kc7 5 Ke6 Nb4 6 Na6+ N×a6 7 Ke7, and wins.

It may sometimes be unfavourable to keep the king in front of the enemy pawn: it may end up in a mating net.

Kan–Goldenov
1946

471 After 1 Ne8+ Black played 1 ... Kd8. This natural move led to his resignation after 2 e7+ Kd7 3 Ke5!, since on 3 ... Nc4(d3)+ there follows 4 Kf6 Ke8 5 Ke6 and mate next move. The correct continuation was 1 ... Kf6, and if 2 e7 Kf7 3 Kd6, then 3 ... Ne4+ 4 Kd7 Ne5+, with a draw.

472 This position is obtained by shifting position 468 down the board by one rank. Here Black can draw.
Knight Against Knight (With Pawns)

1 ... Ng8.
The simplest, but also possible is 1 ... Nf5+ 2 Kd7 Ne7 3 Ne5! Nf5 4 Ng4+ Kg7 5 Ne3 Nxe3 6 e7-Nd5!, with a draw.
2 Kd7 Kg7 3 Ne3 Kf8 4 Nd5, and position 473 is reached.

Averbakh, 1954

Position 475 differs from the preceding one, only in that the black knight is more actively placed.

Averbakh, 1955

475. Black has only one move, 1 ... Kh7, when White must try to divert the black knight from the control of f7. But if he plays 2 Nf3 immediately, then 2 ... Nxf3 3 f7 Ne5, with a draw.

This means that White must not sacrifice his knight from e5, but from some other square. Such a square is d6, when the diverting knight sacrifice will be made by Ne4. Let us transfer the knight to d6.

2 Ne4! Kh8.
We will suppose that Black sticks to waiting tactics.

3 Nd6 Kg8.
White has completed his task, but 4 Ne4 does not yet work because of 4 ... Nf7. In order to win, he must give the opponent the move, which is done by ‘triangulation’. We have here a typical example of corresponding squares: e7-g8, e8-h7, and two squares, d7 and d8, correspond to h8.

4 Ke8 Kh7 5 Kd7 Kh8 6 Kd8! Kh7 7 Ke8 Kg8 8 Ke7 Kh7.
At last White can set about diverting the black knight!

9 Ne4! Nf3! 10 f7 Ne5 11 Nf6+!, and the black king either walks into a check, or is forced to occupy g6.
Knight and Pawn Against Knight

So, White wins? No, it turns out that he doesn’t.

In the above variation Black lost only because his king in the corner got in the way of his knight. Had he played 2 ... Kg6! 3 Nd6 Kh5! (this ‘flight’ by the king was also possible after the 5th and 7th moves), White would have been unable to carry out his winning plan, since on 4 Ne4 there would have followed 4 ... Nf3 5 Ke6 (5 f7 Ne5 6 Nh6+ Kh4, and the g6 square is free) 5 ... Kg6 6 f7 Nd4+ 7 Ke7 Nf5+ 8 Ke8 Ng7+ 9 Kf8 Nf5!, with a draw.

Instead of 5 Ke6 White could have played 5 Nc5!, reaching position 476.

Averbakh, 1955

476

\[477\]

477. For example, with White to move: 1 Ke8 (if 1 Ng4, then 1 ... Nf7 2 Ke8 Nd6+ etc.) 1 ... Kh7 2 Kd7 (2 Ng4 Kg6 3 Ke7 Ng8+) 2 ... Kh8 3 Kd8 Kh7 4 Ke8 Kg8 5 Ke7 Ng5+ 6 Ke8 Ng7+.

If it is Black to move, he immediately gives perpetual check: 1 ... Nf5+ etc.

Thus the knight is best placed at h6: from there it not only stops the pawn, but also threatens perpetual check.

Shifting position 475 a further file to the right, we obtain position 478, in which White wins.

Horwitz & Kling, 1851

478

\[478\]

478. The original analysts thought that White could win only if it was Black to move. In fact, White to move can also win, as follows:

1 Nd6 (simpler is 1 Nh6 Ng7 2 Ke7 Nh5 3 Kf8!—G. Lommer) 1 ... Ng7 2 Ne4 Ne8! 3 Kf8 Ng7 4 Ke7! Kg8 (or 4 ... Ne8 5 Kf7 Ng7 6 Nd6 Nf5 7 Kf8!, and wins)
Knight Against Knight (With Pawns)

5 Nf6+ Kh8 6 Kf7 Nf5 7 Ne4 Ng7 8 Nd6 Ne8 9 Kf8, and White wins.

With Black to move the solution is very simple: 1 ... Ng7 2 Nd6 Ne8 3 Kf8 etc.

If the king is unable to support the knight in its battle with the pawn, the win is normally achieved without difficulty.

Petrov–Arcon
Cheboksary, 1950

479

479. 1 Ng2 Nf5 2 Kc4 Ke4 3 Ke3 Kf3 4 Ne1+ Ke2 5 Ng2 Kf1 6 Nf4 (the white king is far away, and Black wins easily by the familiar method) 6 ... Ne7! 7 Kd2 Ng6! 8 Nh3 (or 8 Nd5 Kf2 9 Ne3 Ne5 10 Nd1+ Kf3 11 Ne3 Nc4+ 12 N××c4 g2 etc.) 8 ... g2 9 Ke3 Ne5, and White resigned.

If the pawn is on the 5th rank, the defender’s drawing chances naturally increase. Thus, for example, if position 474 is moved down the board by one rank, Black’s pieces obtain more space, the pawn becomes less dangerous, and as a result the position will be drawn.

Position 480, obtained by a corresponding shift of position 478, will also be drawn.

480. Here the restricted position of Black’s king proves favourable for him: by 1 ... Ng6! he draws.

If the defender’s pieces are badly placed, it may be possible to win even with the pawn on the 5th rank.

Chéron, 1952

481

481. 1 Ne4! Nf1+ (1 ... K××c4 2 f6) 2 Kf4 Nh2 3 Ne3+ Kd6 4 Kg3, winning the knight.

If the defender’s king is really remote, a win may be possible even with a pawn on the 4th rank.

Pongracz

482

482. 1 Nd2 Kg7 2 Ne4 Nh1 (2 ... Ne2 3 b5 Ne1 4 b6 Nd3+ 5 Kb5) 3 Kd4! (but not 3 b5? Ne3 4 b6 Na4+) 3 ... Kf7 4 b5
Knight and Pawn Against Knight

Ke7 5 b6 Kd7 6 Kc5 Ne3 7 Ne5+ Ke8 8 Ke6, and White wins by force.

A rook’s pawn is the most dangerous for a knight: the proximity of the edge of the board affects its mobility. Therefore we will give special consideration to positions with a rook’s pawn.

If a rook’s pawn has reached the seventh rank, and the stronger side’s king controls the queening square, the win does not present any difficulty, provided only that there is no immediate possibility of perpetual check.

With a rook’s pawn on the 6th rank, there are again very good winning chances.

484. This position is obtained by shifting position 483 one rank down the board.

White wins easily by forcing the opposing pieces away from the pawn.

1 Nf5! Kb4 2 Kb6 Kc4 3 Nd4! Nd6 4 Ke7 Ne8+ 5 Ke6, and the pawn cannot be stopped.

It is worth noting that the given position is not a study, and therefore this is not the only way to win. For example, White can manage without any sacrifice, although then the win requires more moves: 3 Ne3+ Kb4 4 Nd5+ Kc4 5 Nc7! Nd6 6 Kc6 Ne8 7 Kb7 Nd6+ 8 Kb8.

Black could also have defended differently: 1 ... Kc4 2 Kb6 Kb4 3 Ne7 Kc4 4 Nd5! Nd6 5 Ne7, and despite the fact that it is Black to move, play transposes into the previous variation.

Averbakh, 1980

485. Even with this more favourable arrangement of his pieces, Black is unable to stop the pawn.

1 Nb5 Ne7! 2 Kb7 Ne6.

Or 2 ... Ne8 3 Kc8 Ne7 4 Nd4 Nd5 5 a7 Ne7 6 Kb7 Na8 7 Ne6!, and wins.

3 Nd4! Na5+ 4 Kb8 Ne4 5 a7 Nb6 6 Kb7 Na8 7 Ne6!, and Black resigned.
Knight Against Knight (With Pawns)

Reti, 1929

486. Here too White wins without great difficulty.

1 Kb8 Ne6+.

If 1 ... Kb5, then 2 Nb4!! Ne6+ (2 ... Kxb4 3 Kc7 Ne6+ 4 Kb6 etc.).

2 Kb7! (a draw results from 2 Kc7? Kb5 3 Kb7 Na5+) 2 ... Kc5 3 Nd4! Na5+ 4 Kc7 Nc4 5 a7 Nb6 6 Kb7, and White wins.

The win is technically more difficult in the following position.

Reti, 1929

487

487. If it is Black to move, after 1 ... Kb4 2 Kb6 Kc4 3 Ne3! Nd6 4 Kc7 Kc5 5 a7 White wins. Therefore White must give his opponent the move, which is achieved as follows:

1 Ne5!

On other knight moves there follows 1 ... Nd6+ 2 Ka7 Ne8+, with a draw.

1 ... Kb4.

No better is 1 ... Nd6+ 2 Kc7! Nb5+ 3 Kc6! Na7+ 4 Kb7 Nb5 5 Ne4, when the

initial position is reached, but with Black to move.

2 Kb6 Nd6 3 Ne4! Ne8+ 4 Kc7!

Accuracy is required here: 4 Kb7? allows a draw by 4 ... Kb5 5 Ne3+ Ka5 6 Ne4 Kb5 7 Nf6 Nd6+ 8 Ka7 Ne8+ etc.

4 ... Kb5 5 Kb7 Ka5 6 Nd6+ 7 Kc7 Nb5+ 8 Kc6 Na7+ 9 Kb7 Nb5 10 Ne4.

White has carried out the first part of his plan, and the initial position has been reached with Black to move. The rest has already been analyzed.

In all the examples considered, White won by forcing away the black pieces. This cannot be done only in exceptional cases, one of which is the following.

Reti, 1929

488

488. If White’s knight were at c5, then after 1 Kb8 Nb5 2 Kb7 position 487 (after 1 Ne5) is reached, where he wins.

At c7 the knight is much worse placed, interfering with the manoeuvring of its king, and this factor proves decisive.

1 Kb8 Nb5! 2 Kb7 Nd6+ 3 Ka7 Nf7!

The only move: the knight takes up an important key position. 4 Kb8 or 4 Ka8 is now answered by 4 ... Nd8, while if 4 Kb7, then 4 ... Nd6+.

4 Ne6.

White attempts to improve the position of his knight, but it is too late: the regrouping does not succeed.
Knight and Pawn Against Knight

4 ... Kb5!
Not 4 ... Nd6 5 Nc5 Nb5+ 6 Kb7, when position 487 after 1 Nc5 is reached.
5 Nd4+ Ka5 6 Ne6+ Kb5 7 Nb4! Nd8!
After 7 ... K×b4 8 Kb8! Ne5 9 Kc7 White wins.
8 Kb8 Ne6+! 9 Kb7 Na5+ 10 Kc7 Ne6!, with a draw.

If the pawn is on the 5th rank, the defender's drawing chances are considerably better.
However, the position obtained by shifting example 483 two ranks down the board will still be lost for Black. The winning method is roughly the same.

Averbakh, 1980

489. 1 Nf4! Kb3 5 Kb5 Kc3 3 Nd3! Nd5
4 Ke6! Ne7+ 5 Kb7 Nf5 6 a6 Nd6+ 7 Kc7 Nb5+ 8 Kb6 Nd6 (8 ... Kc4 9 Ne5+ Kb4
10 Ne6+ Ka4 11 Nd4! Nd6 12 Kc7 Ne8+ 13 Kc6) 9 Ne5 Kb4 (9 ... Nc8+ 10 Kc7 Na7
11 Nc6 Nb5+ 12 Kb6 Kc4 13 Nd4) 10 Ne6+ Kc4 11 Ne7 Nb5 12 Nd5 Nd6 13 Kc6 Ne8 14 Nb6+.

In this case too there is a second possible winning method, and here it wins more quickly.
3 Ne2+ Kb3 4 Nd4+ Kc3 5 Nc6! Nd5
6 Ke5 Ne7 7 Kb6 Ne8 (7 ... Nd5+ 8 Kb7)
8 a6 Nd6 9 Ne7 Nc4+ 10 Kc5, and White wins.

If Black defends differently—1 ... Kc3
2 Kb5 Kb3, White has an adequate reply

in 3 Ne6 Kc3 4 Nd4 Nd5 5 Nc6 Kb3 6 Kc5
Ne7 7 Kb6 Ne8 (7 ... Nd5+ 8 Kb7) 8 a6
Nd6 9 Ne7 etc.

490. In this position, obtained by moving position 485 down by one rank, Black can now draw.
1 Nb4 Ne6! (not 1 ... Nb3 2 a6 Kc7
3 Nd5+ Kb8 4 Kb6, when White queens)
2 Kb6 Ne5, and White has achieved nothing,
since on 3 Nd3 there follows 3 ... N×d3
4 a6 Nb4 5 a7 Nd5+ and 6 ... Ne7.

With a pawn on the 5th rank, and the opposing pieces closely placed, a win is possible only in exceptional cases, one of which is shown in the following diagram.

Chéron, 1952

491. After 1 Ng7+! N×g7 2 h6 Kf8 3 h7
the pawn queens.

If the opposing king is very remote, a win may be possible even with a pawn on the 4th rank. Here it is useful to remember that when a rook's pawn reaches the 6th rank, this normally leads to a win.
Knight Against Knight (With Pawns)

Simagin–Botvinnik
Moscow, 1955

492
/+

492. The simplest way to win was:

1 ... \textcolor{blue}{Kf5} 2 \textcolor{red}{Nf3} \textcolor{blue}{Kf4} 3 \textcolor{red}{Nh4} \textcolor{blue}{Kg4} 4 \textcolor{red}{Ng6}

\textcolor{red}{(4 Ng2 Nd6! 5 Kb3 Nf5 6 Kc3 Kg3 7 Ne1 h4)}

4 ... \textcolor{blue}{Ne5} + 5 \textcolor{red}{Kb4} \textcolor{blue}{Ne6} 6 \textcolor{red}{Kc3} \textcolor{blue}{Nf8}.

Not the only winning move. Also possible is 6 ... \textcolor{blue}{Nf4} 7 Ne5 + Kg3 8 Cd2 h4 9 Ne4 h3
10 Ne3 Nd5 11 Nf1 + Kf2 12 Nh2 Nf6.

7 Ne5 + (7 \textcolor{red}{N×f8} h4 8 Ne6 h3 9 Ne5 h2
10 \textcolor{red}{Nd3} Kg3) 7 ... \textcolor{blue}{Kg3} 8 \textcolor{red}{Kd2} h4 9 Ke2 h3
10 \textcolor{red}{Nf3} Ne6 11 Nd2 (or 11 Ke3 Nd4! 12 Nd2 Kg2) 11 ... \textcolor{blue}{Kg2} 12 \textcolor{red}{Nf1}Nd4 + 13 Ke1 Nf5 14 Ke2 Ng3 +, and Black wins.

Black played 1 ... \textcolor{red}{Nd2}?, immediately taking control of f3. But this allowed White to save the game in elegant fashion.

2 \textcolor{red}{Kb4} Kf5 3 Kc3!

The saving tempo. Now the king succeeds in coming to the aid of the knight.

3 ... \textcolor{blue}{Ne4} + 4 \textcolor{red}{Kd4} Ng5 5 \textcolor{red}{Nd3} Kg4 6 Ne5 + Kf5 7 Nd3.

The black pawn has not yet moved, and White has already brought up his king. The draw is obvious.

7 ... \textcolor{blue}{Kg4} 8 Ne5 + Kg3 9 Ng6 Ne6 + 10 Ke3 Ng8 (this no longer wins) 11 \textcolor{red}{N×f8}

h4 12 Ne6 h3 13 Ng5. Draw.

Podgayets–Tal
Alma-Ata, 1969

493 W

493. The black king is a long way from the pawn, and White’s problem is to drive away the opposing knight. This could have been most simply achieved by the subtle 1 \textcolor{red}{Nd4}!, for example: 1 ... \textcolor{blue}{Kc8} (1 ... \textcolor{blue}{Ke7} 2 Ne6 +)

2 \textcolor{red}{Kf5} \textcolor{red}{Nh5} 3 Ne2! (threatening to win the knight) 3 ... Ng7 + 4 \textcolor{red}{Kf6} Ne8 + 5 Kg6 Nc7

(5 ... \textcolor{blue}{Kd7} 6 h5 \textcolor{blue}{Ke7} 7 h6 \textcolor{blue}{Nf6} 8 \textcolor{blue}{Nf4}, and wins) 6 \textcolor{blue}{Nh4}, and the pawn cannot be stopped.

No better is 2 ... \textcolor{red}{Nd5} 3 h5 Ne7 + 4 Kg6 Ng8 5 Nh5, when the knight is trapped.

But White incorrectly decided to force matters: 1 Ne5 + Kc6 2 N\textcolor{red}{d3} Nh5 + !

It is not obligatory to capture the knight. It now turns out that the knight is badly placed at d3, and has to adopt a new approach in order to continue its battle with the enemy knight.

3 Kg6 Ng3 4 Nf2 Kd6 5 Nh1 Ne2 !

Black declines the gift, and White again has to take evasive action with his knight. And Black’s king is closer to the pawn than before.

6 \textcolor{red}{Kf6} Nf4 7 Ng3 Kd7.

An inaccuracy, which complicates Black’s task. Correct was 7 ... \textcolor{red}{Nd5} +, e.g. 8 Kg7

Nf4, when 9 Ne2 can be answered by 9 ... \textcolor{red}{N×e2} 10 h5 \textcolor{red}{Nf4} 11 h6 Ne6, with a draw, while if 8 Kg5, then the black king comes into the action— 8 ... \textcolor{blue}{Ke7} 9 h5 \textcolor{blue}{Kf7}, with a draw.

\textcolor{red}{8 N×h8+}.
Knight and Two Pawns Against Knight

8 Kf7.
Even so, White should have tried 8 Ne2. Of course, the knight cannot be taken, and Black would have had to play 8 ... Nd5 + 9 Kf7 Ne3 10 h5 Ng4. Here the pawn has not yet reached the 6th rank, so Black should be able to draw, for example: 11 Ng3 Ne5 + 12 Kf6 Ng4 + 13 Kg5 Ne5 14 Kf5 Nf7 15 Kf6 Nh6 16 Kg6 Ng4, and White has not achieved anything. However, also possible is 15 ... Ke8 16 Kg7 Ke7 17 Nf5 + Ke6! (17 ... Ke8? 18 Kg8 Ng5 19 h6, and wins) 18 Nd4 + Ke7 19 Ne6 + Ke8, with a draw. 8 ... Kd6! 9 Ne2 Nxc2. Draw.

Averbakh, 1979

494. This position, obtained by moving example 483 down by three ranks, once again shows that in this type of ending the defender's king is badly placed to the rear of the pawn. The solution is of a standard nature.

1 Nf3!, with two possibilities:

a) 1 ... Kb2 2 Kb4 Kc2 3 Ne1 + (here 3 Nd2 Nd4 is less clear) 3 ... Kb2 4 Nd3 + Kc2 (4 ... Ka2 5 Nc1 + ) 5 Ne5 Nd4 6 Ke4 Ne6 (6 ... Nf5 7 Nb7 Ne7 8 a5 Ne8 9 a6 Kb2 10 Kc5 Kb3 11 Nd6, and White wins) 7 Kd5 Nc7 + (7 ... Nd4 + 8 Kb6 Kc3 9 a5 Kc4 10 a6 Nb5 11 Ne4 Kb4 12 Nc3! Nd6 13 Ke7, and wins) 8 Kb6 Ne8 + 9 Kc7 Ne7.

If 9 ... Na7, then 10 Kb7. No better is 9 ... Kc3 10 Kxc8 Kb4 11 Kb7! Kxc5 12 a5.

10 a5 Nd5 + 11 Kc6 Nbd4 + 12 Kb5 Kc3.
No better is 12 ... Nd5 13 Ne6! Ne7 14 a6 Ne8 15 Nd4 + Kd3 16 Nf5 Kc4 17 Ne7!
But now we have reached a position which is very similar to example 489. The simplest way to win here is by a standard knight manoeuvre.

13 Ne6! Kb3 14 Nd4 + Kc3 15 Ne6 Nd5 16 Kc5 Nc7 17 Kb6 Ne8 18 a6 Nd6 19 Ne7, and the pawn cannot be stopped.

b) 1 ... Kc2 2 Kb4 Kb2, and again White wins by a subtle knight manoeuvre: 3 Ne5 Kc2 4 Nd3 (4 Nd7 is also possible) 4 ... Nd4 5 Ne5.

495. We have already analyzed this position with White to move. It turns out that having the move makes things no better for Black. If, for example, 5 ... Nc6 +, then 6 Kb5, as already examined. 5 ... Kb2 makes no essential difference, in view of 6 Kc4 Nc6 7 Kd5 Na7 + 8 Kb6 Nc8 + 9 Kc7 Ne7 10 a5 Nd5 + 11 Kc6 Nbd4 + 12 Kb5 Ka3.

This move was not possible in the previous analysis, but it too does not help.

13 Ne6! Kb3 14 Nd4 + Kc3 15 Ne6, and White wins in the same way as after 1 ... Kb2.

5.2 KNIGHT AND TWO PAWNS AGAINST KNIGHT

The win with two extra pawns does not normally demand any great efforts.
Knight Against Knight (With Pawns)

Fine, 1941

496. After 1 Ne6+ Kg8 2 g6 Ne5+ 3 Kf5 Nf3 4 h6 Nh4+ 5 Kf6 Nf3 6 Ng5 White wins. The winning method, which consists of the gradual advance of the pawns, is simple and does not require any explanation. The one thing that has to be guarded against is the opponent giving up his knight for both pawns.

Below we will examine some examples where the advance of the pawns is difficult or altogether impossible.

Landau–Grau
Stockholm, 1937

497. White’s king is a long way from his pawns, whereas the black king is ready to eliminate them. Despite this, White succeeds in winning, by exploiting his far-advanced h-pawn.

1 h6! Nh8 2 Nh6! Ke3.

If Black were able to eliminate the h-pawn, he would draw, but this is not possible: on

2 ... Ke5 there follows 3 Nd7+ N×d7 4 h7, when White wins.

3 Ke3 Kf3 4 Kd4!

Of course, not 4 g4? Kg4 5 Kd4 Kg5 5 Ke5 K×h6, with a draw.

4 ... K×g3 5 Ke5 Kh3! 6 Kf4! (after 6 Kf5 Kh4 White is in zugzwang, since on 7 Nd7 there follows 7 ... Kh5) 6 ... Kh4 7 Kf5.

White has given up his less important pawn, but on the other hand he has markedly improved the position of his king.

7 ... Nh7 8 Kg6 (8 N×h7? Kh5) 8 ... Ng5.

Or 8 ... Nh8+ 9 Kf7 Kg5 10 Ng4 Ng6 11 h7 Nh8+ 12 Kg7 Ng6 13 Ne5, and wins.

9 Ne4! Ne6 10 Kf7, and White wins.

Position 498 shows an exceptional case, where two extra pawns prove insufficient for a win.

Taimanov–Spassky
Leningrad, 1952

498. 1 Nf3!! Kg4.

If 1 ... e5, then 2 Nh4+ Kg5 3 Nf3+ Kg4 4 K×f6 e4 5 Ne5+ Kg3 6 Nc4, with a draw, while on 1 ... Ke4 there follows 2 Nd2+ Kd3 3 Nf1 f5 (3 ... Ke2 4 K×f6 K×f1 5 Ke5, with a draw) 4 Kf6 followed by Ng3.

2 Nh2+ Kh3 3 Nf1 f5 4 Kf6, and in view of the threat of Ne3, a draw was agreed.
Knight and Pawn Against Knight and Pawn

Yegorov–Grigoriev
Moscow, 1928

499  
/+  

499. The plan, typical of positions with isolated pawns, is carried out by Black in this example. One of the pawns is normally sacrificed with the aim of diverting the enemy pieces.

1 ... Kh3! 2 Kf1!

If 2 Ke2, then 2 ... Kg2 3 Ke3 K×h1 4 Kf2 e3+ 5 Kf1 e2+, and wins.

2 ... e3 3 Ke2 Kg2 4 K×e3 Ne4! 5 Ke2 Ng3+!, and White resigned.

Prokes, 1938

500  
/+  

500. In view of the threat of ... Nd6+, one of the pawns is lost, but by subtle play White nevertheless manages to win.

1 b7?

Not 1 e7? Kf7 2 b7 (or 2 Kd5 N×b6+ 3 Kd6 Nc8+ etc.) 2 ... Nd6+ 3 Ke5 N×b7 4 Kd5 Na5!, when the draw is obvious.

1 ... Nd6+ 2 Kd4.

After 2 Kd5? N×b7 White is in zugzwang (3 e7 Kf7, with a draw).

2 ... N×b7 3 Kd5! (now it is Black who is in zugzwang) 3 ... Kg7 4 Nd8!

The deciding move. Bad is 4 Na5? N×a5, with a draw.

4 ... N×d8 (or 4 ... Na5 5 e7, and wins) 5 e7, and White wins.

Apart from 3 ... Kg7, Black could also have played 3 ... Nc5, when White wins by 4 e7 Ne6 (4 ... Na6 5 Kd6 Kf7 6 Nd8 + Ke8 7 Ne6 Kf7 8 Ng7! Nc7 9 Kd7 Kf6 10 Ne8+) 5 Kd6 Ng7 6 Kd7 Kf5 (6 ... Kf7 7 Nd8+ and 8 Ne6, winning) 7 Nd4+ Ke5 8 Ne6 Nh5 9 Kd8 Nh6 10 Nf8 and 11 Nh7.

5.3 KNIGHT AND PAWN AGAINST KNIGHT AND PAWN

In endings of this type a win is possible only in exceptional cases, in particular if the enemy pawn can be eliminated, and a won ending with an extra pawn obtained. We will consider two examples.

Kaminer, 1925

501  
/+  

501. After 1 d6 Ne6 2 d7, in view of the threat of Ne5+, the black king is unable to go to g6 or g4. Therefore by exact play, by putting Black in zugzwang, White wins: 2 ... Kh4 (or 2 ... g5 3 Kh2, and wins) 3 Kh2! (not 3 Kg2? g5 4 Kh2 g4 5 Kg2 g3, when it is White's move, which is unfavourable for him; after 6 Kg1 Kh3 7 Kh1 g2+ 8 Kg1 Kg3 the result is a draw) 3 ... g5 (or 3 ... Kh5 4 Kg3 g5 5 Kh3 g4+ 6 Kg3 Kg6 7 Ne5+...
Knight Against Knight (With Pawns)

etc.) 4 Kg2 g4 5 Kh2 g3 + 6 Kg2 Kh5 (6 ... Kg4 7 Ne5+) 7 K×g3 Kg6 8 Ne5+, and White wins.

Halberstadt, 1949

502. Black also loses because of zugzwang in this position. The win is achieved by familiar methods.

1 e7! (1 Nf6? Ng4! 2 N×g4 Kc7—draw) 1 ... Ng4 2 Kb5! (2 Ka5? Ne5, with a draw) 2 ... a5 3 Ka4! (3 K×a5? Ne5, or 3 Nd6? Nf6 4 K×a5 Kc7, or 3 Kc6? a4) 3 ... Ka7 4 Ka3 (White gives his opponent the move; also possible is 4 Kb3 Kb8 5 Ka3 Ka7 6 Ka4) 4 ... Kb8 (or 4 ... Kb6 5 Ne7 Nf6 6 Nd5+, and wins) 5 Kb3 Ka7 6 Ka4 Kb8 7 Kb5! Ka7 8 Nd6! (with the black king at a7 this move is possible) 8 ... Nf6 9 K×a5 Kb8 10 Ne4! (10 Kb6? Nd5+) 10 ... Ne8 11 Kb6, and White wins.

Bron, 1948

503. This shows another exceptional case. White succeeds in exploiting the cramped position of the black pieces, although the win is achieved only by very subtle play.

1 Kf7 Nb6+ 2 Kf8 Ng8 3 Ng4 h6 (after 3 ... Nh6 4 Ne5 Black is mated in two moves) 4 Kf7 Kh7 5 Ne5 Kh8 6 Ne4!

Nothing is achieved by 6 Ng6+ Kh7 7 Nh8+. In order to put the opponent in zugzwang, White must reach g6 with his knight when the black king is at h7, or f8 with the black king at h8, i.e. he must give the opponent the move. But a knight on its own is not able to gain a tempo. Therefore White takes his king away, and transfers his knight to e8, so as to keep the black pieces under lock and key.

6 ... Kh7 7 Nd6 Kh8 8 Ne8! Kh7 9 Ke6! Kb8 10 Ke6! Kh7 11 Ke7! Kh8 12 Ke6 Kh7 13 Kf7.

Having gained the necessary tempo, White returns his king to its former post.

13 ... Kh8 14 Ne7 Kh7 15 Ne6 Kh8 16 Nf8, and White wins.

If the pawns are passed, one of the sides may queen first. We will examine some positions where, despite the fact that one side queens his pawn, a draw is nevertheless achieved.

Gorgiev, 1936

504. White's knight must approach the black pawn, since he loses after 1 c6 Ne3! 2 c7 + Kc8 3 Ng6 Nd5 + 4 Kc6 c2, when the black pawn queens first.

1 Ng6 Nb4 2 Nf4 Nd5 + 3 N×d5 c2 4 c6 c1 = Q 5 c7 + Ka8!
Knight and Two Pawns Against Knight and Pawn

It turns out that White cannot play 6 Ne7, since after 6 ... Qc3+ 7 Kc6 Qe6+ 8 Kb5 Qd7+ 9 Kb6 Qd6+ 10 Nc6 Qc6 Black wins. But there is a way out!

6 c8=Q+! Q×c8 7 Ne7+ Kb8 Na6+, with perpetual check.

Bron, 1925

505

505. There is also a surprising finish in this position.

1 f7 Ne7! 2 Nf2 Kc2! 3 Nd3! (on 3 Kc4 there follows 3 ... e1=Q 4 f8=Q Qc3 mate; it was for this reason that Black played 1 ... Ne7, and not 1 ... Ng7) 3 ... K×d3

4 Kd6 e1=Q 5 f8=Q Qb4+ 6 Ke5! Q×f8-- stalemate.

In conclusion, an example in which the draw is achieved only after several subtleties.

Kivi, 1936

506

506. 1 h7 Kf7 (if 1 ... a2, then 2 Kg8 a1=Q 3 Ne7+! and 4 h8=Q; the immediate 3 h8=Q? fails to 3 ... Qa2+ 4 Kf8 Qf7 mate) 2 Nd6+! Kf8 (after 2 ... N×d6 White is stalemated) 3 N×b5 a2 4 Nd4! (not 4 Nc3? a1=K! and ... Ra8, winning)

4 ... a1=K (after 4 ... a1=Q White is stalemated) 5 Ne6+ Kf7 6 Nd8+ Kg6 (6 ... Kf6 7 Kg8; 6 ... Kf8 7 Ne6+) 7 Kg8 Ra8 8 b8=K+!, with a draw.

An unexpected finish!

5.4 KNIGHT AND TWO PAWNS AGAINST KNIGHT AND PAWN

Here a win is possible if one can:

1) queen one of the pawns, or at least win the knight for it, and obtain a won ending with an extra knight.

2) win the opposing pawn, and obtain a won ending with knight and pawn against a knight.

3) after the exchange of a pair of pawns, obtain a won ending with knight and pawn against knight.

4) exchange knights and obtain a won pawn ending.

Of course, these are only the main cases. We will consider the following pawn configurations:

a) connected pawns, both passed.
b) connected pawns, one passed
c) connected pawns, neither passed.
d) isolated pawns, both passed.
e) isolated pawns, one passed.

In contrast to a bishop, a knight is unable to prevent the advance of passed pawns from far away. Therefore, in knight endings with two connected passed pawns against one, the proximity of the pieces to the pawns is of greater significance than in bishop endings.

If the stronger side can deploy his pieces so that they prevent the advance of the opposing pawn and support the advance of his own pawns, the win is normally achieved without difficulty.

The following position is typical.
Knight Against Knight (With Pawns)

507

\[ 1 \text{Nf5} + \text{Kf6} \text{ (or 1 ... Kh7 2 h5 Nd8} \]
\[ 3 \text{Ke5 and 4 Kxd5) 2 g5+ Kg6 3 Ng3 Nd8} \]
\[ 4 \text{h5+ Kg7} \text{ 5 Nf5+ Kg8} \text{ 6 g6 Ne6+ 7 Ke5} \]
\[ \text{Nc7 8 h6 etc.} \]

Difficulties can arise if the opposing passed pawn is far advanced.

Tapionlinna, 1929

508

509. After 1 Ka2 Black unexpectedly finds himself in zugzwang. For example: 1 ... Kh4
\[ 2 \text{Nb6 Ne7 3 Nf5+}, \text{ or 1 ... Kf4 2 Nf6 Ne7}\]
\[ 3 \text{Nd5+}. \]

If Black’s king is moved to e6, and his knight to f7, then after 1 Ka2 he will again be in zugzwang, since on 1 ... Kd6 there follows 2 Ne7 Nh6 3 Nf5+, or 1 ... Ke5
\[ 2 \text{Nf6 Nh6 3 Ng4+}, \text{ and wins.} \]

It is curious that both positions occur in two variations of one and the same study.

If the two pawns are connected, but only one of them is passed, the result will depend upon how effectively the defender can oppose this pawn.

Averbakh, 1955

510

\[ 3 \ldots \text{Ne6 there would again have followed} \]
\[ 4 \text{Ne7 N×g7 5 h7!}, \text{ and wins.} \]

A far advanced passed pawn can prove altogether stronger than two opposing pawns, if the opposing pieces are unable to block it securely.

From a study by Liburkin, 1952
510. White’s knight, which is forced to defend his g-pawn, is rather passively placed here. Therefore the immediate advance of his king to support the f-pawn does not achieve anything. For example: 1 Kd4 Kg7 2 Ke5 Kf7 3 Kd6 Ne8+ 4 Kd7 Nf6+ 5 Kd8 Kf8, and White has not got anywhere.

1 Kf3!
The only move to win. Black has two main continuations:

a) 1 ... Kg7 2 Ne4! Nh7.
The roles are reversed: now the black knight is passively placed, and White can send his king to the support of his f-pawn.
3 Ke3 Kf7 4 Kd4 Ke7 5 Ke5 Kf7 6 Kd6 Kf8 7 Ke6 Kg7 8 Ke7 Kh6 9 Kf7, and White wins.

b) 1 ... Nd7 2 Ke4 Kg7 3 Kd5 Nf6+ (3 ... Kf7 fails to 4 Ne4) 4 Ke6 Ng8 5 Ne4 Nh6 6 f6+ Kg6 (6 ... Kgs 7 Nxg5 Nxg4 8 f7+ Kg7 9 Nh7, and wins) 7 Nd6 Nxd6 8 f7 Kg7 9 Ke7, and White wins.

If in example 510 it were Black to move, he would draw by 1 ... Kg7, for example 2 Kf3 Nd7 3 Ke4 (3 Ne4 Ne5+! 4 Kg3 Kh6, and White has achieved little) 3 ... Nf6+ 4 Ke5 Kf7 etc.

Let us now move position 510 one rank up the board.

Averbakh, 1955

511

512

512. White nevertheless manages to win.
1 ... Ne6 2 Kd6! Nf8 3 Ke7 Ne6 4 Nh5! Ng8 5 Ke8! Ne6.
If 5 ... N×g6, then 6 Nf4!, while 5 ... Nd7 is met by 6 N×g7.
6 Nf6!! g×f6.
6 ... Nf8 fails to 7 K×f8 g×f6 8 g7+, with an immediate win.
7 f8=Q+! N×f8 8 K×f8 f5 9 g7+, and White wins.

If the pawns are connected, but neither is passed, there are few winning chances.

513

513. Black easily maintains the balance, for example: 1 Ne4+ Ke7 (1 ... Ke6? loses after 2 Ng5+ Kf6 3 N×f7 K×f7
Knight Against Knight (With Pawns)

4 Ke5! 2 Ng5 Nd6 3 Nf3 Kf6 4 g5+ Kf7 5 Ne5+ Kg7. White also achieves nothing by 1 Ke4 g5! 2 h5 Ne5 etc.

But if position 513 is moved one rank up the board, White will have a considerable advantage in space, and the defence will require great accuracy.

Averbakh, 1955

514

514. After 1 Ne5+! the only move to draw is 1 ... Kg8!

Black loses after 1 ... Ke7 2 Ng6+ Kf7 3 Nxf8 Kxf8 4 Kg6 Kg8 5 h6, or 1 ... Ke8 2 g6 Kd8 3 h6! N×g6 4 h×g7 Ne7+ 5 Ke6! Ke8 6 Ng4 Kd8 7 Nf6.

2 g6 Kh8.

White has cramped Black’s pieces to the maximum extent, but has not put him in zugzwang.

3 Nd3 Nd7!

Again the only move. On 3 ... Kg8 there follows 4 Nc5 Kh8 5 Ke5 Kg8 6 Kd6 Kh8 7 Ke7 Kg8 8 Ne4 Kh8 9 Nf6!, and wins.

4 Ke6 Nf6!

4 ... Nb6 loses after 5 h6 Ne4 (5 ... Kg8 6 h7+ Kh8 7 Ne5) 6 Kf7 Nd6+ 7 Kf8 Nf5 8 Ne5 N×h6 9 Nf7+ N×f7 10 g×f7.

5 Nf4.

5 h6 Ng4 6 h7 Ne5! is a blow in thin air, as is 5 Kf7 N×h5 6 Kf8 Nf4.

5 ... Kg8 6 Ke7 Ng4!

Black must be on the alert. On 6 ... Kh8 there follows 7 h6 Kg8 (7 ... Ng8+ 8 Kf8 N×h6 9 Ne6 Ng8 10 Ng5, or 7 ... Nh7

8 Ne6 g×h6 9 Kf7 also loses) 8 Ne6! Nd5+ 9 Kd6 Ne3 10 h7+ and 11 Ng5, winning.

7 Nd5 Ne5 8 Ke8 Ng4 9 Ne7+ Kh8 10 Kf8 Ne5 11 h6 Nd7+ 12 Ke8 Ne5 13 Kf8 Nd7+ 14 Kf7 Ne5+ 15 Ke6 N×g6, with a draw.

White’s chances were associated with a pawn sacrifice and the obtaining of a strong passed pawn, as well as with mating threats. By accurate defence Black was able to parry these threats.

We will now examine two practical examples, where the defence was not up to the mark.

Anderssen–Steinitz
London, 1866

515

515. After 1 Nb4+ Ke2 2 Nd5 g3 3 Nf4+ Ke1 4 Nd3+ Kd2 5 Nf4 White could have drawn. Instead, he played 1 Na3?, on which there followed 1 ... g3 2 Nb5 g2, and Black won, since any move is answered by 3 ... Nd4.

Goldenov–Kan
Moscow, 1946

516
Knight and Two Pawns Against Knight and Pawn

516. Exploiting the remoteness of the white knight, Black tried his last chance: 1 ... e3! 2 f×e3+ Ke4 (2 ... K×e3 3 Nd5+ leads to an immediate draw) 3 Kf1 N×e3+ 4 Kf2 Nd1+, and after 5 Ke1? f2+! 6 Ke2 Kf4 White resigned, whereas 5 Kg3! Ke3 6 Nd5+ Ke2 7 Nf4+ would have led to a draw.

Cases with isolated passed pawns are demonstrated in the following examples.

Kholmov, 1975

517. White intends to tackle the a-pawn with his king, and the f-pawn with his knight, but with his first move Black prevents the king from approaching any closer to the Q-side: 1 ... Ne4!

Now on 2 Kd1 there follows 2 ... Ne3+. White has two main defences, but neither is able to save him from defeat:

a) 2 h4 a4 3 h5 (or 3 Nf2+ Kd4! 4 h5 a3 5 h6 a2 6 h7 f3+! 7 K×f3 Ne5+ 8 Kg2 Nf7) 3 ... a3 4 h6 a2 5 Nf6+ Kf5 6 h7 a1=Q 7 h8=Q Qb2+, and White is mated.

b) 2 Nf2+ Kd4 3 Nh3.

If now the king approaches the a-pawn, 3 Kd1, there follows 3 ... Ke3 4 Ng4+ Kf3 5 Nf6 Kg2 6 h4 f3 7 Ne4 Nd6! 8 Nd2 f2 9 h5 Ne4 etc.

3 ... f3+ 4 K×f3 a4 5 Nf4 a3 6 Ne2+ Kd3 7 Nc1+ Ke2 8 Na2 Kb3 9 Nc1+ Kb2 10 Nd3+ Kb1 11 Nb4 Ne5+ 12 Ke4 Ne6! 13 Nd5 Kb2, and Black's pawn queens.

Kholmov, 1975

518. Here the white king is not far from Black's outside passed pawn, but nevertheless, by shutting the enemy knight out of the game, Black succeeds in winning.

1 ... Ne4+! 2 Ke3 Ne5! 3 Ng8 Ng4! 4 h3 f3! 5 Kd2 Nh2! 6 Nf6+ (6 Ke1 Ke3) 6 ... Ke5 7 Nh5 f2 8 Ng3 f1=Q 9 N×f1 N×f1+ 10 Kc3 Kd5, and Black wins.

Kholmov, 1975

519. Here too Black's pawns, supported by his pieces, bring him victory.

1 ... f3 2 Nd6+ Kd3 3 Nf7 Kd4!

By this subtle king manoeuvre Black prevents the white knight from taking an active part in the game. If now 4 Ng5, for example, then 4 ... Ke3 5 h4 f2+ 6 Kf1 a4 etc. The most tenacious move is 4 Nd8, but then there follows 4 ... a4 5 Ne6+ Ke4 6 h4 a3 7 Nb4 a2 8 N×a2 N×a2 9 h5 Nb4 10 b6 Nd3+ 11 Kf1 Ne5 12 h7 Nf7, and the pawn is stopped.
In conclusion we examine a few positions with isolated pawns, only one of which is passed.

Chernikov–Chekhov
Leningrad, 1948

520

520. This is a typical example. If, instead of the knights, there were like-coloured bishops, say at g2 and g6, Black would be unable to win. But with the knights the win is a matter of straightforward technique. An essential point is that all the play here takes place on a narrow sector of the board.

1 ... Ke5 2 Nd2 Nf5+.

Black forces back the enemy pieces, aiming to advance his e-pawn.

3 Ke2 e3 4 Nf3+ Kf4 5 Ne1 Ke4 6 Kf1 Nd4 7 Kg2 Ne2 8 Nf3 Kd3 9 Ne5+ Kd4!

On the immediate 9 ... Kc3 there follows 10 Kf3 Kd2 11 Nc4+.

10 Nf3+ Ke3! 11 Ne5.

This simplifies Black’s task. 11 Kf1 was tenacious, although even then after 11 ... Nf4 12 Ke1 Kd3 13 Ne5+ Ke4 14 Nc4 Kf3 15 Ne5+ Kg2 16 h4 h5 Black wins a second pawn, and with it the game.

11 ... Nf4+ 12 Kf2 e2! 13 Kf2 Nd3+ 14 N×d3.

Or 14 K×e2 N×e5 15 Kc3 Ng6 16 Ke4 Kd2 17 Kf5 Ke3 18 Kf6 Kf3 19 Kg7 Nf8!, and Black wins.

14 ... K×d3 15 Ke1 Ke3.

White resigned, since on 16 h3 there follows 16 ... h5! 17 h4 Kf3, and on 16 h4—16 ... h6!

In the following example the play is over the whole board, since the pawns are on opposite flanks.

Kholmov, 1975

521

521. How should White defend here? If, for example, 1 Ne5+, then 1 ... Kb3 2 Nd3! a3 3 Nc1+ Kb2 4 Nd3+ Kb1 5 Nb4 Nf4!, and Black wins, since 6 Kc3 is met by 6 ... Nd5+!, and 6 Kc3 by 6 ... Ng2+ 7 Ke4 N×h4 8 Kf4 Ng6+ 9 Kg5 h4 etc.

The most tenacious is 1 Ke1.

Also possible is 1 Na5+ Kb5! 2 Nb7 Kb4 3 Kc1 a3 4 Kb1 Nd4 5 Ka2 Nf5!, joining the main variation.

1 ... a3! 2 Na5+ Kc3 3 Kb1 Nd4 4 Ka2 Kb4 5 Nb7 Nf5! 6 Nd8 N×h4 7 Ne6+ Ka4 8 Nd4 Ng2 9 Ne6 h4.

Also possible is 9 ... Ne3 10 Ne5+ Kb5 11 Ne4 Nc4, when Black’s king goes to the aid of the h-pawn.

10 Ne5+ Kb5 11 Nd3 h3 12 K×a3 h2 13 Nf2 Ke4 14 Kb2 Ne1! 15 Nh1 Kd3 16 Kb3 Ke3 17 Ke3 Nd3, and Black wins.

522. In some cases Black can attack the pawn at f2, so White first forestalls the opponent’s counter-play, and eliminates the g4 pawn.

1 Nf6 Kh4.

If 1 ... Nd3+ 2 Kd4 N×f2, then 3 Ne4+ N×e4 4 K×e4 Kh4 5 b6 g3 6 Kf3 Kh3 7 b7 g2 8 b8=Q g1=Q 9 Qh8 mate.
Large Number of Pawns

522

W

2 b6 Kh3 3 Kf5 Kg2 4 Ne4 Nd7 5 b7 Kf3 6 Nf6 Nb8 7 N×g4.

White has fulfilled his task. He now sacrifices his f-pawn, and transposes into a won ending with an extra pawn.

7 ... Na6 8 Nf6! K×f2 9 Ke5 Ke3 10 Kd5 Kd3 11 Nd7 Ke3 12 Ke6. Black resigned: against 13 Kb6 there is no defence.

However, it is by no means always true that the stronger side is able to support the advance of his pawn.

In the following position, for example, White completely neutralizes the opponent’s threats, by attacking the f-pawn with his knight and forcing the black king to defend it.

Botvinnik–Lisitsin
Moscow, 1935
(variation)

523

W

523. 1 Ne1 Kd4 2 Ng2 Ke5 3 Kb4 Kf5 4 Ka4, with a draw.

Position 524 illustrates some interesting subleties, arising from the fact that one of the kings is stalemated.

Khachaturov, 1935

524

+ 

524. Black’s king is in a mating net, and therefore on 1 Ne2! it is wrong to reply 1 ... N×g5, in view of 2 Nd4 Nf7 3 Nb5, and mate next move. Black attempts to bring his knight over to the defence, exploiting staleming threats, and a very sharp situation arises.

1 ... Nf4 2 Nb4 Nd5 +! 3 Ke5 (of course, not 3 N×d5—stalemate) 3 ... Nb6! 4 Nd5! Nd7 + 5 Kd6 Nf8 6 Nf6! An unexpected finish. The knight is trapped, and White wins easily.

5.5 ENDINGS WITH A LARGE NUMBER OF PAWNS

In this chapter we will again consider examples where each side has at least two pawns.

5.51 Exploitation of an extra pawn

An extra pawn in a knight ending with a large number of pawns can normally be realized almost as simply as in a pawn ending.

The winning method, in its most general form, is as follows:

1) The king and knight take up their best positions.
2) The pawns are arranged in the most favourable way, and the formation of a passed pawn is prepared.

3) After improving the positions of the pieces and pawns, a passed pawn is created, and with the support of king and knight it is advanced.

Subsequent operations depend on the plan of defence:

4) If the opponent attempts to blockade the passed pawn with his knight, the king and knight force it away, ensuring the further advance of the pawn.

5) If the opponent attempts to stop the pawn with both his king and his knight, the simplest way to win is normally by taking the king over to the pawns on the opposite wing, where a decisive material advantage is gained.

Averbakh, 1955

525

525. 1 Kf1 Ke7 2 Ke2 Kd6 3 Kd3 Ke5.
Black attempts to prevent the creation of a passed pawn.

4 Nc2 Nd5 5 g3 a5 6 h3 f5 7 a3 g6 8 b4+ a×b4 9 a×b4+ Kd6.
Black has a lost pawn ending after 9 ... N×b4+ 10 N×b4 K×b4 11 Kd4 Kb3 12 f4 Kc2 13 Ke5.

10 Kd4.
Thus White has created a passed pawn, but now the enemy king attempts to prevent its advance, while at the same time not allowing the white king to break through to the K-side pawns.

10 ... Nc7 11 f4 Nb5+ 12 Kc4 Ne7.
Black is forced to stick to waiting tactics.

13 Ne3.
13 b5 also wins, but it requires deep and exact calculation. For example: 13 ... N×b5! 14 K×b5 Kd5 15 Ne1 Ke4 16 Kc5 Ke3 17 Kd5 Kf2 18 K×f1! K×e1 (or 18 ... Kg1 19 Nf3+ Kg2 20 Kg1!) 19 Kf6 Kf2 20 Kg7 K×g2 21 K×h7 K×h2 22 K×g6 K×g3 23 K×f5, and White wins.

13 ... Ke6 14 Kd4 Kd6 15 Ne4+ Kc6.
If 15 ... Ke6, then 16 Ne5 Kd6 17 Nf7+ Ke7 18 Ng5 h6 19 Nf3 Kf6 20 Kc5 Ne6+ 21 Kd6 g5 22 b5, and wins.

16 Ke5 Kb5 17 Ne3 Na6 (17 ... K×b4 18 Nd5+, with a won pawn ending) 18 Nd5 Kc4 19 Nf6 h5 20 Nd5 Nb8 21 Ne7, and White picks up all the K-side pawns.

Keres–Reshevsky
Moscow–Leningrad, 1939

526

526. Here White already has a passed pawn. He must now bring up his king.

1 Kf1 Ke7 2 Ke2 Kd6 3 Nc2 Ke5 4 Ne3 Nh2 5 Nd1 Na4 6 Kd3 Kd5 7 Ne3+ Ke5 8 Ne5!
White creates weaknesses in the opponent's position, so as to then break through with his king to the K-side pawns.

8 ... g6 9 Nh6 f5 10 Ne7 Kd5 11 Ng5 Ne5+ 12 Ke3 h6 13 Nh3 g5 14 g3 Ne4 15 Nd4
Large Number of Pawns

N×c3 (15 ... Ke5 16 f4+, and White wins) 16 N×f5 h5 17 f4!

In the game White played 17 Ng7?, and after 17 ... h4 18 g×h4 g×h4 19 f4 h3! Black managed to draw.

The given continuation was suggested by Fine.

17 ... g4 (17 ... g×f4+ 18 K×f4 Ne4 19 h4! Nf6 20 Ng7 Kd6 21 Kf5, and White gains a second pawn, with an easy win) 18 Ng7 Kd6 19 N×h5 Ke6 20 Ng7+ Kf6 21 Ne8+, and White wins.

In the examples just considered, in spite of Black's active king position he found it difficult to defend on two fronts.

We will now consider several positions where the pawns are all on one wing.

Fine, 1941

527

527. 1 ... Kf6 2 g3 Ke5 3 Nc6+ Ke6 4 Ke3.

Now Black can choose one of three main continuations:

a) 4 ... Kd7 5 Nd4 f6 6 f4 Ke7 7 h4 Nf7 8 g4 Kd7 9 Kd3 Ke7 10 Ke4 Kd6 11 g5! f×g5 12 h×g5 Ke7.

On 12 ... h6 there follows 13 e5+ Ke7 14 g×h6 N×h6 15 Kd5 Ng4 16 Nc6+ Ke8 (16 ... Kd7 17 e6+ Ke8 18 Kd6 Nf6 19 Nb4 Ne4+ 20 Ke5 Nf2 21 Nd5 Ng4+ 22 Kd6, and wins) 17 Ke6 Ne3 18 Nbd4 Ng2 19 Nd5, and White wins the g6 pawn.

13 e5 Nd8 14 Kd5 Nf7 15 Ne6+ Ke8 16 e6 Nh8 17 Ke5 Kf8 18 Kf6, and White wins.

b) 4 ... f5 (Black attempts to exchange as many pawns as possible) 5 Nd4+ Kf6 (if 5 ... Ke7, then 6 e5 Nc4+ 7 Kf4 h6 8 h4 Nb2 9 N×f5+! g×f5 10 K×f5 Kf7 11 f4 Nd3 12 h5 Nf2 13 g4 Nh3 14 g5, and wins) 6 e×f5 g×f5 7 Kf4 Kg6 8 Ke5 Nf7+ 9 Ke6 Nd8+ 10 Kd7 Nb7 11 Ne6!

This is stronger than the line given by Fine: 11 f4 Nc5 12 Nf3 Kh5 13 Ne5, since Black plays 13 ... h6! 14 Kf6 Ne4+ 15 K×f5 N×g3+!!, with drawing chances.

11 ... Na5 12 Nf4+ Kg5 13 b4+ Kh6 14 Kf6, and wins.

c) 4 ... g5 5 Nd4+ Kf6 6 f4! g×f4+ 7 g×f4 Nc4+ 8 Kg2! Kg7 9 e5 Kg6 10 Ke2 Nbd2 11 Kf3 Ne4 12 Ke4 Nd2+ 13 Kd5 Nf1 14 f5+ Kg5 15 e6! f×e6+ 16 K×e6 N×h2 17 f6, and the pawn queens.

Boleslavsky–Ragozin
Moscow, 1947

528

528. Black is seriously cramped, so that White is able to win without any great difficulty.

1 Ke5 Kf7 2 Kd6 Ne8+ 3 Kc7 Na7 4 Kb6! (White does not allow the knight out of the cage) 4 ... Nc8+ 5 Kb7 Ne7 6 Kc7 Kf8 (6 ... Nd5+ loses immediately to 7 N×d5 e×d5 8 Kd7 and 9 e6+) 7 Kd6 Kf7 8 Kd7!

The result of Black's cramped position is that he is now in zugzwang.

8 ... g5 (8 ... h5 9 Ne4 and 10 Ng5)
Knight Against Knight (With Pawns)

9 f×g5 Ng6 10 Kd6 h×g5 11 Ne4 Nf4
12 N×g5+ Kf6 13 h4 Ng2 14 Nf3 Ne3
15 h5+ Kf7 16 g5 Ne4+ 17 Ke6 Ne3 18 h6
Nd5 19 Nh4 Nf4 20 g6+, and Black resigned.

Marco–Maróczy
Paris, 1900

529

529. Here too White’s cramped position is the cause of his defeat.
1 ... Nd3! 2 Nb3 (or 2 N×d3 a2 3 Kb2
K×d3 and wins, while if 2 Na2, then 2 ...
Ke2!! 3 Kb3 Kd2 4 K×a3 Kc2, winning
a piece) 2 ... Ne1+ 3 Kd1 Kd3! 4 K×e1
K×c3 5 Na1! K×d4 (on 5 ... Kb2 there
follows 6 Kd1! K×a1 7 Kc1 Ka2 8 Kc2,
with a draw) 6 Ne2+ Kc3 7 Kd1 (after
7 N×a3 Kb2 the knight has no retreat)
7 ... a2 8 Kc1 d4 9 Na1 d3 10 Ne2 c5, and
White resigned.

Guldin–Averbakh
Baku, 1955

530

The following conclusion may be drawn: an advantage of four pawns against three on one wing is normally sufficient to win, although the realization of the advantage demands considerable accuracy.

With three pawns against two on one wing, if the stronger side has a passed pawn he again has good winning chances.

530. 1 ... g5!

It is essential to fix the white pawns. Black utilizes the fact that he wins after 2 h×g5+
K×g5 3 Kf3 (3 Nh2 e4 4 Kd4 Kf4 5 Nf1
Nb5 + 6 Kc5 e3 7 N×e3 K×e3 8 K×b5
Kf3 9 Kc4 K×g4 10 Kd3 Kf3, and wins)
3 ... e4+ 4 Kg3 Nc4! 5 Nh2 Nd2 6 Kf2 Kf4
7 Ke2 Kg3.

2 h5 Ke6 3 Kd3 Kd5 4 Ne3+. Kc5 5 Nc2.

If 5 Nf5, then 5 ... N×f5 6 g×f5 Kd5
7 Ke3 g4, and wins.

5 ... e4+ 6 Ke3 Kc4!

The immediate 6 ... Kd5 fails to 7 Nb4+
Ke5 8 Nc6+, when the white knight becomes dangerous.

7 Nd4 Kd5! 8 Ne2.

Here White had the possibility of playing
for a trap: 8 Nf5 N×f5 9 g×f5 Ke5 10 f6
K×f6 11 K×e4 Ke6 12 Kf3, and if 12 ...
Kf5, then 13 Kg3 g4 14 Kh4!, with a draw.
But by continuing 12 ... Ke5! 13 Kg4 Ke4
14 Kg3 Kf5 15 Kf3 g4+ 16 Kg3 Kg5 Black
wins easily.

8 ... Ne4+ 9 Kf2 Ne5! 10 Kg3 Kc4, and
Black won.

If, with three pawns against two on one wing, there is no passed pawn, and the formation of it leads to exchanges, the defender normally has good drawing chances, although here too accurate defence is required.

The following position shows a classic example.
Large Number of Pawns

Fine-Najdorf
New York, 1949

531. White could have put up a successful defence by 1 Nf2 Ne3+ 2 Kg1 Nc2 3 Nd3 g5 4 Kh2 Kh3 5 Kg1. In this variation it is important that the pawn is at h2.

In the game White played 1 h3?, which weakened his K-side. Now Black sacrifices his knight to win the h-pawn, thereby obtaining a dangerous passed pawn which decides the game.

1 ... Ne3+ 2 Kh2 Nc2 3 Kg2 Ne1+ 4 Kh2 (White obviously assumed that the black knight would have to move away, when his king would return to g2) 4 ... Kxh3!! 5 Kxe1 Kg2 (No.443) 6 Ke2 h5 7 Ng5 h4 8 Ne6 g5!, and White resigned.

Bishev-Lilienthal
Kiev, 1954

532. Here the possibility of creating a passed pawn on the Q-side gives Black counter-chances, and therefore White must play energetically. His plan is to advance his passed pawns so as to divert the black pieces to the K-side, and then to try to win the a- and b-pawns with his king and knight, after which the passed a-pawn should decide the game.

1 h5 Nd6 2 h6 Nf7 3 h7 a4 4 Kd2.

Vacating d3 for the knight. Now on 4 ... b3 there follows 5 a3.

4 ... Nh8 5 Ne1 Ke6.

The king heads for the h-pawn. If it should remain on the Q-side, White will advance his g-pawn, and with the help of his knight the two K-side pawns will decide the game.

6 Nd3 Kf7 (6 ... b3 7 a3) 7 Nxb4 Kg7 8 Kc3 Kxh7 9 Nd5 Kg6 10 Kb4 Kf5 11 Kxa4 Kg4 12 Kb4 Ng7 13 a4.

The plan has been carried out, and the win is now simple.

13 ... Nd8 14 Kb5 Nb7 15 Kb6, and White won.

Chekhover-I. Rabinovich
Leningrad, 1934

533. Black has a passed pawn, which ties down the white knight. Nevertheless, thanks to the fact that his pawns are far advanced, White is able to win.

1 h5 Nf3+ 2 Kf4 Nd4 3 h6! Ne6 4 Nc4 Ne7 5 Ke5 Ne6+ 6 Ke4 Ne7 7 Kf4 Nc6.

Here Rabinovich showed that White could have forced a win by 8 g6+! Kg8.

If 8 ... hXg6, then 9 Nd6+ Kf6 (9 ...
Kg8 10 f×g6 Ne7 11 Kg5 a3 12 Nf7 a2 13 h7+!, and wins) 10 Ne8+!! and 11 h7.

9 Kg5 Ne7 10 g7 Ne6 11 Kf6 Nd8 12 Nd6 a3 13 Ne8 Ne6 14 Ne7+ N×e7 15 K×e7
a2 16 f6 a1= Q 17 f7 mate.

The game went 8 f6? Kg6 9 Kg4 a3!, with a draw.

If the stronger side is unable either to support the advance of his passed pawn with his king, or to approach the opposing pawns on the opposite wing with his king, the realization of the extra pawn will be a very difficult, and sometimes impossible task.

Zotkin–Kudrin
Moscow, 1965

534. Here Black cannot support his passed pawn with his king, while White is threatening move his knight from b4 and then capture on d3. Black’s only chance is to attempt to create a passed pawn on the opposite wing.

1 ... f×g4 2 h×g4 h5 3 g5+.

In this way White drives the opposing king back to g7, since on 3 ... Kf5 there follows 4 Ne7+, on 3 ... Kc6—4 Nd4+ Kd5 5 Nf3, while if 5 ... Kc4, then 6 f5! g×f5 7 g6 etc.

3 ... Kg7 4 Nd4 h4 5 f5! h3 6 f6+ Kf7.

No better is 6 ... Kf8 7 Nf3 Ne4 8 K×d3 N×g5 9 Nh2 Kf7 10 Ke3 K×f6 11 Kf4, when Black cannot win.

7 Nf3 Ke6 8 Kd2 Kf5.

Black attempts to break through with his king to the support of his h-pawn.

9 f7 Nd7 10 K×d3 Kf4 11 Ke2 Kg3.

White appears to be lost. If, for example, 12 Ke3, then 12 ... h2 13 N×h2 K×h2 14 Ke4 Kg3 15 Kd5 Kg4 16 Ke6 Nh8+ 17 Kf6 Kh5, and White loses. But he has a defence!

12 Ne5 Nh8 13 Nd3! h2 14 Nh2 Kg2 15 Nh1!

Draw.

The natural question arises: couldn’t Black have played more strongly, since, after all, his passed pawns looked very strong?

Let us return to the position after 5 f5.

535

535. I. Zaitsev showed that 5 ... d2! would have won. The point is that the pawn is immune: 6 K×d2 Nb3+! 7 N×b3 h3, and the pawn cannot be stopped.

White is forced to play 6 f6+ Kf8 7 Ke2 h3 8 Nf3, but after 8 ... Ne4 9 Nh2 (totally bad is 9 Kd1 Nh2+ 10 K×d2 Ng4 followed

Botvinnik–Lisitsin
Moscow, 1935
(variation)

536

201
Large Number of Pawns

by ... h2) 9 ... Kf7 10 Kd1 N×g5 11 K×d2 K×f6 12 Ke3 Kf5 Black is in the end bound to realize his advantage.

536. Black is a protected passed pawn to the good, but how is he to utilize it? If 1 ... Kc5, then 2 Nd3+, and the king has to go back. From d3 the knight can blockade the passed pawn, and can prevent the opposing king from approaching the a- and b-pawns. Let us try transferring the black knight to c5.

1 ... Ng6 2 Kd3 Nf8 3 Kc4 Ne6 4 Nd3.

It turns out that on 4 ... Nc5 there follows 5 N×c5 b×c5 6 a5!, with a draw.

5.52 Positional advantage

5.521 Passed pawn

One of the important features here which determines the evaluation of a position is the existence of a passed pawn, or the possibility of creating one.

The knight is not a long-range piece, therefore it is difficult for it to take part in play which is proceeding on opposite flanks.

Thus if the opponent has a far-advanced passed pawn, a knight will be essentially tied to this pawn.

An important conclusion follows from this: in knight endings an outside passed pawn has the same importance as in pawn endings:

what's more, this pawn does not even need to be defended, since all the same the knight alone cannot win it.

A strong outside passed pawn can more than compensate for even a big deficit in pawns.

537. Black is powerless to stop the opposing passed pawn, since by the now standard knight sacrifice White succeeds in diverting the enemy knight.

1 b×c7.

Not 1 h5 Ne4 2 h6 (2 b×c7 Kb7 3 N×d6+ N×d6) 2 ... Ng5 (but not 2 ... Nf6? 3 b×c7 Kb7 4 N×d6+ K×c7 5 Ne8+ etc.) 3 b×c7 Kb7, when there is no win.

Now two main continuations are possible:

a) 1 ... Kb7 2 Na7! K×c7 3 Nb5+! N×b5.

No better is 3 ... Kd7 4 N×c3 Ke6 5 h5 Kf6 6 Nd5+ Kg5 7 Nf4.

4 h5, and White wins, since the knight cannot stop the h-pawn.

Instead of 2 Na7!, bad is 2 N×d6+?, since after 2 ... K×c7 3 Nb5+ N×b5 4 h5 the black knight can go to d6, and can stop the pawn after 5 h6 f5 6 h7 Nf7.

b) 1 ... Nd5 2 h5 Kb7 (3 N×d6 was threatened) 3 Nb6! (but not 3 h6? Ne3+ 4 Kg1 f2+ 15 K×f2 Ng4+ and 6 ... N×h6) 3 ... Ne3+ (on 3 ... N×b6 or 3 ... N×c7 there follows 4 h6) 4 Kf2 Ng4+ 5 Kg3 (not 5 K×f3? Ne5+ and 6 ... K×c7) 5 ... K×c7 6 K×g4 f2 7 Nd5+ Kd7 8 Ne3 Ke7 9 h6 Kf6 (9 ... f5 10 Kf3 f4 11 h7, or
9 ... Kf8 10 Kf3 Kg8 11 Kxf2 Kh7 12 Nf5 also loses) 10 Kh5, and White wins.

538. Here there is a similar win.
1 Ne7 Nd7 2 Ne6+ Kb6 (2 ... Ka6 3 Nb8+! Nxb8 4 g7 etc.) 3 Nxe5 Nf6 (it appears that all Black's difficulties are behind him) 4 Nd7+!! Nxd7 5 e5!, and White wins.

Chekhover–Ebralidze
Tartu, 1950

539. White's positional advantage, in the form of his passed a7 pawn and the active placing of his pieces, proves sufficient to save the game.

1 ... h6.

The most dangerous move for White was 1 ... f4, when there could have followed 2 Ne4 f5 3 Ne5 Nb6+ 4 Kb4 Kd5 5 Nd7! Na8 6 Kb5 (with the threat of 7 Nb6+) 6 ... Kd6 7 Nb6 Nc7+ 8 Kc4 Kc6 9 Nd5! Na8 10 Ne7+ Kb6 11 Nxf5 Kxa7 12 Nxd4! e×d4 13 K×d4 and 14 Ke5, with a draw.

2 g3 Nb6+ 3 Kb4 e4 4 Na4! Na8 5 Kc4 d3 6 Kd4. Draw.

Indeed, after 6 ... h5 7 g4! f×g4 8 h×g4 h4 9 K×e4 d2 10 Nc3 h3 11 Kf3 the draw is obvious, and the same result is obtained after 8 ... h×g4 9 K×e4 d2 10 Nc3 Kb6 11 Ke3 K×a7 12 K×d2 Nb6 13 Ke3, when White can give up his knight for both black pawns, since the black king is a long way from its pawns.

In positions where both sides have passed pawns, the evaluation depends mainly on how far advanced the pawns are, and on how effectively the pieces can combat them.

Wolf–Balogh
Correspondence, 1930

540. Here White's pawns are much more dangerous than Black's.
1 e6 Ne4 2 e7 Nd6 3 Nd4 K×h7 4 N×b5 Ne8 5 Nc7!

Gaining a decisive tempo. If 5 Nd6??, with the same idea, then 5 ... N×d6 6 b5 Kg7 7 b6 Kf7, and it is Black who wins.

5 ... N×c7 6 b5 Kg7 (6 ... Ne8 7 b6 Nd6 8 b7) 7 b6, and White wins, since on 7 ... Kf7 there follows 8 b×c7.

If both sides have passed pawns, then, all other things being equal, the more outside passed pawn will be the more dangerous.

The great importance of a passed pawn is

Lebedev–Romanovsky
Moscow, 1923
Large Number of Pawns

that it diverts the opposing forces, and thus allows a decisive blow to be struck on the opposite wing.

541. Black carries out the typical plan of advancing his a-pawn. He diverts the white pieces, and then gains a decisive material advantage on the other wing.

1 ... a5 2 Nf3 a4 3 Nd2 a3 4 Kf2 Kg8 (the king goes across to tackle the c-pawn) 5 Ke2 Kf8 6 Kd3 a2 7 Nb3 Ke7 8 Kc2 (otherwise White cannot free his knight) 8 ... Ne3+ 9 Kb2 Ng2 10 K×a2 N×f4 11 Ka3 (all the same the h3 pawn cannot be defended) 11 ... N×h3 12 Kb4 Kd7 13 Nd4 Nf4 14 Kc4 (14 c6+ Kc7 15 Kc5 Ne6+ 16 Kd5 g5 also fails to save the game) 14 ... g5 15 c6+ Kc7 16 Nf5 g4 17 Kd4 Ne6+ 18 Kc4 K×c6 19 Ng3 Kc5 20 Kf5 Kc4 21 K×g4 g6, and Black soon won.

Em. Lasker–Ninjowitsch
Zurich, 1934

542.

543. In order to win, White must evict the knight from a5, without allowing Black to create any significant threats on the K-side.

The centralized placing of White’s pieces allows him to carry out combined play on both wings.

1 Ne6 Kg6 2 Nd4! f5 (attempts to create counter-chances) 3 Ke5 Nc4+ 4 Ke6 f4 5 g×f4 g×f4 (5 ... g×h4 6 f5+, and wins) 6 Nf3! Nb2 (6 ... Na5 7 Ke5 and 8 K×f4) 7 Ne5+ Kg7 8 a5 Na4 9 Kf5 Ne5 10 Kg5 Ne6+ 11 K×h5 Kf6 12 Nf3 Kf5 13 a6 Ne7 14 a7 Na8 15 Nd4+ Ke4 16 Kg4! K×d4 17 K×f4 Kd5 18 Kf5, and Black resigned.

If the side with an outside passed pawn succeeds in preventing the opponent from creating a passed pawn on the opposite wing, the win is normally achieved without difficulty.

The following position shows a typical example.

Mikenas–Zagoryansky
Vilnius, 1946

543

W
Knight Against Knight (With Pawns)

Chigorin–Marshall
Karlsbad, 1907

544. After 1 Nd5! Nd7 2 g5! White paralyzed Black’s K-side play.

The game continued: 2 ... h6 3 Nf6 Nb6
4 h4 h×g5 5 h×g5 Kf8 6 Ke5 Na4+ 7 Kd6!
Kg7 (7 ... Nb6 8 Nd7+, and wins) 8 Kc6
Kf8 9 b6 N×b6 10 K×b6 Ke7 11 Ke7 Kf8
(11 ... Kc6 12 Kd8 Kf5 13 Nh7 etc.) 12 Kd7
Kg7 13 Ke7 Kh8 14 Ne8 (but not 14 K×f7?—
stalemate!) 14 ... Kg8 15 Kf6, and Black
resigned.

Barcza–Simagin
Moscow, 1949

545. White has an extra pawn, and, moreover, an outside passed pawn. But here this is not the decisive factor. Black’s passed pawn, supported by both pieces, proves to be much more dangerous, since White is unable to unite his forces to combat it.

1 ... d3! 2 Kf1 Nc3 3 Ke1 Kd4 4 Kd2
Ne4+ 5 Kc1 (5 Kd1 loses immediately to
5 ... Ke3!) 5 ... Nd6!!

The only way to win. A draw results from
5 ... Ke3 6 Nb5 d2+ 7 Kc2 Kc2 8 Nd4+.
6 Kd2.

Or 6 Nc6+ Ke3! 7 Ne7 d2+ 8 Kd1 Ne4
9 Nd5+ Kc4, and Black wins (Simagin).
6 ... Nc4+ 7 Kc1 d2+ 8 Kc2 Ke3 9 Nb5
Na3+!!', and White resigned.

We will conclude this section on the passed pawn with an ending which might well be called “the triumph of the passed pawns”.

Pillsbury–Gunsberg
Hastings, 1895

546. White has a strong protected passed pawn, but if the black knight were at c6, it might prove impossible to realize the advantage.

The unfortunate placing of the black pieces allows White to begin immediately a decisive breakthrough.

1 f5! g5 (1 ... g×f5 2 g×f5 e×f5 3 Nf4,
and White wins) 2 Nb4 a5 3 c6!! Kd6 (3 ... a×b4 4 c7) 4 f×e6! N×e6 (4 ... a×b4
5 c7 K×c7 6 c7) 5 N×e6 K×c6 6 e4!

White obtains two connected passed pawns.
6 ... d×e4 7 d5+ Kd6 8 Ke3 followed by
9 K×e4, and White wins.

5.522 Superior pawn formation

Here we will examine a few examples where one side has an undisputed positional advantage, thanks to defects in the opponent’s pawn formation.
Large Number of Pawns

Botvinnik–Keres
The Hague/Moscow, 1948

547 W

547. The defect of Black's position is not so much that his pawns are doubled. Much more important is the fact that two white pawns on the Q-side hold three black pawns, so that White is able to create a passed pawn in the centre.

1 Nb1 Kf8.

In view of the threat of 2 Nc3, Black is unable to manoeuvre with his knight. Therefore he takes his king to the defence of his b5 and d5 pawns, so as to free his knight.

2 Kf1 Ke7 3 Ke2 Kd6 4 Kd3 Kc6 5 Nc3 Ne8 (Black plans to transfer his knight via d6 to c4) 6 Na2! f6.

The attempt to prevent the formation of a passed pawn by 6 ... f5 leads to the creation of fresh weaknesses. As shown by Keres, there can then follow 7 Nb4+ Kd6 8 Kc3 followed by 9 Nd3, and the weakness of the b4 and e5 squares decides the game.

7 f3 Nc7 8 Nb4+ Kd6 9 e4 dxe4+ 10 fxe4 Ne6.

White has succeeded in transforming one form of positional advantage into another: he has acquired a passed pawn.

11 Ke3 Ne7 12 Kd3 Ne6 13 Nd5 Kc6 14 h4.

White deprives the knight of g5, and prepares an attack on Black's K-side pawns.

14 ... Nd8 (Black is running out of useful moves) 15 Nf4 Kd6 16 Nb5 Ne6 17 Ke3 Ke7 18 d5 Ne5 19 N×g7 Kd6 20 Ne6! Nd7 21 Kd4 Ne5 22 Ng7 Nc4 23 Nf5+ Kc7 24 Kc3 Kd7 25 g4 Ne5 26 g5 f×g5 27 h×g5 Nf3 28 Kb4 N×g5 29 e5 h5 30 e6+ Kd8 31 K×h5, and Black resigned.

In position 548 Black has weak pawns on both wings. Being forced to defend these weaknesses, the black pieces will have to take up passive positions.

Thus a superior pawn formation can lead to the enhancement of a positional advantage—to an increase in the activity of one's own pieces, and a reduction in that of the enemy pieces.

It is instructive to follow how White gradually improves his position.

Alekhine–Turover
Bradley Beach, 1929

548 W

548. 1 Kb5 Nd5 2 f4.

Threatening 3 Nd4, so that the black pieces are forced to retreat.

2 ... Kc7 3 Nd4 Nc3+ 4 Kb4 Nd5+ 5 Kc4 Ne7 6 Kb5 Kb7 7 Ne6! Ne8.

If 7 ... Nc6, then 8 Ng7 Ne7 8 Ne8 Ng8 10 Nd6+ and 11 N×f5. Black therefore attempts a counter-attack.

8 Kc4 Nd6+ 9 Kd5 Ne4 10 h6! Nf2.

Black avoids 10 ... N×g3, since after 11 Nf8 Ne2 12 N×h7 N×f4+ 13 Kd4 Ng6 14 N×f6 Kc6 15 h7 White wins easily.

11 Nf8 Ng4 12 Ke6 N×b6 13 K×f6 Ka6 14 Kg5 Ng8 15 K×f5 Ka5 16 Nd7! K×a4 17 N×b6+ Kb5 18 Nd5 Ke6 19 Ke6 Nh6 20 Nf6, and Black resigned.
Knight Against Knight (With Pawns)

Rudenko–Langosh
Moscow, 1949

549. White's advantage is that by 1 c5 he is able to break up Black's Q-side pawns. But if it were Black to move, by 1 ... c5 he would be able to strengthen his pawns, and deprive White of the greater part of his advantage.

1 c5! a4 (1 ... Nd5 2 c×b6 a4 3 Na5, and wins) 2 Nd4 Nd7 3 N×c6 (on 3 c×b6 there would have followed 3 ... c5) 3 ... N×c5 +.

Black has managed to parry the immediate threats, but now the way has been opened for White's king to approach the Q-side pawns.

4 Kc4 Ke6 (4 ... g5 5 Kd5, and wins) 5 f4! (fixing Black's K-side weakness—his pawn at g6) 5 ... Kd6 (this simplifies White's task, but in view of his weaknesses on both wings, Black could hardly have saved the game) 6 Ne5 g5 7 Nh7+ Kc6 8 f×g5, and Black soon resigned.

Nimzowitsch–Sämisch
Copenhagen, 1923

5.523 Superior king position

As we have seen many times, in knight endings a superior king position is of great importance.

550. White's king can come quickly into play and attack the c4 pawn.

1 Kf3 Kf7 2 Nc3.

Simpler is 2 Ke4 Ke6 3 g4, when after 4 Ne3 White in the end wins the c4 pawn, and with it the game.

2 ... Ndd4 + 3 Ke4 Nb3 4 Kd5.

At first sight White seems to have improved his position considerably. But in fact his king has strayed too far from his K-side pawns, which allows Black to create counter-threats there.

4 ... Nd2 5 b3.

Preventing the fixing of his pawns by ... g4.

5 ... f5 6 Nd1 Kf6 7 Ne3 Ne4 8 N×c4 N×f2 9 b4.

White has transformed one form of advantage into another: he has acquired an outside passed pawn. But it is not yet far advanced, and his K-side pawns are weak.

9 ... Ke7.

After this incorrect move White realizes his advantage without difficulty, but if Black had played the active 9 ... Ne4 (pointed out by V. Platonov) 10 b5 Nc3+ 11 Kc6 N×b5 12 K×b5 f4, White could hardly have managed to win.

10 b5 Kd7 11 b6 Ne4.

Too late. The knight can no longer undertake any activity on the opposite wing, but has to hurry to the help of its king.

12 Ne5+ Kc8 13 Kc6 Nf6 14 Nd3! (threatening 15 b7+ Kb8 16 Nc5 etc.) 14 ... Nd7 15 b7+ Kd8 16 Kd6 Nb8 17 Nb4 Nd7 18 Nc6+ Ke8 19 Kc7, and Black resigned.

In certain cases a badly placed king can itself be the object of attack.
Large Number of Pawns

Tartakover–Botvinnik
Groningen, 1946

**551.** Black is threatening to create mating threats by advancing his K-side pawns. But White also has chances, with his two connected passed pawns.

1 ... h5! 2 Ne4+.

White takes his knight to the aid of his king.

2 ... Kd5 3 Ne3+ Ke4 4 a4.

As was shown by Botvinnik, 3 b4 is more consistent, when Black should play 4 ... Nd4! followed by ... Kf3, since 4 ... Kd3 fails to win after 5 b5 Kc2 6 b6 K×f2 7 Nf5 h4 8 N×h4 g3 9 N×f3 K×f3 10 b7 Kf2 11 b8=Q g2+ 12 Kh2 g1=Q + 13 K×h3, when the g3 square is defended.

4 ... Kd3 5 Nd5 Ke2 6 Nd4+ K×f2 7 N×h5+.

7 N×h5 leads to mate: 7 ... g3 8 N×g3 K×g3 9 a5 h2 10 a6 Ng5 11 a7 Ne4 12 a8=Q Nf2 mate.

Bronstein, 1948

**552.**

7 ... Kf1 8 Nf4 g3 9 Ng2 Kf2 10 a5 h4 11 Nf4 Kf1 12 Ng2 h3 13 Ne3+ Kf2 14 Ng4+ Ke2, and White resigned.

Had White played 2 a4, Black would have won by the ingenious move 2 ... Nd2!! (cf. example 552).

**552. 1 Ne7? h4.**

On 1 ... g6? there follows 2 Kd4!!, and now:

a) 2 ... Nf5+ 3 N×f5 g×f5 4 Kc5 h4 5 Kc6 h3 6 K×c7 h2 7 b6 h1=Q 8 b7+, and wins.

b) 2 ... h4 3 Kc5! Ne4+ (3 ... h3 4 Nd5!! h2 5 N×c7+ Kb8 6 Kb6 h1=Q 7 a7+ Kc8 8 a8=Q+, and White wins)

4 Kc6 Nc3 5 K×c7 N×a4 6 b6 N×b6 7 K×b6 followed byNd5–c7, winning.

2 a5 h3 3 b6 c×b6 4 axb6 h2 5 b7+! Ka7 6 Ne6+ K×a6 7 b8=Q h1=Q 8 Qa7+ Kb5 9 Nd4+, with a quick mate.

Kholmov, 1974

**553.**

553. White's pieces have broken into the opposing position, and the d6 pawn is doomed. But Black can eliminate the b3 pawn, after which his passed pawn will become dangerous.

1 Nd7+ Kc7 2 Nf6 Na5 3 Ne8+ Kb6 4 N×d6 N×b3 5 Ne8+ (White's plan is clear—to queen his pawn) 5 ... Kb7 6 d6 Nd4 7 d7 b3!

Black uses his trumps. Weaker is 7 ... Nc6+ 8 Ke8 b3 9 Ne7 b2 10 N×c6 b1=Q 11 d8=Q, when White wins, since 11 ...
Kxc6 fails to 12 Qc8+, when Black either loses his queen or is mated.

8 Nd6+! (weaker is 8 Ke8 Ne6!) 8 ... Ka6!
9 Ne4 b2 10 Nxc5+ Ka7 11 Kd6! Nf5+
12 Kxe5 Ne7 13 Kd6 Nf5+ 14 Ke6 Nd4+
15 Kd5, and White wins.

It is worth checking whether or not 3 ... Kb6 was a mistake:

3 ... Kb8 4 Nxd6 Nxb3 5 Ne4 Nd4
6 Nxc5 b3 7 Na4, and White's passed pawns decide. Black could have played more strongly, 5 ... Na5 6 Nxc5 b3 7 Na4 e4! 8 dxe4 Nxc4, but even here he loses after 9 d6 Ne5
10 d7 Nc6+ 11 Ke8 Kc7 12 e5 Nd8 13 Nb2
Nb7 14 e6 Nd6+ 15 Kf8 Kd8 16 Nc4! Nf5
17 Na5!

But what if Black on his first move had played his king to a7? Then White's task would have been much more difficult.

The best continuation is 2 Ke6!, not determining for the moment the position of the knight, when Black has three possibilities:

a) 2 ... Na5 3 K×d6 N×b3 4 Kc7! Nc1
5 N×c5 b3 6 N×b3! N×b3 7 d6 Nc5 8 d7
Ne6+ 9 Kd6 Nd8 10 K×e5 Kxb6 11 Kd6
Nb7+ 12 Ke7 Kc7 13 d4 Nd8 14 d5 Nb7
15 c5, and White wins.

b) 2 ... Ka6 (Black defends passively)
3 Nb8+ Kb6 (3 ... Ka7 is decisively met by 4 Nc6+! Ka6 5 Kd7 Kb6 6 Kc8 Ka6
7 Kc7) 4 Kd7! Na5 5 K×d6 N×b3 6 Nd7+
Kb7 (6 ... Ka7 7 Kc7 leads to a variation already considered) 7 Ke7 Na5 8 N×c5+, and Black can well resign.

c) 2 ... Ka8 (the strongest), when there can follow 3 Nb6+ Kb8 4 Kd7 Na5 5 K×d6
N×b3 6 Nd7+! Ke8 7 Ke7 Na5 8 N×c5 b3
9 Na4 e4 10 d×e4 N×c4 11 d6 Ne5 12 Nb2
Nc6+ 13 Ke8 Ne5 14 Nc4! Nd7 15 Ke7
Nb8 16 e5 Ne6+ 17 Kf6 Kd7 18 e6+ Ke8
19 d7+ Kd8 20 Na5! N×a5 21 e7+ K×d7
22 Kf7, and White wins.
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