

Thinkers' Chess Academy
WITH GRANDMASTER

THOMAS LUTHER

First Steps in Tactics

by
Thomas Luther



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KEY TO SYMBOLS

!	a good move
?	a weak move
!!	an excellent move
??	a blunder
!?	an interesting move
?!	a dubious move
□	only move
=	equality
∞	unclear position
≈	with compensation for the sacrificed material
±	White stands slightly better
∓	Black stands slightly better
±	White has a serious advantage
∓	Black has a serious advantage
+ -	White has a decisive advantage
- +	Black has a decisive advantage
→	with an attack
↑	with initiative
↔	with counterplay
Δ	with the idea of
⊃	better is
≤	worse is
N	novelty
+	check
#	mate

REQUIREMENTS FOR WORKING WITH THIS BOOK

You should know the basics well and no longer make illegal moves frequently.

You should know the elementary endgames of king and queen/rook vs. king.

You should have a standard size chess set (king's height about 90+ mm and the squares about 5×5 cm). If your set is a bit smaller it is sufficient for the beginning. But it is good to adjust as early as possible to the common tournament size.

I would not advise funny or artful chess men in a Mickey Mouse style, Romans and barbarians or fantasy characters etc. A chess set is inexpensive and can be used for a lifetime. You should not avoid this little investment. It will help you to become a better chess player.

DEAR READER!

This book is written for chess friends who are beginners or hobby players without much experience and who want to improve to lower club level. If you are already somewhat stronger you may not like the idea of learning from scratch. But sometimes going a step back in order to take two steps forwards is a good idea.

To play chess well one has a lot to learn: opening, middle game, endgame, tactics and strategy etc. Where to begin? In my opinion tactics are the most important area. I always advise players with a rating under 1700 to study tactics, learn some basic endings and start analyzing their own games. That is a good way to reach a higher level.

Tactics are the main topic of this book. Tactics are not only the most exciting and enjoyable part of chess but also the fastest way to improve. On the following pages you will find an introduction to the most frequent tactical motifs and a lot of exercises for each of them. My guess is that in practice you will need about 50 examples or exercises for every motif to make you familiar with it. If you know the motifs you can not only win more often but, even more importantly, recognize the possible threats of your opponent earlier and defend yourself better.

Tactics are helpful for players of all categories. I myself and many of my grandmaster colleagues regularly solve combinations and studies, especially as preparation for a tournament to give the brain a kick.

Have a lot of fun while studying chess and enjoy your improvement!

Yours,
Thomas Luther
Grandmaster and FIDE senior trainer

HOW TO USE THIS BOOK

Making the best use of this book for you depends basically on your intentions, aims and how much time and work you can and will put in.

Ambitious readers ought to work hard and regularly over a longer time. Choose a day (or days) and a time in the week that you can spare for your training session. Start with one to two hours, later three hours. Study and work without any longer breaks. This will increase your concentration and stamina for real tournament games. Solve a large number of exercises, ideally under a time limit. If you do this for some months your brain will adapt to the practice of chess and you'll be able to calculate quickly and precisely. Your understanding of chess will also improve, and you will be able to make better judgements and more logical decisions.

Less ambitious readers can work at a more leisurely pace. By working occasionally — reading a chapter from time to time or solving some exercises — you'll learn a lot too, but obviously less consistently as by constantly working. Maybe you will have some gaps in your knowledge.

Less or non-competitive readers, who are not particularly interested in tournament chess, can improve their knowledge about chess. You can learn to better understand what is happening on the board if you are a spectator or if you follow big chess events on the internet. In order to achieve this goal you don't need to simulate a tournament situation in your training session; e.g. putting yourself under time pressure. There's no need to improve your stamina, therefore it doesn't matter how many exercises you solve in a row or how many hours you work on your chess.

As you can see there are different ways of working and it's up to you to make your choice. Are you keen to improve for competitive chess, do you just want to play a little better, or do you only want a better understanding of chess? All these possibilities are sound and rewarding. But you should be

goal-orientated and firmly decide what you are aiming for. Be honest with yourself and don't nurture any illusions. If you want to improve, go to work.

Do not expect anything unrealistic. Do not look for shortcuts if you really want to become stronger. For every achievement in life you need time and effort. If you want to improve from beginner to club level, you ought to follow the advice in the book.

SOME PRACTICAL ADVICE

If you want to improve as fast as possible, here is some practical advice for you.

Set a regular time: If you want to increase your strength you need to work regularly, as with any kind of sport. To ensure this it's a good idea to set aside a regular day and time you can keep open for your chess exercises. Let's say on a Saturday or Sunday afternoon. Give yourself at least one or two, later three hours. Don't take a break (except for some quick refreshment) and try to work without any interruptions or disturbances.

Keep a diary: Most of the time our memory is not very accurate. "I did a lot of training in the last few weeks," you may think. But is that really true or an overly optimistic view? Write down the days and hours of your training sessions in a kind of diary, add up the time spent and have a critical look what you really have achieved — or not!

Set yourself a goal for every month and for the whole year and try to stick to your plan. As soon as you start habitually skipping your planned sessions the temptation to do not much at all will only increase.

To understand a **complicated position** (especially later in the book with the longer combinations), set it up on a board and study it in more depth. It needs a little bit more time but it's worth it. The best understanding of a position comes from seeing it on a real board. No diagram on paper or a computer can give you the same impression.

Improve your stamina by simulating a tournament situation. If you are used to working intensely on exercises for many hours then a four-hour game (or two on a tournament day!) will be no problem for you. Good training should be longer and harder than a game. In addition, it will strengthen your self-discipline, a real asset in tournament chess — and in life too!

Studying chess together with a friend makes it more interesting and fun. You can discuss, analyze and compete in a friendly way, which will benefit you both.

And now let's start on our path to chess improvement!

CHAPTER 1. NOTATION

Please, please, please, don't skip this chapter — study it!!!

You may not like to have such a boring topic as the first task, but it's absolutely necessary. In the world of chess, notation and the knowledge of some terms have the same function as reading or writing in daily life.

You can:

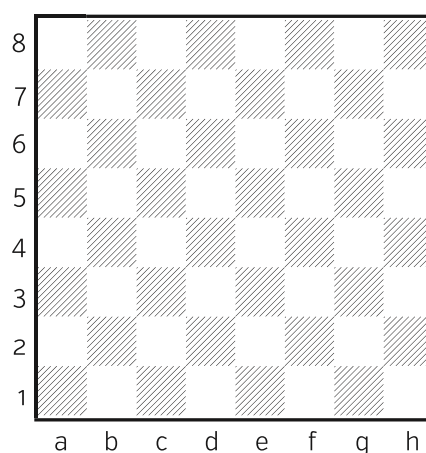
- ▶ Understand comments about positions or games and the advice of other players or a coach much better
- ▶ Ask questions much more easily
- ▶ Blend into the chess scene and not immediately be branded at first glance as a kind of “chess moron” or “patzer”. Who would like to be seen like that?
- ▶ Look at your games afterwards to find mistakes and missed possibilities, and learn a lot from them
- ▶ Not play in a competition without notating your game. If you ever want to participate in a tournament you will have to learn the notation anyway
- ▶ Think better — in a more structured manner and more efficiently. Putting something in writing makes it easier to under-

stand, to work with, and to come to decisions.

Please, even if you are not excited by learning the notation, make a little sacrifice and don't skip this chapter!

LET'S LEARN HOW TO USE THE NOTATION

If you know the game “Battleship”, or if you can read a map it's not a big deal to learn the chess notation. The intersection point of a number and a letter distinguish a certain square. Can you find the squares of the move e2–e4 on the following diagram?



To make it easier here is a diagram where all the squares are named.

But you must learn to identify and name every square on the board. And you should know your squares even if there are no markings on the edge of the board. All good players can do it!

8	a8	b8	c8	d8	e8	f8	g8	h8
7	a7	b7	c7	d7	e7	f7	g7	h7
6	a6	b6	c6	d6	e6	f6	g6	h6
5	a5	b5	c5	d5	e5	f5	g5	h5
4	a4	b4	c4	d4	e4	f4	g4	h4
3	a3	b3	c3	d3	e3	f3	g3	h3
2	a2	b2	c2	d2	e2	f2	g2	h2
1	a1	b1	c1	d1	e1	f1	g1	h1
	a	b	c	d	e	f	g	h

A horizontal row of squares (e.g. a1 to h1) is called a **“rank”**. In the diagram below it's the 4th rank.

A vertical row of squares (e.g. a1 to a8) is called a **“file”**. In the diagram below it's the d-file.

A diagonal row of squares (e.g. a1 to h8) is called a **“diagonal”**.

8								
7								
6								
5								
4								
3								
2								
1								
	a	b	c	d	e	f	g	h

At the beginning of the game the white pieces stand on the 1st rank, with the white pawns on the 2nd rank. If you want to notate a game, make sure the board is in the right position. If the board has no markings, you can use two simple rules to make sure it is set up correctly:

White queen on white square
and black queen on black square.







and

The square at White's right corner should be a white one.

If both of these rules apply, then you have the correct starting position.

By naming the starting square and the square to which you want to move we can already describe every chess move. But to make it easier we add the names of the pieces and set them ahead of the move. The names of the pieces are shortened or shown by a symbol, called a “figurine”.

On the next page you will see a list of the names and abbreviations:

Name of the piece	Abb.	Figurine
King	K	
Queen	Q	
Rook	R	
Bishop	B	
Knight	N	
Pawn	---	[]

Pawn moves are simply written as e.g. e2–e4. The poor pawn is not mentioned by name or figurine.

In a game the moves are numbered, starting with move one.

Our move of the king's pawn would be written: **1.e2–e4**.

If you chose a move with the knight on the side instead it would be: **1.♘g1–f3**.

If a piece is captured, we mark this with a “x”. As an example after 1.e2–e4 e7–e5 2.♘g1–f3 ♘g8–f6 3.♘f3×e5

In older books or magazines you may find a “:” instead of the “x” (e.g. ♘f3:e5). It has the same meaning but nowadays FIDE has standardized the notation.

Castling is indicated by a special sign. o–o means castling to the short side / kingside. o–o–o means castling to the long side / queenside.

If a pawn reaches the last rank he gets **promoted**, in most cases to a queen. To notate this, we simply put the abbreviation for the chosen piece behind the pawn's move, e.g. **e7–e8♑**.

Or, if a player chose another piece (that's called “**underpromotion**”, which is sometimes necessary to avoid a stalemate), let's say a knight, we write **e7–e8♘**.

Check is shown as +, and normally double check is shown in the same way, but sometimes by ++.

The symbol for checkmate is #.

In tournaments the game is usually notated on a special score sheet. In training you can simply use any writing pad. In your initial games you may make some mistakes by forgetting a move or naming the wrong square. Don't worry, it's quite normal because you are mainly concentrated on the game and therefore distracted.

ANNOTATIONS

The following symbols are used by annotators to classify the quality of moves:

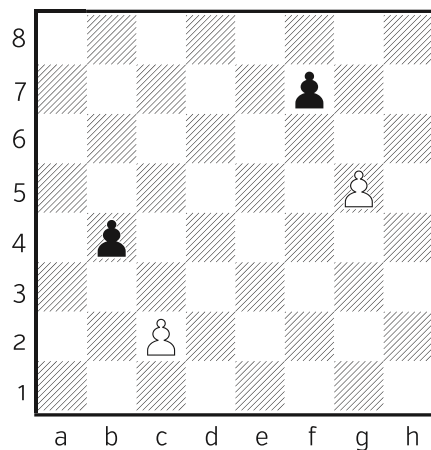
- ? A weak move, unfortunately the bread and butter move of the inexperienced player, ☹️.
- ?? A very bad move, e.g. a mistake leading to checkmate or blundering a heavy piece, 💣.
- ! A strong move — just what we're aiming for, 😊!
- !! An extraordinary move. Unfortunately very, very rare. But for the moment good moves will do.
- !?! An interesting move that is worth a try, but that comes with some risk and is not that clear.
- ?! Also an interesting move, but with some doubt attached. If one does not like risk, then it may be better to abstain.
- = A balanced, equal or drawish position.

There are lots more symbols for annotation, but we do not need to know them now. Our goal in our

games should be to get rid of the first two symbols on the list — and hopefully from time to time be entitled to use symbol no. 3!

En passant (French for passing) is a special case. Do you know how to do it? Just to make sure I will repeat the rule.

If you have a pawn on the 5th rank (for Black on the 4th rank) and your opponent moves one of his pawns from the starting position alongside your pawn on a neighboring file, you can capture his pawn as if he had only moved one square. Look at the following diagram:



If on the left-side White moves c2–c4, Black can capture the pawn en passant. The move is set on the board and written as if the pawn had only moved to c3, followed by the abbreviation e.p.:

b4×c3 e.p.

If on the right-side Black plays f7–f5 you can take the pawn e.p.:

g5×f6 e.p.

You can only take en passant on your following move, not later! It's now or never!

In most chess books and magazines, you will find abbreviated notation. The square from which the piece starts his move is not given, only the final square. The first move of the king's pawn in our example is only e4 instead of e2–e4.

Later you'll probably use this style of notation too. But I recommend using the full notation for the first one or two years. It's easier to reconstruct your game in case of an error.

SOME MORE CHESS TERMS

In comments about chess games you will find some words you may not understand. Here are the most frequent:

Position. The arrangement of pawns and pieces on the board is called a "position". For example, an "attacking position" means that the

pawns and pieces on the board are arrayed in an aggressive way, ready to strike. Unfortunately, the situation in beginners' games is very often described as a "poor position," and our goal ought to be to reach at least an "equal position".

Material. Pawns and pieces are called material. If you have more material than your opponent, then you have "material superiority" or a "material advantage". But always keep in mind, it's good to have more material, but material is not everything. The position on the board is at least equally important!

Major and minor pieces. Queen and rooks, the heavy guns, are called "major pieces". Bishop and knights are called "minor pieces".

Winning the exchange. If you can take a rook for the price of a minor piece, it's called "winning the exchange". How much of an advantage this is depends on the position. In the early stage of the game a minor piece may be more valuable than a rook which cannot move and is no more than an idle spectator. If the exchange is accompanied by the win of some pawns it may be even e.g. giving a rook for a minor piece and two pawns counts in many cases as about equal material.

Sacrifice. To give material to achieve a goal (ideally checkmate!) is called a “sacrifice”.

Combination. A move or a sequence of moves including a sacrifice to reach a certain goal, such as capturing a piece, gaining a positional advantage or checkmate, is called a “combination”.

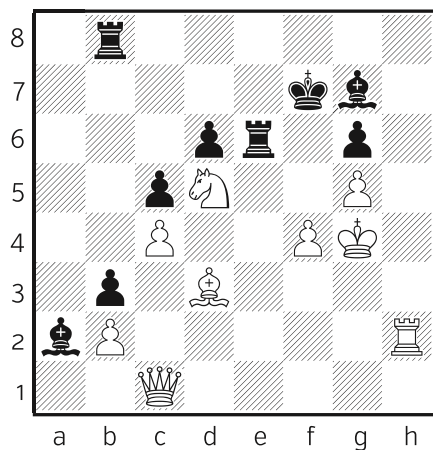
Maneuver. A more or less forced sequence of moves to reach an advantageous position is called a “maneuver”.

There are more terms, but we’ll see them later in the book.

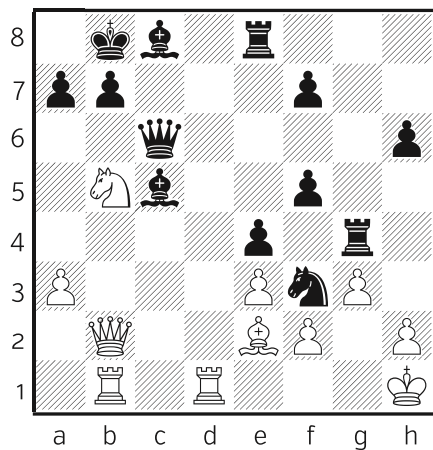
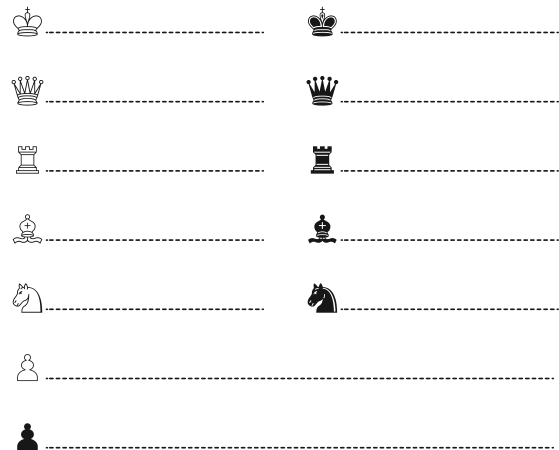
NAME THE SQUARE

Let's have a look to see if you have really understood the notation. In the following 4 positions you should name the square for all the pieces. We will start off easy with the captions around the diagram, but you will have to do no. 3 and 4 without any help. At the beginning you may count the ranks and files, “*a, b, c, d*”, and “*1, 2, 3*” (the square is *d3*), but soon you'll get used to the names of the squares without thinking.

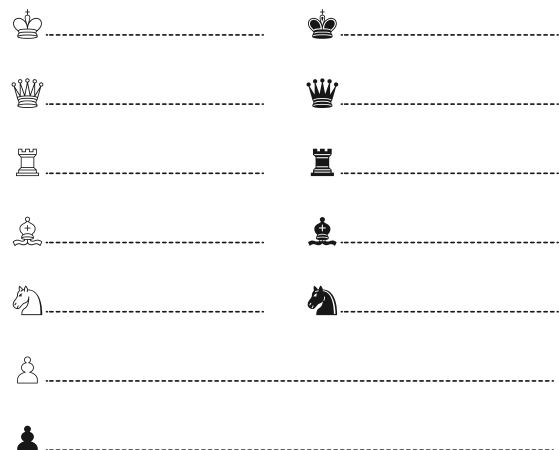
If one side has two or more equal pieces, write it down e.g.: ♘*b2, g2* or for pawns, *a2, b2, c3, d4, g2, h3*

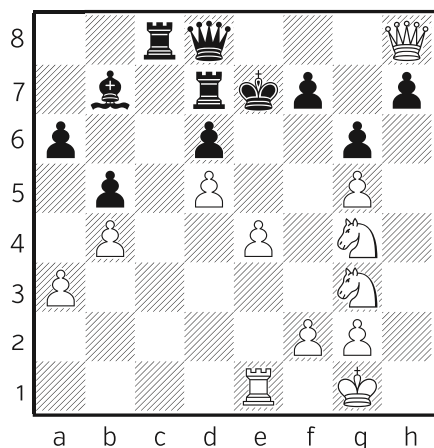


1

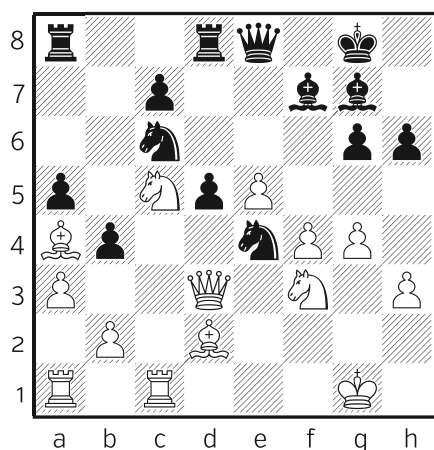
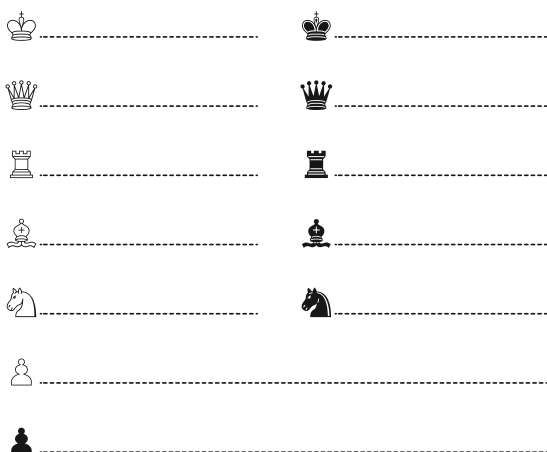


2

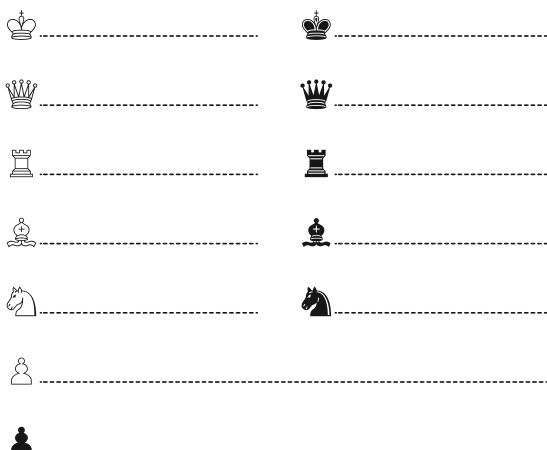




3



4



To notate a position without the captions on the board is much harder when you are starting out. But it is a good exercise and sometimes you will have to play on a board with no markings. If you want to notate your game always look before the start to see if the board is in the right position, otherwise you may get confused by the wrong captions.

If you have an interesting position in a game, you can record it and later have a look at it. That's a very good way to improve! To learn from our own mistakes or to find out what one could have done better is the best training you can get!

NOTATION SOLUTIONS

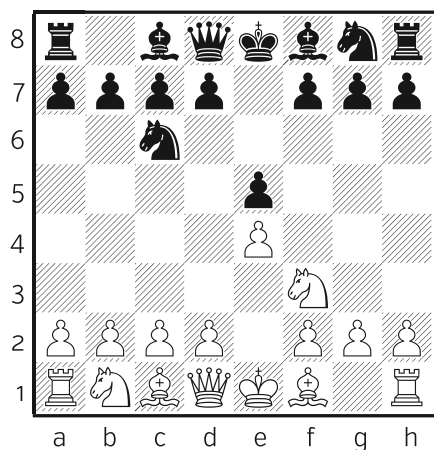
1	○	♔g4; ♚c1; ♖h2; ♙d3; ♘d5; ♜b2, c4, f4, g5
	●	♔f7; ♚b8 / e6; ♙a2 / g7; ♜b3, c5, d6, g6
2	○	♔h1; ♚b2; ♖b1 / d1; ♙e2; ♘b5; ♜a3, e3, f2, g3, h2
	●	♔b8; ♚c6; ♖g4 / e8; ♙c8 / c5; ♜a7, b7, e4, f5, f7, h6
3	○	♔g1; ♚h8; ♖e1; ♙b3; ♘g3 / g4; ♜a3, b4, d5, e4, f2, g2, g5
	●	♔e7; ♚d8; ♖c8 / d7; ♙b7; ♜a6, b5, d6, f7, g6, h7
4	○	♔g1; ♚d3; ♖a1 / c1; ♙a4 / d2; ♘c5 / f3; ♜a3, b2, d5, f4, g4, h3
	●	♔g8; ♚e8; ♖a8 / d8; ♙f7 / g7; ♘c6 / e4; ♜a5, b4, c7, d5, g6, h6

Don't worry if you have made some mistakes. Even experienced tournament players sometimes make mistakes, especially if there are no captions on the board. Practice the notation and it will soon be easy for you to record a position or a game.

We simulate the notation of a game in the following exercise. Let's say you are a spectator at a tournament and a friend asked you to notate his game. Surely you'll do him the little favor?

NOTATE THE GAME

The first diagram shows the two moves at the start.
All following diagrams show only one move for both players.

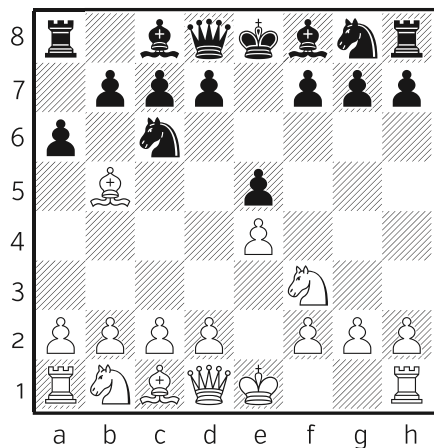


Move 1 and 2

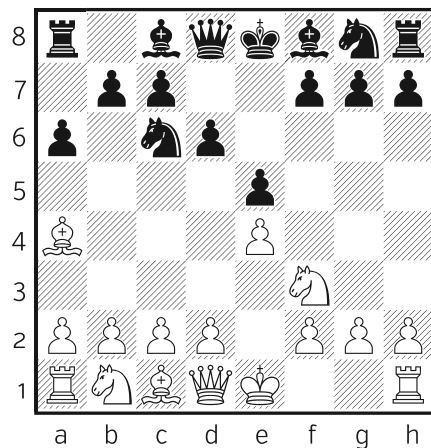
The game was played between the master Steiner and former world champion Capablanca.

1. /

2. /



Move 3



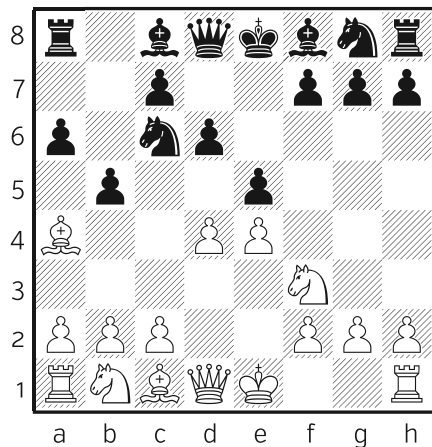
Move 4

3. /

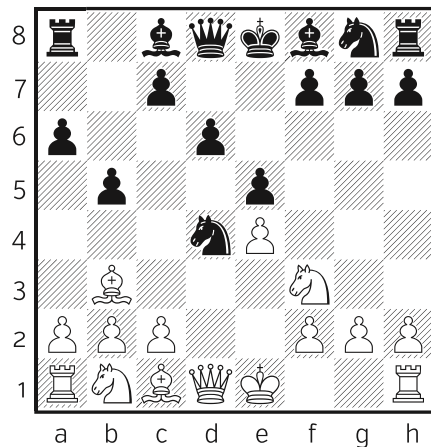
4. /

The Ruy Lopez opening.

White can exchange but the doubled pawn is no problem for Black.



Move 5



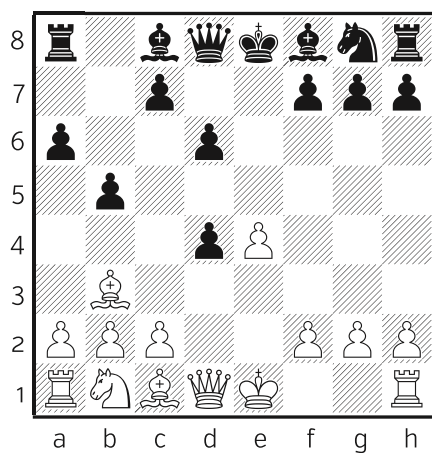
Move 6

5. /

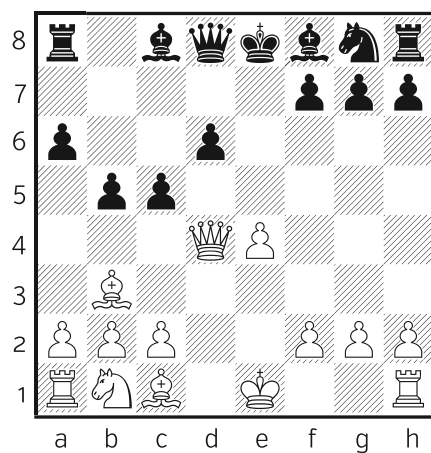
6. /

Another possibility is to exchange pawns on d4 and move the bishop to d7.

In this case the exchange is better than to develop. Try it out later!



Move 7



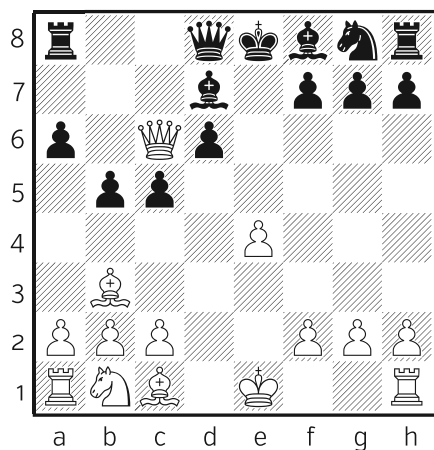
Move 8

7. /

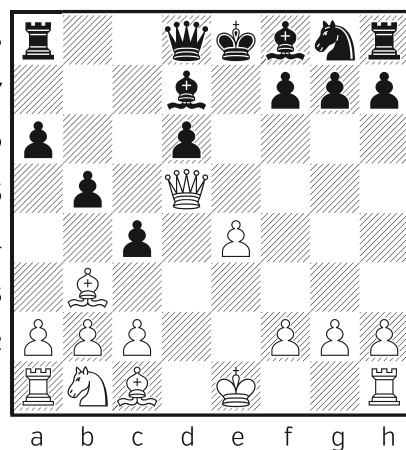
8. /

The position looks quite normal but a trap is lurking. To move the bishop to d5 is the best continuation.

Now you see why the queen move was not good!



Move 9



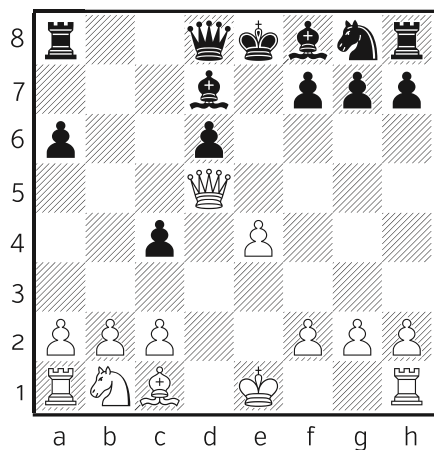
Move 10

9. /

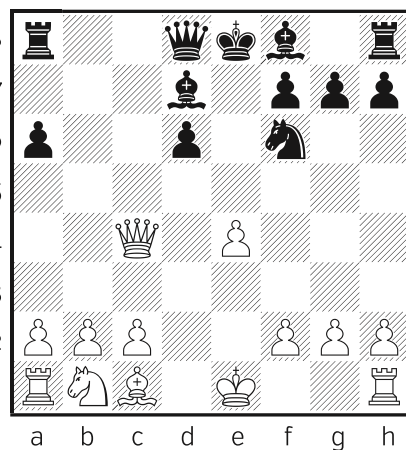
10. /

After any other queen move the bishop is lost too.

Bad luck! The bishop is trapped and lost in return for only two pawns.



Move 11



Move 12

11. /

12. /

Black has the better position but there's still a long way to go before the win is secure.

▷ **Steiner**

▶ **Capablanca**

Budapest 1929

1. e2-e4 e7-e5

2. ♖g1-f3 ♘b8-c6

3. ♙f1-b5 a7-a6

4. ♘b5-a4 d7-d6

5. d2-d4 b7-b5

Another continuation is 5...e5×d4

6. ♘f3×d4 ♙c8-d7.

6. ♙a4-b3 ♘c6×d4

7. ♘f3×d4 e5×d4

8. ♚d1×d4?

8. ♙b3-d5 ♖a8-b8 9. ♚d1×d4 is the right plan.

8...c7-c5

9. ♚d4-d5 ♙c8-e6

10. ♚d5-c6+ ♙e6-d7

11. ♚c6-d5 c5-c4

12. ♙b3×c4 b5×c4

13. ♚d5×c4 ♘g8-f6

The trap is even older than the game and was already mentioned in 1878.

If you like play through the game on a real chessboard and think about other possibilities or ideas.

For example, why was it better on move 6 for Black to offer an exchange as opposed to choosing a developing move?

CHAPTER 2. EXERCISES & MAZES

Most chess players learn the rules of the game and some basics and immediately start playing. That's quite natural as playing (and hopefully winning, ☺) is the greatest joy. But are they really well prepared for the next steps?

The great master Dr. Tarrasch was very skeptical about this. Is a quick introduction enough to make you really familiar with the properties, limitations and specialties of the pieces? On a full board the pieces are always hampered by your own or your opponent's pieces.

A good way to deepen your knowledge is starting to play little games or solve special tasks with only a few pieces*. This will give you a better impression of how they work. It's especially important for the minor pieces, most of all for the knight, which is the most feared by beginners.

In some cases, you can make your task easier by calculating back-

wards. If, for example, you have to give check to the king you can look to see from which squares this is possible, how to reach those squares etc. and find at least part of the solution from the "reverse" direction.

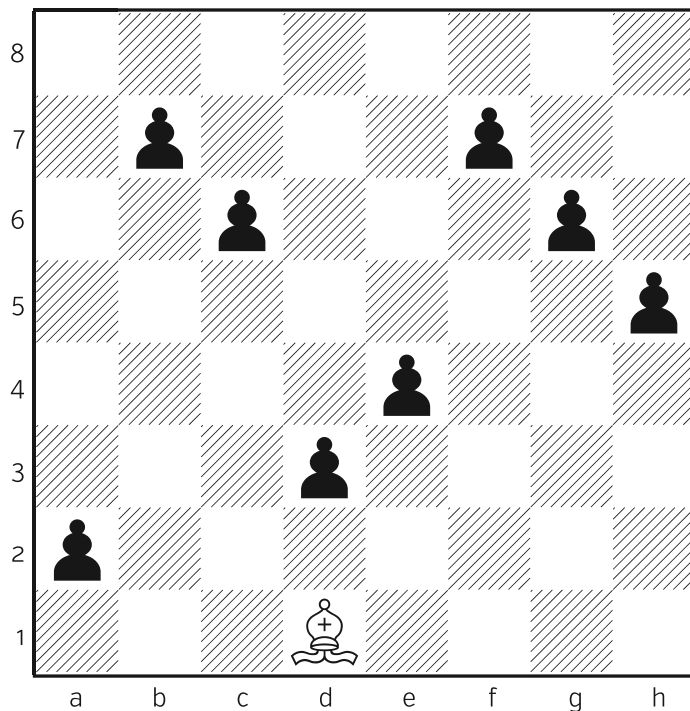
* * *

* In the Russian chess school little games with reduced material have been used for a long time for beginners. In the Western world this is quite a rare occurrence.

In 1967, John Love showed such exercises and little games in his book *Chess. A New Introduction*.

Bruce Alberston showed some amazing chess mazes in his books, *Chess Mazes* and *Chess Mazes 2* (published Milford 2004 and 2008 respectively). But most of these are more suitable for advanced beginners as the mazes mostly involve most than one type of piece.

1st Exercise



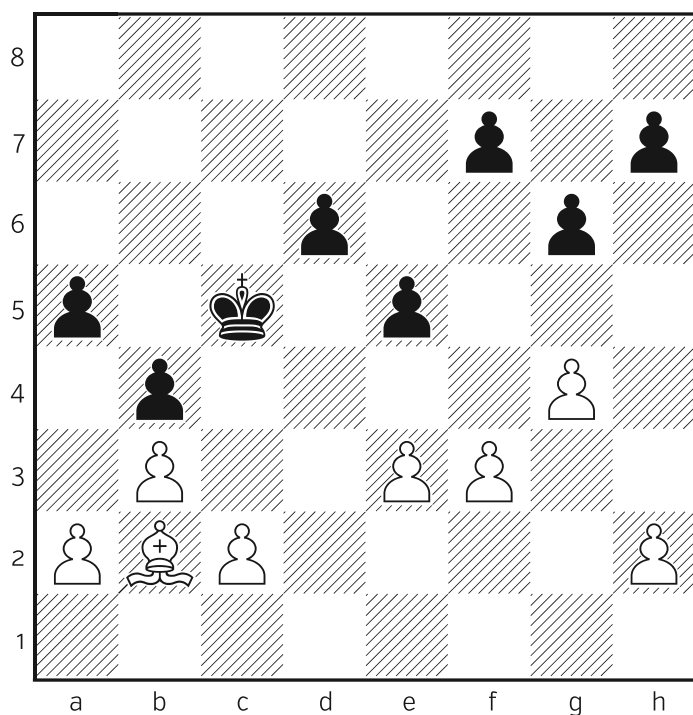
The bishop has to capture all the pawns as quickly as possible.

He cannot move to a square where he could be captured.

He cannot capture protected pawns.

Make a guess: how many moves are needed?

Then go to work. First, calculate the bishop's path in your head without moving the piece. If you think you have the right path, you can use your fingers to mark your moves. (This is an exception — don't do that in a real game! It distracts your opponent and marks you as a beginner.) If you are sure, set the moves on the board and test to see if your idea was right.

2nd Exercise

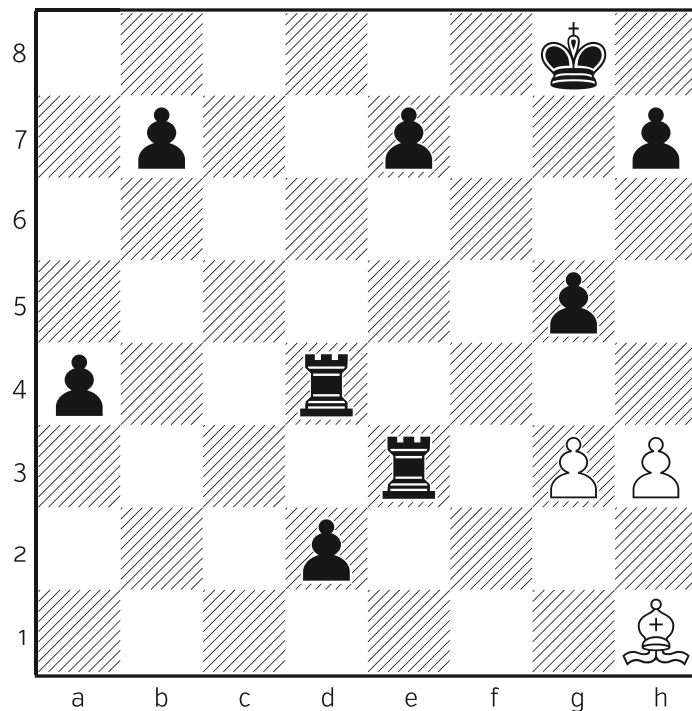
The bishop has to give check to the black king.

He cannot move to a square where he could be captured.

He cannot capture pawns, even if they are unprotected.

Make a guess: how many moves are needed?

3rd Exercise




This time it's a bit harder as Black has posted two big bodyguards in the middle of the board. The black king obviously doesn't want to be disturbed by the bishop, but you have to find a way around the obstacles. The rules are the same as before:

- The bishop has to give check to the black king.
- He cannot move to a square where he could be captured.
- He cannot capture pawns, even if they are unprotected.

Make a guess: how many moves are needed?

THE TRICKY KNIGHT

Before we go to the 4th task we need to look at the way he moves. The knight can jump over pieces and into the opponent's position, but it's hard for him to go to neighboring squares. A pawn or piece directly next to the knight is absolutely safe, while pieces standing far away may be threatened by his fork. Let's look at how long the knight needs to reach certain squares:

8	4	3	2	3	2	3	2	3
7	3	2	3	2	3	2	3	2
6	2	3	4	1	2	1	4	3
5	3	2	1	2	3	2	1	2
4	2	3	2	3		3	2	3
3	3	2	1	2	3	2	1	2
2	2	3	4	1	2	1	4	3
1	3	2	3	2	3	2	3	2
	a	b	c	d	e	f	g	h

To reach the horizontal and vertical squares around him (d4, f4, e3, e5) the knight needs three moves.

Even worse is for him to go two squares away diagonally (c2, g2, c6, g6). He needs four moves — and in a real game there's often not enough room on the board for such maneuvers!

The knight can only attack squares of the same color!

In the example above it is only black squares. With every move the color of the squares will change. Here after his next move the knight would only attack white squares.

If you want to avoid a possible knight fork, then put your important pieces — e.g. king and queen — on squares of a different color. Now the knight can never attack them simultaneously!