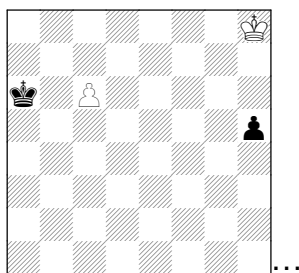


PAWN ENDINGS



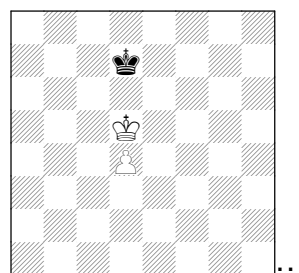
ENDINGS WITH SMALL NUMBER OF PIECES

PAWN ENDINGS

Pawn endings constitute a basis of all endings. One should study them most carefully, because each ending can eventually transpose into a pawn one. Despite their simplicity, pawn endings are very complicated - even masters and grandmasters often err in them. The complexity of a pawn ending is that it cannot be evaluated as \pm or $?$; it is either won or drawn. Erroneous transition to a pawn ending may have fatal consequences.

In order to better understand pawn endings, one should master the following strategic ideas and devices.

OPPOSITION



OPPOSITION

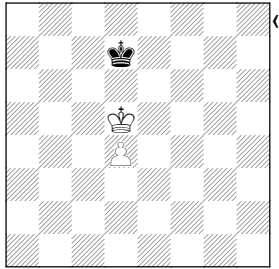
The kings are in opposition, when they are placed on the same file, rank, or diagonal, with an odd number of squares separating them. While standing in the opposition, the turn to move is always a disadvantage. Hence it is clear that one should strive for taking the opposition. It plays a decisive role while queening a pawn (see example 1), while breaking to the opponent's pawns and winning them (example 2), and while defending a worse position (examples 3 and 4).

If it is White to move, then after 1. Kc5 , Black retains the opposition by

[1. Ke5 Ke7=]

1... Kc7= , and saves the game.

Example

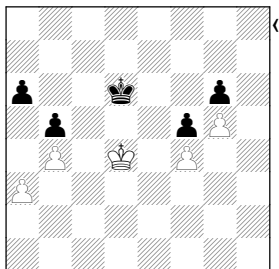


But if it is Black to move, he is forced to allow the penetration of the opponent's king 1... Ke7

[1... Kc7 2. Ke6□]

2. Kc6□ , and Black loses.

Example 2



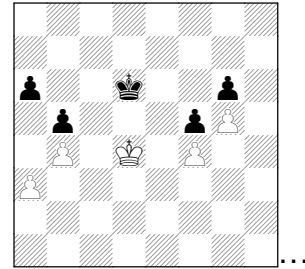
If it is Black's turn to move, he loses, because he is forced to allow the opponent's king to break to his pawns.

1... Ke6

[1... Kc6 2. Ke5□]

2. Kc5□

Example 3



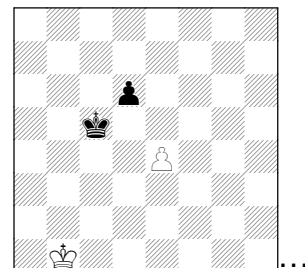
If it is White to move, he draws. 1. Kc3!
[But not 1. Kd3? Kd5! , and Black wins.]

1... Kd5 2. Kd3! Taking the opposition, White saves the game. 2... Ke6!

[Black even loses after 2... Kd6? 3. Kd4□]

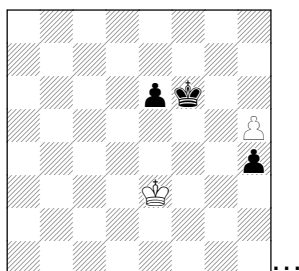
3. Kd4 Kd6=

Example 4



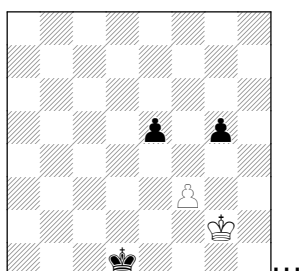
Black threatens 1... cxd4, winning a pawn. Hence, the only chance is 1. e5! dxe5 (this is forced) 2. Kc1! (taking the distant opposition) 2... Kd4 3. Kd2 , transforming the distant opposition into close opposition. Draw.

Horvath D. - Horvath C., Hungary, 1988 2



1. Kf4 h3 2. Kg3 Kg5 3. Kh2!!
 [The only move. After 3. Kxh3? Kxh5
 Black takes the opposition and wins.]
 3... Kh6
 [or 3... Kxh5 4. Kxh3=]
 4. Kg3! , and the players agreed a draw.

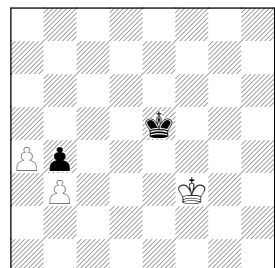
Neustadtl G



Using the opposition, one can draw even in positions that seem hopeless.

1. Kh1!
 [Taking the distant opposition. Bad is
 1. Kf1? Kd2 2. Kf2 Kd3 - the f3-pawn
 hinders its own king to take the close
 opposition, and White loses after 3.
 Kg3 Ke3 4. Kg2 Ke2 5. Kg3 Kf1°, and
 the rest is clear.]
 1... Kd2 2. Kh2! Kd3 3. Kh3=

Example 5



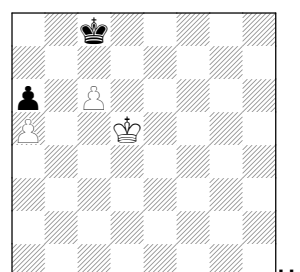
As a rule, such positions with a protected passed pawn are easily won.

Here, however, after 1... Kd5! Black draws by taking the diagonal opposition:

2. Kf4 Kd4 3. Kg4 Ke4 4. Kg3 Ke5
 [The black king must not move out of the "square" of the a-pawn: 4... Ke3 5. a5□]
 5. Kf3 Kd5! 6. a5 White is unable to seize the opposition, so he tries his last chance.
 6... Kc5 7. Ke4 Kb5 8. Kd5 Kxa5 9. Kc4 Ka6!
 [9... Kb6 10. Kxb4□]
 10. Kxb4 Kb6! , taking the opposition.
 Draw.

CORRESPONDING SQUARES.

TRIANGULATION



CORRESPONDING SQUARES.
 TRIANGULATION

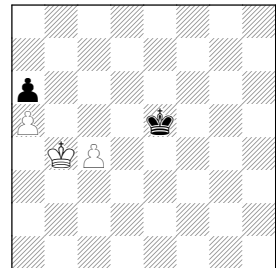
The following example explains the notion of "corresponding squares".

In order to win, White must break with his king either to b6, winning the a6-pawn, or to d7, promoting the c-pawn. Nevertheless, on 1. ϕ d6 Black plays 1... ϕ d8, and 2. c7 ϕ c8 3. ϕ c6 leads to stalemate, while 1. ϕ c5 is met by 1... ϕ c7, and Black succeeds in not allowing the penetration of the opponent's king to b6. That is, when the white king is on d6, the black king should be only on d8, and when the white king is on c5, the black king should be only on c7. These are the corresponding squares: to each position of the white king there is a single corresponding position of the black king. It is easy to see that the square corresponding to d5 is c8, that to c4 is b8, and d4-d8. But what if White loses (or wins?) a tempo by 1. Kd4 , and in response to 1... Kb8 , plays 2. Kc4 ? Then Black can no longer maintain the correspondence: 2... Kc8 is decisively met by 3. Kd5 Kc7

[or 3... Kd8 4. Kd6□]

4. Kc5□ The white king's maneuver along the d4-c4-d5 squares is called triangulation. This device helps to win a lot of games.

Dvoretzky M. - Nikitin A., Moscow, 1970

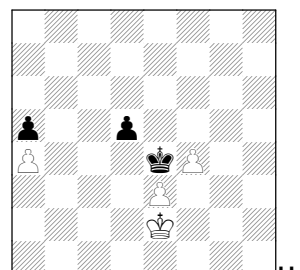


If White manages to bring his king to d4, then he wins as it was shown in the previous example. Naturally, Black tries to prevent this. 1... Kd4 2. Kb3 Ke5 3. Ka4 Here the corresponding squares are: c3-e4, b4-d4, and b3-e5. But White has two reserve squares, a3 and a4, from which his king can move to b4 or b3, while Black has the only square, e4, from which his king can move to the key d4- and e5-squares. White wins by maneuvering with his king in the a4-a3-b3 triangle.

[It is worthy to note that the aim cannot be achieved by 3. Kc3 in view of 3... Ke4 4. c5 Kd5 5. Kb4 Ke6! 6. Kc4 Ke5=]

3... Ke4 4. Ka3 Ke5 5. Kb3! Ke4 6. Kc3 , and White wins.

Alatortsev V. - Consultants, 1934

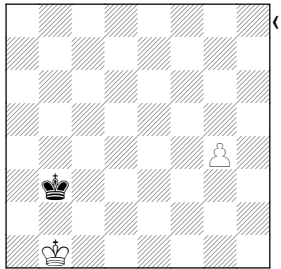


White wins by triangulation along e1-d2-e2. 1. Ke1!

[The straightforward 1. Kd2 leads only to a draw after 1... d4 2. exd4 Kxd4]

1... Kf5 2. Kd2 Ke4 3. Ke2□

THE RULE OF THE SQUARE

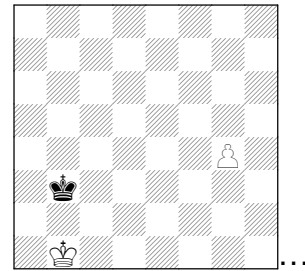


THE RULE OF THE SQUARE

The "rule of the square" enables one to quickly determine whether or not a king can catch a pawn. Let us examine the following example.

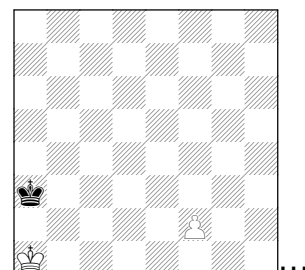
If it is Black to move, he plays 1... Kc4 , and the king steps into the "square" of the g4-pawn. Its sides are equal to the distance of the pawn to its queening square (g4-g8-c8-c4).

Example 6



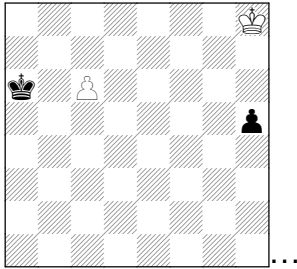
If White begins, then after 1. g5 the black king is not able to step inside the g5-g8-d8-d5 "square", therefore Black loses. In practice, it is simpler to draw mentally only one line - the diagonal of the "square", for example g4-c8 or g5-d8 in the examined examples. When a pawn is in its starting position, i.e. on the 2nd rank, the diagonal of the "square" should be drawn from the square in front of the pawn.

Example 7



In this case the diagonal of the "square" is f3-a8, therefore - draw.

Reti Richard



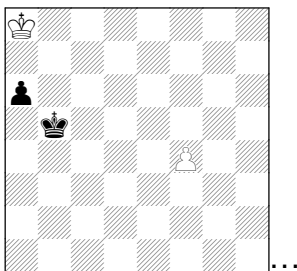
The "rule of the square" is often seen in practice and in chess composition.

At first sight the task seems impracticable, however, using two threats - to queen the c-pawn and to step into the "square" of the h-pawn - White manages to draw. 1. Kg7 h4 2. Kf6 h3

[Or 2... Kb6 3. Ke5 Kxc6 4. Kf4= , stepping into the "square".]

3. Ke7! Kb6 4. Kd7 , with a draw. In chess literature, this idea was picturesquely called "chasing two birds".

Feiter K



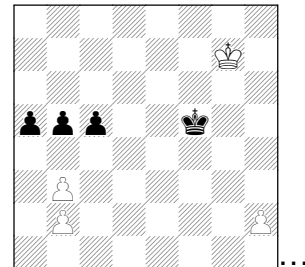
1. Kb7 a5 2. Kc7 Kc5

[2... a4 3. f5]

3. Kd7 Kd5 4. Ke7 Ke4 (it seems that Black is winning, but...) 5. Ke6! Kxf4 6. Kd5 The king has stepped into the "square". Draw. This idea was employed in practice by the world champion

Emanuel Lasker in a game against Tarrasch.

Lasker E. - Tarrasch S., Petersburg, 1914



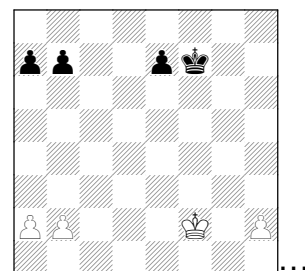
1. h4 Kg4 (otherwise White plays 2. h5)

2. Kg6!

[2. Kf6? loses due to 2... c4 3. bxc4 bxc4 4. Ke5 c3! 5. bxc3 a4°]

2... Kxh4 3. Kf5 Kg3 4. Ke4 Kf2 5. Kd5 Ke3 6. Kxc5 Kd3 7. Kxb5 Kc2 8. Kxa5 Kxb3 Draw.

OUTSIDE PASSED PAWN



OUTSIDE PASSED PAWN

A passed pawn that is most remote from the center is called an outside passed

pawn. The possession of an outside passed pawn, or a threat of creating one, is a decisive advantage in pawn endings. The winning plan is simple and typical: to divert the opponent's king by the advance of this pawn, and then break through with one's own king to the opponent's pawns.

Here is an elementary example.

White's plan is simple: to advance his Q-side pawns as far as possible, and then to exchange the h-pawn for the black e-pawn, breaking with his king to the opponent's pawns. The game may continue as follows: 1. b4

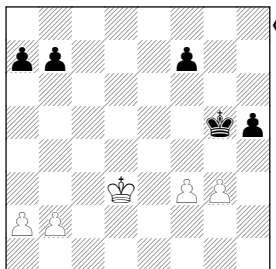
[Or 1. a4]

1... b5 2. a3 a6 3. Ke3 Kf6 4. Ke4 e6

[Or 4... Kg5 5. Ke5, and the rest is clear.]

5. h4 Kg6 6. Ke5 Kh5 7. Kxe6 Kxh4 8. Kd6

Gheorghiu F. - Gligoric S., Hastings, 1964



For the moment there is no an outside passed pawn, but Black quickly creates it:

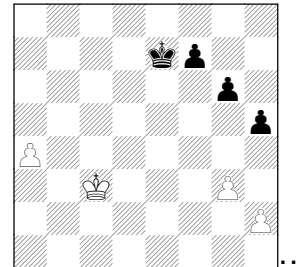
1... f5 2. Ke3 f4+! 3. Kf2

[Or 3. gxf4+ Kf5 4. b4 b5 5. a3 a6°, and the rest is clear.]

3... b5 White resigned. After 4. Kg2 b4 5. Kf2 fxg3+ 6. Kxg3 h4+ 7. Kh3 Kf4 8. Kxh4 Kxf3 the black king captures both

White's pawns.

Fischer R. - Larsen B., Denver, 1971



In some positions with an outside passed pawn, the stronger side must play accurately and subtly in order not to miss an advantage.

1. Kd4 Kd6 2. a5 f6

[2... Kc6 3. Ke5]

3. a6 Kc6 4. a7 Kb7 5. Kd5 h4! (the only chance)

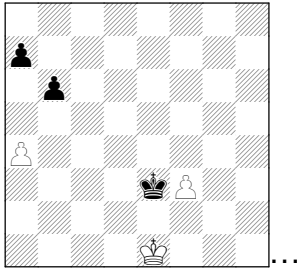
[5... f5 6. Ke5 h4 7. Kf6!]

6. Ke6! Black resigned.

[it was not too late to let the win slip away by 6. gxh4? Kxa7 7. Ke6 (or 7. h5 gxh5 8. h4 Kb7 9. Ke6 Kc7 10. Kxf6 Kd7 11. Kg5 Ke7 12. Kxh5 Kf8=) 7... f5 8. Ke5? (correct is 8. h5! gxh5 (if 8... f4, then 9. hxg6 f3 10. g7 f2 11. g8=Q f1=Q 12. Qf7+)) 9. Kxf5 Kb6 10. Kg5 Kc6 11. Kxh5 Kd6 12. Kg6 Ke7 13. Kg7 Ke6 14. h4 Kf5 15. h5) 8... Kb7 9. h5 gxh5 10. Kxf5 Kc7 11. Kg5 Kd7 12. Kxh5 Ke7=]

On 6... f5, White wins by 7. Kf6!

PLAYING FOR STALEMATE



PLAYING FOR STALEMATE

Stalemate combinations occur in pawn endings much more often than in other endings. This is explained by limited material on the board.

1. a5!

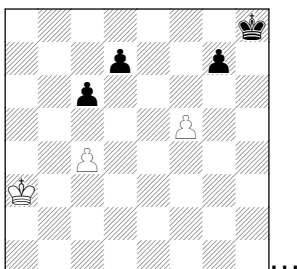
[White loses after both 1. f4? Kxf4 2. Kd2 Ke4 3. a5 b5 4. a6 b4!°; and 1. Kd1 Kxf3 2. Kc2 Ke4]

1... b5 2. a6! (creating a "stalemate shelter" for the king) 2... Kxf3

[2... b4 3. Kd1=]

3. Kd2 Ke4 4. Kc3 Kd5 5. Kb4 Kc6 6. Ka5! Kc5 Stalemate.

Troitsky A



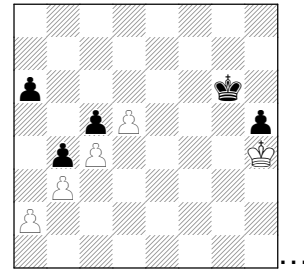
Stalemate is possible even in the center, as it occurs in the following example.

Black is forced to defend his d7-pawn, and White manages to create a stalemate shelter for his king. 1. Kb4 Kg8

[Or 1... Kh7 2. Kc5 Kh6 3. Kd6 Kg5 4. Kxd7 Kxf5 5. Kxc6=; 1... d6 2. Ka5=]

2. Kc5 Kf7 3. Kd6 Ke8 4. c5 Kd8 5. f6! gxf6 Stalemate.

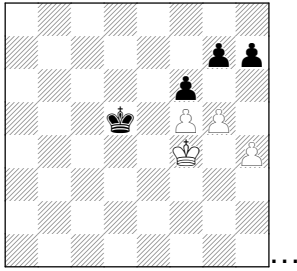
Nikolaevsky Y. - Taimanov M., Tbilisi, 1967



Many games have been saved thanks to stalemate.

It seems that after 1. d6 Black is helpless, because he will lose the c5-pawn. Nevertheless, he draws thanks to a seemingly minor detail: his pawn is not at a5, but at a6. 1... Kf6 2. Kxh5 Ke6 3. Kg5 Kxd6 4. Kf5 Kc6 5. Ke5 Kb6 6. Kd5 Ka5! The king has reached a stalemate shelter. 7. Kxc5 Stalemate.

Chigorin M. - Tarrasch S., Nurnberg, 1896



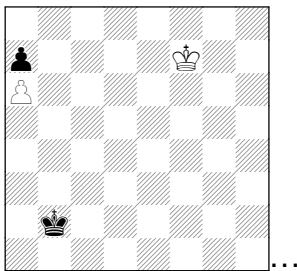
Sometimes a saving combination is found only in analysis. The following ending is especially instructive: even a great player has let a draw slip out of his hands.

Chigorin played 1. gxf6?, and resigned two moves later, instead of which he could have drawn by 1. Kg4 Ke4 2. g6! h6

[2... hxg6 does not win either in view of 3. fxf6 f5+ 4. Kg5 f4 5. h5 f3 6. h6 gxh6+ 7. Kxh6=]

3. Kh5 , and if 3... Kxf5 , then stalemate.

SHOULDER-CHARGING



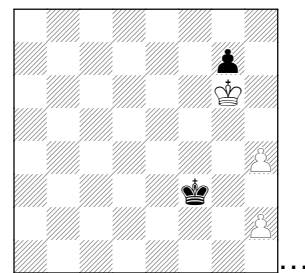
SHOULDER-CHARGING

(variation from the game)

White needs five moves to capture the a7-pawn, but the same number of moves is enough for Black to reach c7 with his

king, drawing. Hence, heading for a7, the white king should simultaneously push away the black king. 1. Ke6! Kc3 2. Kd5! Kb4 3. Kc6 Kc4 4. Kb7 Kc5 5. Kxa7 Kc6 6. Kb8 , and White wins. This maneuver, which has received the name of "shoulder-charging", is frequently employed in practice.

Grigoriev Nikolay (RUS)



1. Kf5!

[1. h5? Kg4 2. h3+ Kh4=;

1. Kg5? Kg2 2. h5 Kh3 3. Kg6 Kg4!

(3... Kh4 4. h3□) 4. h3+ Kh4=]

1... Kg2

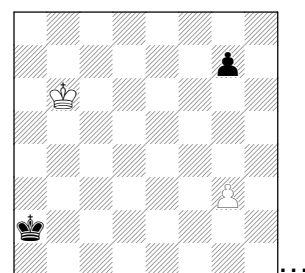
[1... Ke3 2. h5 Kf3 3. Kg5□]

2. h5 Kh3 3. Kg5!

[3. Kg6 Kg4! 4. h3+ Kh4=]

3... Kxh2 4. Kg6□

Moravec Jaroslav (CZE)



In order to win, White must reach f7 with his king, but the king is moved there in a roundabout way, at the same time "shoulder-charging" the opponent's king.

1. Kc5!

[Only a draw results from 1. g4? Kb3 2. Kc5 Kc3 3. Kd5 Kd3 4. Ke5 Ke3 5. Kf5 Kf3 6. g5 Kg3=]

1... Kb3 2. Kd4!

[2. Kd5 Kc3=]

2... Kc2

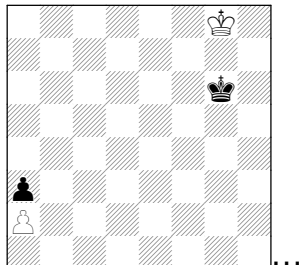
[2... Kb4 3. g4 Kb3 4. g5□]

3. Ke3! Kd1 4. g4 Ke1

[4... Kc2 5. g5□]

5. g5 Kf1 6. Kf3! Kg1 7. g6 Kh2 8. Kg4 Kg2 9. Kf5 Kg3 10. Ke6 Kg4 11. Kf7□

Sackmann F



In conclusion let us study another valuable example.

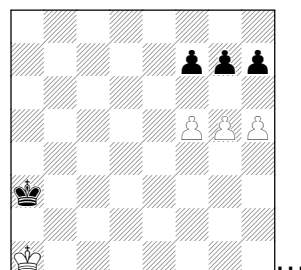
White saves the game, taking the so-called "knight's opposition" - another kind of opposition, which we have not yet discussed. 1. Kh8!

[The natural 1. Kf8 loses due to 1... Kf6 2. Kg8 Ke5 3. Kg7 Kd4 4. Kf6 Kc3 5. Ke5 Kb2 6. Kd4 Kxa2 7. Kc3 Kb1°]

1... Kf6 2. Kh7! (maintaining the knight's opposition) 2... Ke5 3. Kg6 Kd4 4. Kf5

Kc3 5. Ke4 Kb2 6. Kd3 Kxa2 7. Kc2 Draw.

BREAKTHROUGH



BREAKTHROUGH

A pawn breakthrough involves a sacrifice of one or several pawns in order to create a passed pawn. This device often occurs in practice, and so in the course of play it is very important to foresee the possibility of a breakthrough.

As a rule, three factors contribute to a breakthrough.

I. Pawns are close to the queening square (in other words, extra space).

II. The opponent has doubled pawns.

III. The pawns hinder its own king to catch the opponent's pawn.

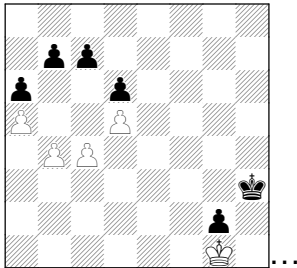
I. Pawns are close to the queening square His far advanced pawns allow

White to promote one of them by a breakthrough. 1. g6! fxg6

[Or 1... hxg6 2. f6 gxf6 3. h6□]

2. h6! gxh6 3. f6□

Example 8



Here the white pawns are less advanced; nevertheless, it is sufficient for a breakthrough. 1. b5!

[Or 1. c5]

1... Kg4 2. c5 Kf5

[2... axb5 3. c6 bxc6 4. a6□;

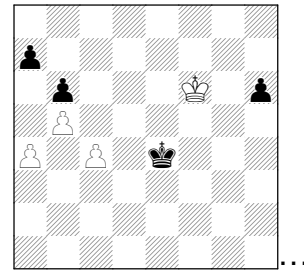
2... dxc5 3. b6 cxb6 4. d6□]

3. b6

[Or 3. c6]

3... cxb6 4. c6 bxc6 5. axb6□ Let us note that this pawn structure may arise in many openings, for example in the Scotch game, so all White has to do is to keep it until a pawn ending.

Godes D, Averbakh Y



Here too, the far advanced pawns decide the game. 1. c5! bxc5

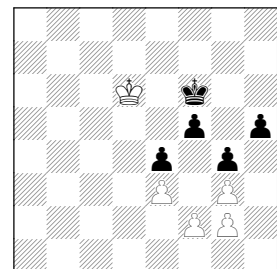
[1... Kd5 2. c6 Kd6 3. Kg6□]

2. a5 Kd5 3. a6!

[3. b6? loses due to 3... axb6 4. axb6 Kc6°]

3... Kd6 4. b6□

Pomar S. - Cuadras, Olot, 1974



II. The opponent has doubled pawns

1... f4! 2. Kd5

[2. exf4 h4! 3. gxh4 g3 4. fxg3 e3°]

2... h4! 3. Kxe4

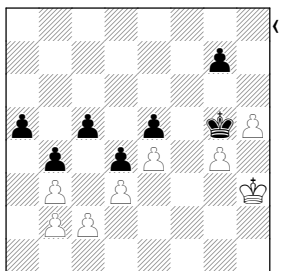
[3. gxf4 h3]

3... f3!

[Bad is 3... h3? 4. gxh3 gxh3 5. Kf3]

4. gxf3 h3 White resigned.

Havazi - Reko, 1976



After the correct 1... c4! Black could have won.

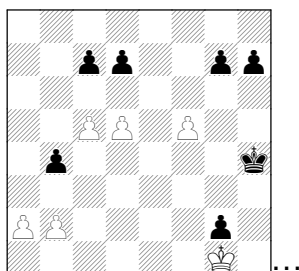
[He, however, resigned, probably in view of the following line: 1... a4? 2. bxa4 c4 3. b3!□]

For example, 2. bxc4

[2. dxc4 a4! 3. bxa4 b3 4. cxb3 d3°; 2. Kg3 a4! 3. bxa4 b3 4. cxb3 c3°]

2... a4 3. c5 a3 4. bxa3 bxa3 5. c6 a2 6. c7 a1=Q 7. c8=Q Qf1+ 8. Kg3 Qf4+ 9. Kh3 Qf3+ 10. Kh2 Qf2+ 11. Kh3 Qh4+ 12. Kg2 Qxg4+ , and Black wins.

Troitsky A 2



III. The pawns hinder its own king to catch the opponent's pawn.

To start with, let us examine a classic

study.

White puts a pawn barrier on the black king's way to the Q-side. 1. f6!!

[Bad is the immediate 1. a4? in view of 1... bxa3 2. bxa3 Kg3! 3. a4 h5 4. a5 h4 5. a6 h3 6. a7 h2#; or 1. Kxg2? Kg5 2. a4 bxa3 3. bxa3 Kf6! 4. a4 Ke7! (4... Ke5? 5. d6! cxd6 6. c6 dxc6 7. a5□) 5. Kf3 Kd8=]

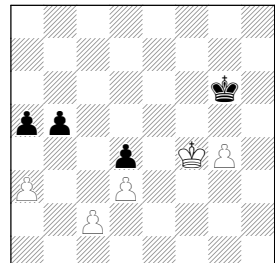
1... gxf6 2. Kxg2 (otherwise Black plays ♝g3) 2... Kg4 3. a4 bxa3 4. bxa3 Kf5 5. a4 [Premature is 5. d6 cxd6 6. c6 dxc6 7. a4 because of 7... Ke6]

5... Ke5 6. d6!

[6. c6 d6 7. a5 Kxd5]

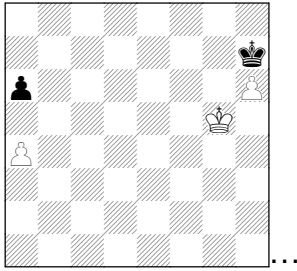
6... cxd6 7. c6! dxc6 8. a5 Kd5 9. a6□

Borisenko V. - Zvorykina K., 1962



1... a4! 2. Ke4 b4 3. Kxd4 bxa3 4. Kc3 Kg5 Without the pawn on c2, White could have drawn by 5. ♝c2. 5. d4 Kxg4† White resigned.

EXTRA SPACE

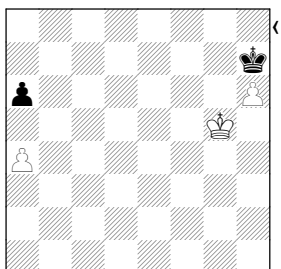


EXTRA SPACE

Extra space is a highly important advantage in all stages of the game. In pawn endings, you should strive to seize space with your king or pawns. After eventual exchanges, if you possess more space, your pawns will be promoted quicker, as it was already shown in the previous section, "Breakthrough".

The result depends on who it is to move. If White begins, he seizes space by 1. a5! , and wins: 1... Kg8 2. Kf6 Kh7 3. Ke6 Kxh6 4. Kd6 Kg6 5. Kc6 Kf7 6. Kb6 Ke7 7. Kxa6 Kd7 8. Kb7□

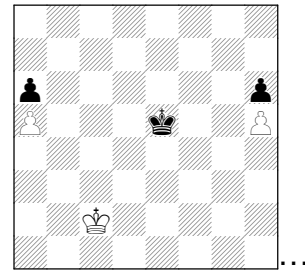
Example 9



But if it is Black to move, he prevents White from seizing space by 1... a5! , and

draws: 2. Kh5 Kh8 3. Kg6 Kg8 4. Kf5 Kh7 5. Ke5 Kxh6 6. Kd5 Kg6 7. Kc5 Kf6 8. Kb5 Ke6 9. Kxa5 Kd7! 10. Kb6 Kc8! - the king has arrived just in time. Draw.

Grigoriev Nikolay (RUS) 2



At first sight, White has to fight for a draw, because he loses one of his pawns. Nevertheless, by 1. Kc3! he takes the diagonal opposition and, thanks to his spatial advantage secured by the far advanced a- and h-pawns, it is White who wins. For example, 1... Kd5

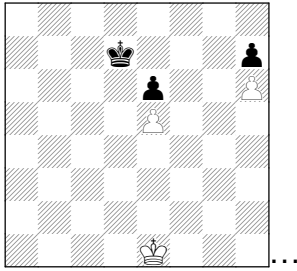
[or 1... Kf4 2. Kc4 Kg5 3. Kc5 Kxh5 4. Kb6 Kg4 5. Kxa6 h5 6. Kb6 h4 7. a6 h3 8. a7 h2 9. a8=Q□]

2. Kd3 Kc5

[2... Ke5 3. Kc4 Kd6 4. Kd4 Ke6 5. Kc5 Ke5 6. Kb6 Kd6 7. Kxa6 Kc6 8. Ka7 Kc7 9. a6 Kc8 10. Kb6□ , and the rest is clear.]

3. Ke4 Kb5 4. Kf5 Kxa5 5. Kg6 Kb4 6. Kxh6 a5 7. Kg6 a4 8. h6 a3 9. h7 a2 10. h8=Q□

Grigoriev Nikolay (RUS) 3



Here, thanks to his far advanced pawns on e5 and h6, White saves the game by subtle king maneuvering. 1. Kf2!!

[1. Ke2 Kc6! 2. Kf3 Kd5 3. Kf4 Kd4 4. Kg4 Ke4! 5. Kh4 Kf4! 6. Kh5 Kf5 7. Kh4 Kg6!° (7... Kxe5 8. Kg5=)]

1... Kc6

[If 1... Ke7, then the white king penetrates to the h7-pawn from the rear: 2. Ke3 Kf7 3. Kd4 Kg6 4. Kc5 Kg5! 5. Kd6 Kf5 6. Ke7! Kxe5 7. Kf7!=]

2. Kg3 Kd5 3. Kh4!

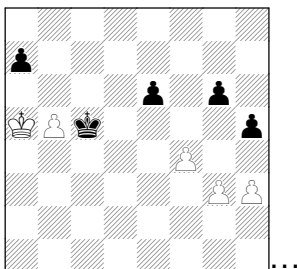
[3. Kg4 Ke4!°]

3... Kd4 4. Kh5!

[4. Kg5 Kxe5°]

4... Ke4 5. Kg4! Kxe5 6. Kg5 Kd6 7. Kf6=

Radu L. - Teodorescu M., Bucharest, 1939



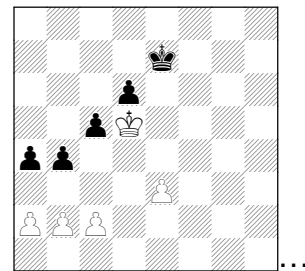
First White seizes space on the K-side, then exchanges Q-side pawns, and finally wins by a breakthrough. 1. g4! hxg4 2. f3

hxg4 Kc4 3. g5! Kc5 4. Ka6 Kc4 5. Kxa7! (now this decides) 5... Kxb5 6. Kb7 Kc5 7. Kc7 e5

[Or 7... Kd5 8. Kd7□]

8. f5! gxf5 9. g6 e4 10. g7 f4 11. g8=Q, and White wins easily.

Walker

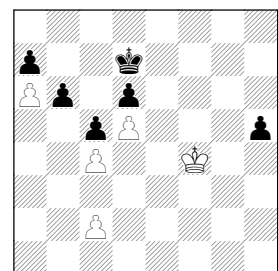


Although Black's pawns are advanced farther than White's, the activity of the white king decides the game. 1. c4! Nipping in the bud a possibility of Black's breakthrough.

[1. c3? a3!°]

1... bxc3 2. bxc3 a3 3. c4 Kd7 4. e4 Kc7 5. e5 dxe5 6. Kxe5 Kc6 7. Ke6 Kc7 8. Kd5 Kb6 9. Kd6 Kb7 10. Kxc5□

Kakabadze - Katskova, 1960



Black has an extra pawn, while White has

the more active king and the far advanced a6- and d5-pawns. The chances are equal, but Black persistently plays for a win, and this leads him to a defeat. The game continued 1... Kc7

[Correct was 1... Ke7 2. Kg5 h4 3. Kxh4 Kf6 , with a draw.]

2. Kg5 b5 3. Kxh5

[There was also another way to a draw: 3. cxb5 c4 4. Kxh5 Kb6 5. Kg5 Kxb5 6. Kf6 Kc5 7. Ke6 c3 8. Kd7! (this line perfectly illustrates the great importance of the advanced a6-pawn) 8... Kxd5 9. Kc7 Ke6 (after 9... Kd4? 10. Kb7 Ke3 11. Kxa7 the white pawn is promoted first) 10. Kb7 Kd7 11. Kxa7 Kc7 12. Ka8 d5 13. a7 d4 Stalemate.]

3... Kb6 4. Kg5 Kxa6 5. Kf6 bxc4

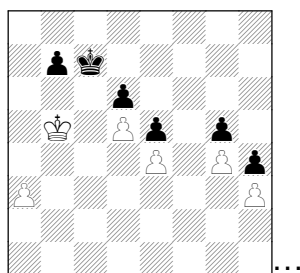
[5... Kb6 6. Ke6 a5 7. Kxd6 a4 8. Ke7□]

6. Ke6 Kb5? A decisive mistake.

[A draw could have been achieved by 6... Kb7! 7. Kxd6 a5 8. Kxc5 c3 9. Kb5 (or 9. Kd4 Kb6=) 9... Kc7 10. Kxa5 Kd6 11. Kb4 Kxd5 12. Kxc3 Kc5=]

7. Kxd6 a5 8. Kc7 Kb4 9. d6 , and White wins.

Alapin S. - Reti R., Vienna, 1908



In this example too, activity of the white

king quickly decides the game. 1. a4 Kc8

[Or 1... Kb8 2. Kb6 Kc8 3. a5 Kb8 4. a6 bxa6 5. Kxa6 Kc7 6. Ka7 Kc8 7. Kb6□]

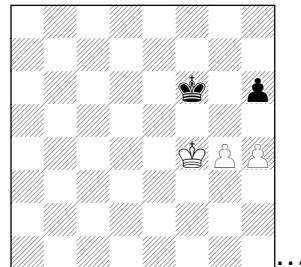
2. Kb6 Kb8 3. a5 Kc8 4. a6 Kb8 5. a7+

[Simpler is 5. Ka5! Ka7 6. axb7 Kxb7 7. Kb5□]

5... Ka8 6. Kc7 b5 7. Kxd6 b4 8. Kc6! b3 9. d6 b2 10. d7 b1=Q 11. d8=Q+ Kxa7 12. Qa5+ Kb8 13. Qb6+ Black resigned.

While playing a pawn ending, one should always consider the far advanced pawns, both one's own and opponent's, because sooner or later they may become a weighty, or even a decisive, argument.

Example 10



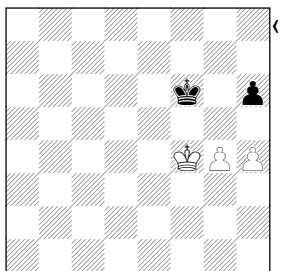
Several theoretical positions that one should know

Theoretical position. If it is White to move, then Black draws: 1. Ke4

[Or 1. h5 Ke6 2. Ke4 Kf6 3. Kf3 Kg5 4. Kg3 Kf6 5. Kf4 Ke6=]

1... Ke6 2. Kd4 Kd6 3. Kc4 Ke5=

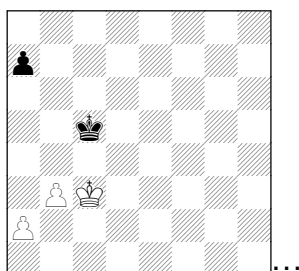
Example 11



If it is Black to move, then White wins.

1... Ke6 2. Ke4 Kf6 3. Kd5 Kf7 4. Ke5 Ke7 5. Kf5 Kf7 6. h5□

Myslivic - Dobosz H.,1977



In this position White is unable to win. Black's task is not to allow the opponent to move his king forward. The game continued: 1. b4+

[1. a3 a5 2. a4 Kd5 3. Kd3 Kc5=]

1... Kb5 2. Kb3

[2. a3 a5!=]

2... Kb6

[2... a5 3. a4+ Kb6 4. b5□]

3. Kc4 Kc6

[But not 3... a5 4. b5 a4 5. Kb4 a3 6. Ka4□, and Black loses.]

4. a4 Kd6

[Simpler is 4... a6! , transposing to the previous example.]

5. Kb5 Kc7 6. Kc5

[Or 6. Ka6 Kb8 7. b5 Ka8 8. a5 Kb8 9. b6 axb6 10. axb6 Ka8=]

6... Kd7 7. Kb5 Kc7 8. Ka5 Kc8!

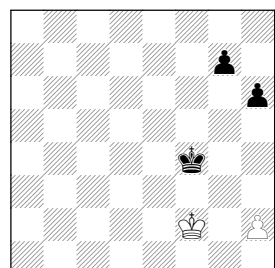
[8... Kb8 9. Ka6□;

8... Kb7! 9. b5 Kb8!=]

9. Ka6 Kb8 Draw. [...]

[10. a5 Ka8 11. b5 Kb8 12. b6 axb6 13. axb6 Ka8=]

Capablanca Jose Raul (CUB)



If the stronger side manages to place king in front of the pawns, then he wins. 1...

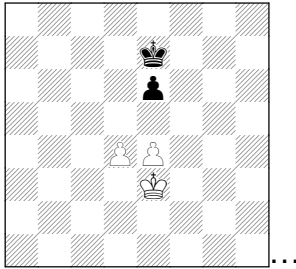
Kg4 2. Kg2 Kh4 3. Kf2

[Or 3. Kg1 Kh3 4. Kh1 h5 5. Kg1 h4 6. Kh1 , and now Black must calculate tempi - 6... g5!° (if the white king were at g1, then Black would play 6... g6!);

If 3. h3 , then 3... Kg5 , and Black wins, using his extra tempo by g7-g6, for example: 4. Kg3 Kf5 5. Kf3 g6! 6. Kg3 (6. h4 h5°) 6... g5! (6... h5 7. Kh4=) 7. Kf3 h5!°]

3... Kh3 4. Kg1 h5 5. Kh1 h4 6. Kg1 g6!°

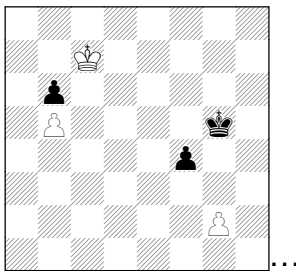
Example 12



Theoretical position

The winning plan is to support a more mobile pawn, in this case d4, with the king. 1. Kd3 Kd6 2. Kc4 Kc6 3. e5□ , and the rest is clear.

Dedrie



White's plan is to exchange his g2-pawn for the black f4-pawn, and then return with his king to the b6-pawn. 1. Kc6!

[Only a draw results from 1. Kxb6 Kg4 2. Kc5 Kg3 3. b6 Kxg2 4. b7 f3 5. b8=Q f2=]

1... Kg4

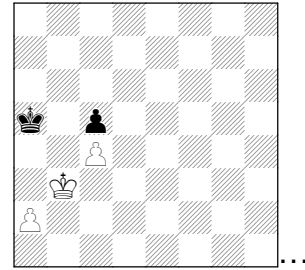
[On 1... Kg6 , White wins by 2. Kxb6]

2. Kd6!

[But not 2. Kd5? due to 2... Kh5! , and Black takes the distant opposition.]

2... Kg3 3. Ke5 Kg4 4. Kf6 Kh4 5. Kf5 Kg3 6. Kg5 Kxg2 7. Kxf4□

Walker 2



White is unable to break through with his king along the a-file, therefore, in order to win, he must transfer it to d5. 1. Ka3!

First White gains a tempo by triangulation. 1... Kb6 2. Kb2 Ka5 3. Kb3 Kb6 4. Kc3 Ka5 5. Kd2!

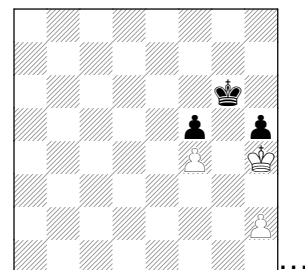
[5. Kd3 Kb4=]

5... Ka4

[5... Kb4 6. Kd3□]

6. Ke3! Kb4 7. Kd3 Ka3 8. Ke4 Ka4 9. Kd5 Kb4 10. a3+□ If, in the starting position, the white pawn were at a3, the win would have been impossible, because Black would be able to capture it in time.

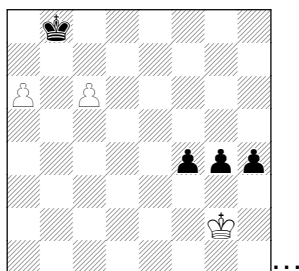
Example 13



The addition of a black pawn at h5 does

not help Black, but now a win is achieved in another way. 1. h3! If there were no the pawn on h5, it would have been a draw. 1... Kh6 2. Kg3 (beginning a by-pass) 2... Kg6 3. Kf3 Kf6 4. Ke3 Ke6 5. Kd4 Kd6 6. h4! (the decisive tempo) 6... Ke6 7. Kc5□

Example 14



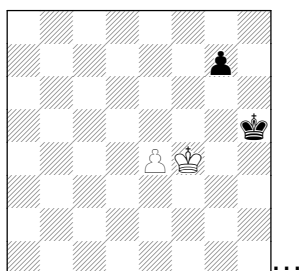
The only move to win is 1. Kg1! , and now, whichever black pawn is advanced, White must block it. 1... g3

[1... h3 2. Kh2□;

1... f3 2. Kf2□]

2. Kg2□ This example illustrates the power of separated pawns, even if the distance between them is only one file.

TRANSITION FROM PAWN ENDINGS TO OTHER ENDINGS



TRANSITION FROM PAWN ENDINGS TO OTHER ENDINGS

One should not forget that pawn endings can transpose into queen or queen vs. pawns endings. When queens appear on the board, the character of struggle changes sharply because of their great power. New scenarios become possible, such as a mating attack, an immediate win of the opponent's queen, or a queen exchange, transposing into a favorable pawn ending. It is important not to miss these possibilities, but on the contrary, to use them.

White wins by 1. Kf5!

[If 1. e5 , then 1... Kg6=]

1... Kh6

[After 1... g5 2. e5 the white pawn is promoted with check.]

2. e5 Kh7 3. Ke6!

[3. e6 Kg8=]

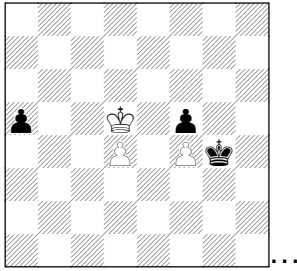
3... g5

[3... Kg8 4. Kd7□]

4. Kf7! g4 5. e6 g3 6. e7 g2 7. e8=Q g1=Q

The pawns promoted simultaneously, but it is White to move, and he is mating. 8. Qe4+ Kh6 9. Qh4#

Selezniev Alexei



1. Kc4!

[1. Kc5 a4=]

1... Kxf4

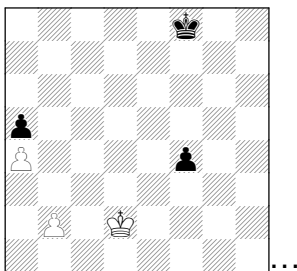
[1... a4 2. d5□]

2. d5 Ke5 3. Kc5! a4

[3... f4 4. d6 Ke6 5. Kc6 f3 6. d7 f2 7. d8=Q f1=Q 8. Qe8+ , and after 8... Kf5 9. Qf8+ Black loses his queen.]

4. d6 Ke6 5. Kc6 a3 6. d7 a2 7. d8=Q a1=Q Black succeeded in queening the pawn, but now his queen is lost. 8. Qe8+ Kf6 9. Qh8+ Kg5 10. Qxa1□

Grigoriev Nikolay (RUS) 4



1. b4!

[1. Kd3 Ke7=]

1... Ke7

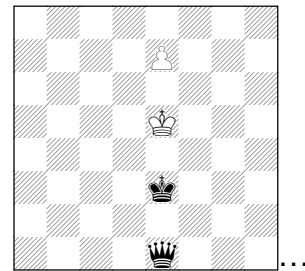
[1... axb4 2. a5□]

2. b5 Kd6 3. Ke2 Ke6 4. Kf3 Ke5 5. Kg4 Ke4 6. b6 f3 7. Kg3! (luring the black king to an unfavorable position) 7... Ke3 8. b7

f2 9. b8=Q f1=Q 10. Qe5+ First White wins a pawn, then he exchanges queens.

10... Kd2 11. Qxa5+ Kd1 The king's retreat to the c-file shortens the solution by one move. 12. Qd5+ Kc1 13. Qc5+ Kd1 14. Qd4+□ , exchanging queens on the next move.

Troitsky A 3



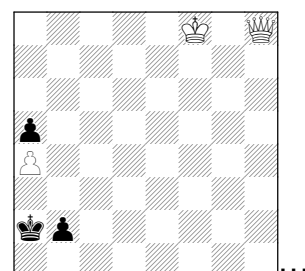
If an ending arises, in which a queen fights against one or several pawns, then the stronger side usually wins. Nevertheless, the exceptions occur.

(Conclusion of a study) After 1. Ke6! White draws, because the black queen is unable to approach the e7-pawn with checks. 1... Kf4+

[Or 1... Kd4+ 2. Kd7=]

2. Kf7!=

Example 15

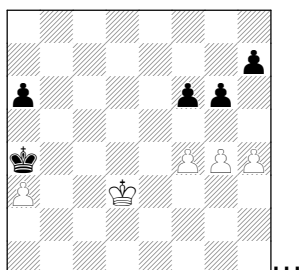


Theoretical position

White is unable to win, because the pawns at a4 and a5 do not allow him to drive the black king to b1. For example:

1. Qh2 Ka1 2. Qe5 Ka2 3. Qd5+ Ka1 4. Qd4 Ka2 5. Qc4+ Ka1 6. Qc3 Ka2 7. Qc2 Ka1 8. Ke7 (the only opportunity) 8... b1=Q 9. Qxb1+ Kxb1 10. Kd6 Kc2 11. Kc5 Kd3! (taking the knight's opposition) 12. Kb5 Kd4! 13. Kxa5 Kc5 Draw.

Van Desburg - Maroczy G., Zandvort, 1936



Transposing into an ending with two pawns against a queen, White draws.

1. Ke4 Kxa3 2. f5 gxf5+ (the threat was 3. fxe6 hxe6 4. h5) 3. Kxf5 a5 4. Kxf6 a4 5. Kg7!

[White loses after 5. g5 Kb4 6. h5 a3, because the black pawn promotes with check.]

5... Kb4 6. Kxh7 a3 7. g5 a2 8. g6 a1=Q 9. g7 Qa7 10. Kh8 Qd4 11. h5 Qf6 12. Kh7 Qf5+ 13. Kh6 Qf6+

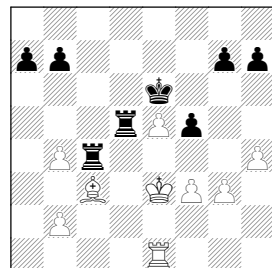
[Now on 13... Qf7 there follows 14. g8=Q Qxg8 - stalemate.]

14. Kh7 Qf7 15. h6

[Also possible is 15. Kh6 (threatening 16. g8£) 15... Qg8 16. Kg6 Qe8+ 17. Kh6=]

15... Kc5 16. Kh8 Draw.

TRANSITION TO A PAWN ENDING



TRANSITION TO A PAWN ENDING

The transition to a pawn ending is an important and difficult problem. Most often, one transposes into a pawn ending in order to utilize a material or positional advantage. Even strong players, however, sometimes err while evaluating the pawn endings that arise and lose precious points.

Two things are needed for correct transition to a pawn ending:

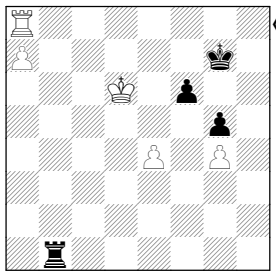
1. Exact knowledge of typical positions and strategic ideas of pawn endings.

2. Precise calculation. A pawn ending is either won, or lost, and so one must not rely only on general considerations.

Let us examine some examples of the transition to a pawn ending, and you will be convinced that this problem is not easy.

Black is an exchange up, but a win is not simple. Fischer transposes into a pawn ending, in which his major trump is an outside passed pawn. 1... Rxc3+ 2. bxc3 Rxe5+ 3. Kd2 Rxe1 4. Kxe1 Kd5 5. Kd2 Kc4 6. h5 b6 7. Kc2 g5! Before the outside passed pawn is created, Black stabilizes the position on the K-side. 8. h6 f4 9. g4 a5 10. bxa5 bxa5 11. Kb2 a4 12. Ka3 Kxc3 13. Kxa4 Kd4 14. Kb4 Ke3 White resigned.

Benko P. - Gereben E., Hungary, 1951



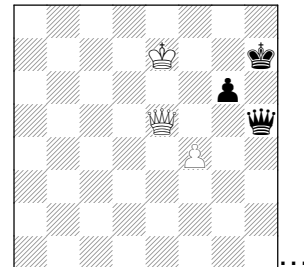
A pawn ending is unavoidable. The game continued: 1... Ra1, and Black lost.

[An intermediate check, however, could have saved Black: 1... Rd1+! 2. Ke6, and only now 2... Ra1 3. Rd8 (here, unlike in the game, 3. Rc8 does not work due to 3... Ra6+!=) 3... Ra6+ 4. Rd6 Rxa7 5. Rd7+ Rxd7 6. Kxd7 Kh7! (taking the distant opposition) 7. Kd8 Kh8!=, and Black draws.]

2. Rc8 Ra6+ 3. Rc6 Rxa7 4. Rc7+ Rxc7 5. Kxc7 (the distant opposition) 5... Kg6 6.

Kd8! Kh7 7. Kd7! Kg6 8. Ke8, and the rest is clear.

Panchenko A. - Grigore G., Bucharest, 1994



The game continued: 1. Kf6!

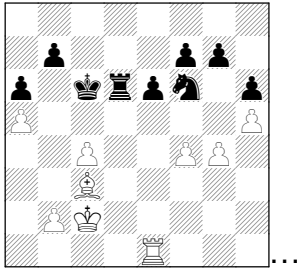
[The pawn ending after 1. Qxh5+ gxh5 2. f5 h4 3. f6 h3 4. f7 h2 5. f8=Q h1=Q transposes into a drawn queen ending; on 1. Kf8 Black draws by 1... Qf5+ 2. Qxf5 gxf5 3. Kf7 Kh8 4. Kf6 Kg8=]

1... Qd1

[The only move. Mate in a few moves was threatened, while the pawn ending after 1... Qxe5+ 2. fxe5 Kg8 is hopeless for Black in view of 3. Ke7 (or 3. Kxg6, taking the opposition) 3... g5 4. e6 g4 5. Kd8 g3 6. e7 g2 7. e8=Q+]

2. Qe7+ Kh6 3. Qg7+ Kh5 4. Qxg6+ Kh4 5. f5 Qd6+ 6. Kg7 Qd7+ 7. Qf7 Qd3 8. f6 White has achieved a theoretically won position, which he won soon.

Kasparov G. - Vukic, Banja Luka, 1979



1. Bxf6

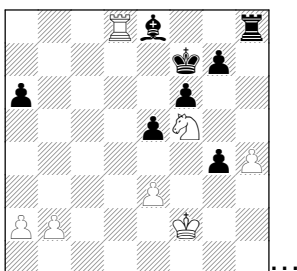
[After 1. Rg1 White is better, but the outcome of the game is unclear. Transition to a pawn ending wins immediately.]

1... gxf6 2. Rd1 Black resigned. Play could have concluded as follows: 2... Rxd1 3. Kxd1 Kc5

[if 3... Kd6 , then 4. b4 , and White creates passed pawns on both wings]

Here White wins by 4. g5 (as far as we know, doubled pawns constitute to a breakthrough) 4... fxg5 5. fxg5 hxg5 6. h6□

Razuvaev Y. - Beliavsky A.,Tashkent,1980



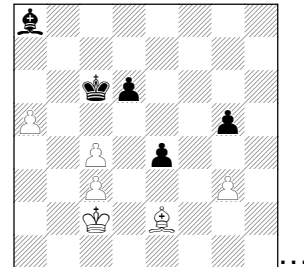
In this position White let a win slip out of his hands by 1. Kg3?

[Instead of this, he could have transposed into a won pawn ending by 1. Nd6+ Ke7 2. Rxe8+ Rxe8 3. Nxe8

Kxe8 4. e4! g6 (otherwise White's pawn majority on the Q-side decides the game) 5. Kg3 f5 6. exf5 gxf5 7. b4! , and White wins easily, creating passed pawns on both wings.]

1... Rh7! 2. Nd6+ Ke7 3. Rxe8+ Kxd6 4. Kxg4 Kd5 5. Ra8 Rh6 6. Ra7 Rg6+ 7. Kf3 Black's counterplay is sufficient; the players agreed a draw..

Karpov A. - Katalymov B.,Daugavpils,1972

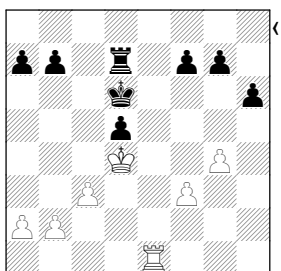


In the game White played 1. Kd2 , and gradually won the bishop ending.

[Instead of this, he could have transposed into a pawn ending by 1. Bg4 Kb7 2. Be6 Ka6 3. Bd5 Bxd5 4. cxd5 Kxa5 , but Karpov rejected this tempting line, because he found a beautiful draw: 5. Kd2 Kb5 6. Ke3 Kc4 7. Kxe4 g4! (the only move) 8. Kf5 Kxd5 9. Kxg4 Kc4 10. Kf5 Kxc3 11. Ke6 Kc4!! (this study-like move leads to the draw) 12. Kxd6 Kd4=]

This example perfectly illustrates the necessity to calculate precisely.

Martynov - Ulibin M.,1986

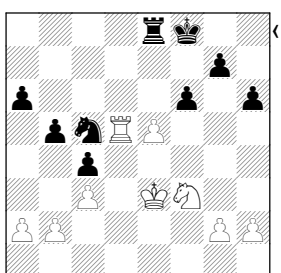


1... Re7! Black gives up his extra pawn and transposes into a pawn ending in which he hopes to use his outside passed h-pawn. 2. Rxe7 White cannot avoid the exchange; otherwise Black invades by 2... !e2°. 2... Kxe7 3. Kxd5 g6! 4. c4

[On 4. Ke5 there follows 4... b5 , seizing space on the Q-side.]

4... h5 5. gxh5 gxh5 6. Ke5 h4 7. Kf4 f5! 8. b4 Kd6 9. Ke3 a5! 10. a3 axb4 11. axb4 h3! (precisely calculated) 12. Kf2 Ke5 13. Kg3 Kd4 14. Kxh3 Kxc4 15. Kg3 Kxb4 16. Kf4 Kc4 17. Kxf5 b5 18. f4 b4 19. Ke6 b3 White resigned.

Rusina E. - Timurova L.,Kostroma,1996



Black could have transposed into a won pawn ending by 1... Nd3!

[In the game she played 1... Na4 2. Rd2 fxe5 , and won only after a long

struggle.]

2. b3 Nxe5 3. Nxe5 cxb3! 4. axb3 Rxe5+ 5. Rxe5 fxe5 6. Ke4

[Or 6. b4 Kf7°]

6... a5 7. Kxe5 a4 8. bxa4 bxa4 9. Kd4 a3 , and Black wins, because the white c3-pawn does not allow its own king to step into the "square" of the a3-pawn.