

An Introduction to Capped Pawn



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Dr. George Soules

July 7, 2007

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Foreword

George Soules (1937–2013) was a beloved member of the Center for Communications Research, first at the Princeton office, and then at the La Jolla office. Among his many talents, George was an excellent chess player. For him to play an interesting game against one of his weaker colleagues, he needed some kind of handicap. Playing with an extreme time handicap would have been one possibility, but George hit on a better solution. Like Babe Ruth, who was not content with merely hitting a home run, but who called his shot by pointing to the spot where the ball would clear the fence, George declared at the start of the game that he would not only checkmate his opponent, but would deliver checkmate with a specified pawn—the so-called *capped pawn*, which for some years literally sported a conical cap to indicate its special status. Although some thought the cap looked like a dunce’s cap, many who witnessed the magic of George’s amazing comebacks regarded it as a wizard’s cap.

The capped pawn turned what would otherwise be a boring, lopsided contest into a lively afternoon’s entertainment. The weaker player, unable to win by conventional means, usually tried to thwart George’s stated goal by specifically targeting poor “cappy” with an all-out assault. Capturing the capped pawn would win the game. Many times, the capped pawn seemed hopelessly cornered, or even “checkmated,” leading everyone to wonder, “How is George going to get himself out of this one?” About half the time, he couldn’t, and had to concede defeat, but the other half of the time, he somehow managed to slip out of the trap like Houdini, turning the tables and winning the game just as he called it. Those fast-paced, timed games, with each player having only five minutes on the clock to complete their moves, were wonderfully social events, drawing onlookers of every level. These games would take place almost every day throughout most of the ’80s and ’90s.

Some time after George’s untimely death, we learned that he had left behind an unfinished draft of a book that he had been writing about this offbeat chess variant. Typeset in a fixed-width font with diagrams rendered using ASCII art, it was not terribly pleasant to read. But when we took a closer look, we were delighted with what we found. For those who had personally played against George back in the day, the highlight was the chapter of illustrated games, which brought back many happy memories. And for the chess problem aficionado, George also presented many subtle positions that he had clearly spent many hours carefully analyzing. Determined to not allow such a treasure to be consigned to oblivion, we have carefully re-typed (and lightly edited) George’s manuscript so that it can be enjoyed by a wider audience.

The Oxford Companion to Chess assures us that capped pawn, or *pion coiffé*, is an ancient form of handicap that dates back to at least the 17th century. However, despite this long history, there is very little literature on the subject, and the popularity of capped pawn has waned. Perhaps some readers will be inspired by this book to revive the game and/or compose some clever problems and studies. We know that George would be thrilled.

Timothy Chow and David Monn

Chapter 1

Introduction

Cappy is a game played at IDA/CCR Princeton since 1982. It is played between a gang of kibitzers, who maneuver the Black pieces, and a masochist who must mate with a certain pawn called the *cappy*. (*Editor's note:* In diagrams, the square with the cappy is highlighted with a dark border, and a small box—white or black—is displayed to the right of the board to indicate whose turn it is to play. The letter C is used to denote the cappy when it needs to be distinguished from an ordinary pawn.)

1.1 The Rules of Cappy

Usually the cappy starts at g2, but f2, b2 have also been tried. To compensate for the exposed cappy, White starts with two moves. To win on the board, White must deliver mate with the cappy. In return, White loses if mated, or if the cappy is captured or promoted, or if Black is mated with a different piece or pawn. (An interesting variant is if White may not promote any pawn.) Otherwise the rules of chess are followed. Some consequences:

- i) The cappy is not treated like a king; an attack on the cappy can be ignored if White checks the Black king. In the heat of battle a single-move capture of the cappy is occasionally overlooked, and the game continues without material consequence.
- ii) A discovered mate delivered with another piece by moving the cappy is not mate, but a loss for White. However, a double-checkmate by moving the cappy is possible.

1.2 Miscellany

- a) Our clock rules are designed in the interest of the game, rather than to terminate the game. An illegal move, when detected, is retracted with the offending player losing some ticks off the clock, while the other player gains some ticks. If a flag falls in a lost position, the other player usually prolongs the pain by feigning ignorance. Even when one player makes a very poor move, the other player often treats it as an illegal move, with the consequent clock adjustments.
- b) A cappy player of Master speed-chess rank can usually play a novice (a player who has never played tournament chess) roughly even with five minutes apiece on the clock. (The relative times may need some adjustment, but seven to three for either side is rare.) This is quite different than time-handicaps, where often the only question is whether the better player mates before forfeiting.

- c) Cappy is played in the presence of a random element (RE), which is the relative strength of the Black moves. Whereas chess is played and analyzed in a deterministic (perfect information, no RE) scenario, other popular games like bridge, backgammon, and poker have RE's.
- d) There is no “best” move in general, for either player! This is a consequence of the RE. With Black a “good” player, best could be defined as the quickest win (usually of the cappy), which would suggest sharp tactics. Or for a lesser player it could be to make the safest move now, that will eventually lead to a win most surely; this would suggest long-term strategic play. But in either case, with White the better player, Black runs the risk of being outplayed. What should White's strategy be? Should it be to prolong the safety of the cappy, or create holes in the Black defense at all costs, or...? Since White starts with a lost game, the only hope is to take risks to improve the White position.
- e) The openings that have evolved are not in the chess books. The suggestion to “just play chess” as Black doesn't seem to work well with players of suitable relative strengths.

1.3 Why Play Cappy?

- 1) Cappy is a fair game between two players of disparate talents, in which either side can take time to think.
- 2) There are fascinating endgames which can test the best of analysts.
- 3) There are amusing sequences which only occur in Cappy, such as the mop, the swinging rook, the chase, the mate defense, and the punching bag.
- 4) Since White starts with a dead lost position and has no best move, it turns out that Cappy, unlike chess, is a game in which White must bluff. The “Cappy players” (a.k.a. the kibitzers, one of whom plays the Black pieces) did not appreciate this element of the game for several years.
- 5) One of the consequences of RE is the role of the kibitzers. The kibitzing element is abhorrent to chess players, where the best move is best and pointing out a single move can be fatal. But for games with a RE, kibitzing in moderation can lend a social element which is beneficial to the game. (The backgammon chouette provides a natural cadre of kibitzers.) What constitutes a good strategy for White is most dependent on the style of the Black player. It is here that the kibitzers can wield their greatest leverage, by causing Black to alter his repertoire during the game.
- 6) Cappy is more fun than chess—you don't have to win to have a good time. This is partly because it is a fair game which is nonetheless massively out of balance, and which enjoys (suffers?) large swings of fate. Nearly always, someone has a lost position.

1.4 Some Endgame Puzzles

Thanks to Paul Lemke for corrections/confirmations.

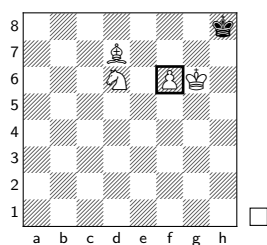
Black has a lone king, denoted by a lowercase k. For the first three puzzles, White has no pawns. By symmetry, we may assume C lies inside the rectangle e2–e6–h6–h2–e2. Thus Ch means the cappy is on the h-file, one of Ch2, Ch3, Ch4, Ch5, Ch6. White moves first in all positions.

- P1. Show that with Ce + Q, or Ce6 + Be1 + R, or Cg6 + Bg1 + R, White can mate, but only if Black cooperates.

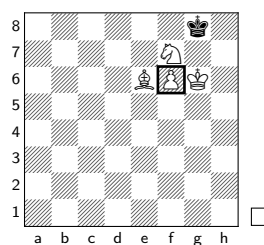
- P2. Show that White cannot mate with Ch6 + R + R, or Ch6 + Bh1 + R, or Ch + Bh1 + N.
- P3. Show that, except for P1–P2, White mates by force in all cases with either C + Q, or C + any two of the pieces R-R-N-N-Bg1-Bh1.
- P4. *One-piece mates.* With C + one piece [R,B,N] there is no forced mate without a favorable position. Find all C positions so that White can mate with Black to move from Bb2, Kf6, C?, kh8. Note with Cg2–g6, the Black king is mated on the 7th rank. Another 3vs1 mate (meaning, X/K/C mates by force vs k) is Qe7/Kf7/Cg5 vs kh8. No other 3vs1 mates exist. However, if the cappy rules did not allow White to promote a Pawn, here are two 4vs1 1-piece mates (XKPC vs k): An RKPC 8th-rank mate starts Rf7/Ke6/Pf6/Cg6 vs ka8. An NKPC 7th-rank mate in 6 starts Nh6/Kf7/Pf5/Cg5 vs kh8. The only 4vs1 1-piece mate on a lower rank starts Qf4/Kg8/Pf3/Cg3 vs kg6: 1.Qf7+ kg5 2.Kh8 kh6 3.Qf6+ kh5 4.Cg4#. A mate on h4 is had by starting all men 1 rank lower. Is there a 4vs1 1-piece mate on the 6th rank? (Only ranks 4–8 are conceivable.) There is one other non-promotion XKPC mate: Bh5/Cg5/Pe7/K-away vs kg7. White pushes the Black king to the 8th rank and arranges for Bh5/Kh6 vs kh8; then 1.Bg6 kg8 2.Be8 kh8 3.g6 kg8 4.Bf7+ kh8 5.g7#.
- P5. *No-piece mates.* With Kb7, C?, kd7 how many pawns, none beyond rank 4, does White, to move, need to mate by force without promoting a pawn?
- P6. White has C + P, on the same rank and on adjacent files, defended from behind by the king. Show that with the best possible Black king position, White mates by force only in the following cases.
- (a) P,C are on files e,f or f,g or g,f respectively.
- (b) P,C are on g2,h2 or g3,h3 or g4,h4 respectively.

Most interesting is Pg5/Ch4/Kg4/kg7, which Black draws if Ch5 instead, or if White fails to move sideways to or from f3.

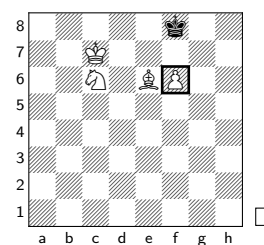
1.4.1 Comments on Puzzles



Position A



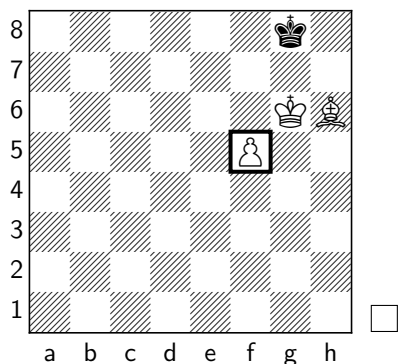
Position B



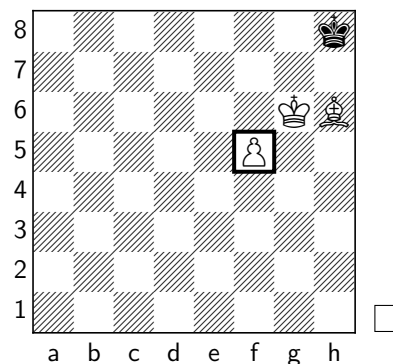
Position C

On P3: All mates with N + N are interesting, as is the mate starting from Kf5/Rg5/Ch5/Rf8/kh6: 1.Rf6+ kh7 2.Rf7+ any 3.Rf8(+) kh7 4.Rgg8 kh6 5.Rh8+ kg7 6.Ch6#. Most interesting is Cf6 + Bf1 + N. White corners the king on h8; see Position A above. As mate is not possible with the Black king on g8, White forces the Black king to f8 starting with Position B. White moves Kh6–Nd8–Nc6, then relocates Kc7 (Position C). A pure mate then follows with Ne5–Ba2–Ng6–Cf7. The mate with Cg6 + Bg1 is simpler. (No mate with Ch/Bh1; see P2.)

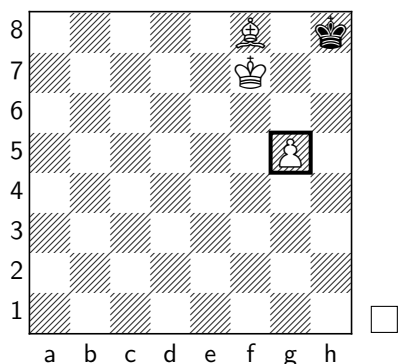
On P4: Shown below are four key positions from which White to move can win.



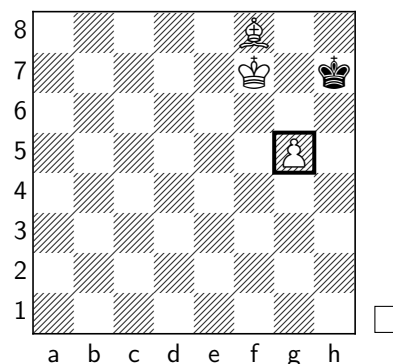
1 f6 ♖h8 2 ♖g7+



1 ♖f8 ♖g8 2 ♖e7 ♖h8 3 ♖d6 ♖g8 4 f6
♖h8 5 ♖f8 ♖g8 6 ♖h6 ♖h8 7 ♖g7+



1 ♖g7+

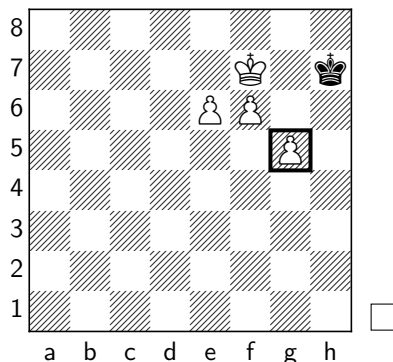


1 ♖e7 ♖h8 2 ♖d6 ♖h7 3 ♖f8 ♖h8 4
♖g7+

Thus with the Black king hemmed in, White can change tempo or not and win with the cappy on the f or g file on ranks 2 through 6. From the given starting position, Cf4 allows the king to escape with ...kh7. So the answer is Cf2, Cf3, Cf5, Cg2, Cg3, Cg4, Cg5 all win and Cf4 doesn't.

On P5: The answer is that with one pawn, mate is possible but requires Black's help. But with Pe4, Pf4, Cg4 White mates starting with 1.e5. The final position is Kh6/kh8/Pe7/Pf7/Cg7.

The key position to mating with P,P,C is that White mates in the position below with either side to move.



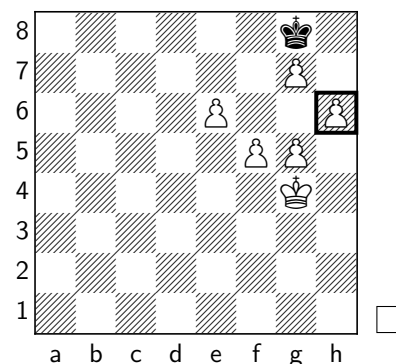
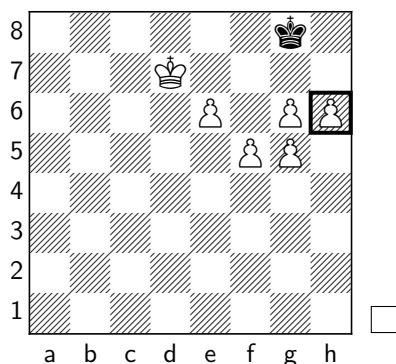
With White to move: 1 e7 ♖h8 2 ♖e6 ♖h7 3 ♖f5 ♖g8 4 g6 ♖h8 5 ♖g5 ♖g8 6 ♖h5! ♖h8 7 ♖h6 ♖g8 8 f7+ ♖h8 9 g7#.

With Black to move: 1... ♖h8 2 ♖g6 ♖g8 3 e7 ♖h8 4 ♖h5 etc.

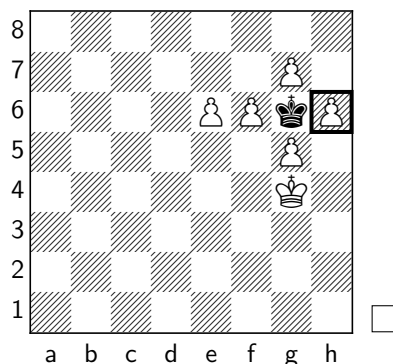
With Kb7, Pe4, Pf4, Cg4, White mates if the Black king is anywhere on files d–h and ranks 6–8, except for d6.

Starting with Ka7, kc7 White needs Pd4, Pe4, Pf3, Cg3, at least, to win. With six pawns on b4–g4 and Black's king in front of the pawns, White can mate, without promoting, with any pawn of his choice; i.e., with any one of the six pawns the cappy.

With Ch instead of Cg, it appears the dead-minimum no-promotion mate with pawns only is Pe4, Pf4, Pg4, Ch4, Pg3 with Kb7, kd7. White starts with e5, pushes the king into the corner, then positions his pawns on e6, f5, g5, g6, Ch6 as in the diagram below on the left. White begins with g7, and the Black king is trapped by pawns, so White can get his king to g4, as in the diagram below on the right. He waits for Black to play ... kh7 to play Kh5, and then mates with f6, g6+, Ch7#.



The Pg7 is needed to cover h8, and Pf6 is needed to cover g7. The Ch7 mate requires defending by Pg6. The Pe6 is needed to keep the king from f7. The Pf5 is needed to keep the king from g6, since mating from the position below requires cooperation.



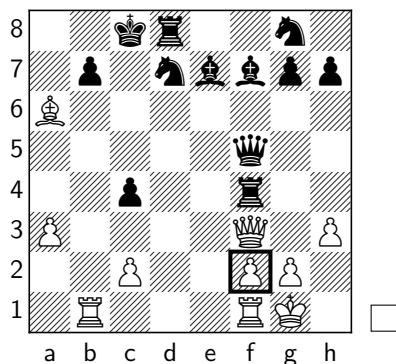
Another suggested rule change is to have a draw count as a win for Black, but with that rule the endgames would be much less interesting.

On P6: White can't mate with his pawn on the h-file, as Black runs to h8 and sits. It's a draw with Ce, Pf by problem P1.

With Pg5, Ch4 Black draws if he can move his king to square (x) for each White king square: Ke5/e4/g4(g6), Ke3/f3/f5/g3(g7), Kf4/h3(f7), Ke12/f12/g12/h12/h12(f8,g8). So if White doesn't move sideways to or from f3, Black can draw.

1.5 The Swinging Rook and the Mop

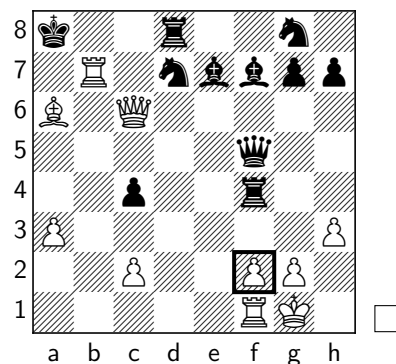
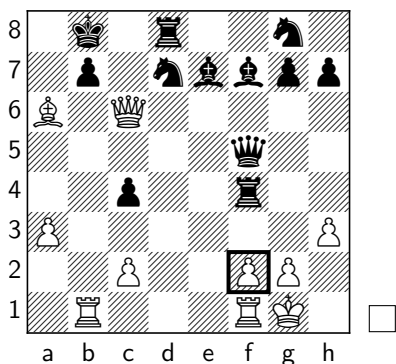
It's not hard to guess why these maneuvers are so-named. In the position below, all Black's pieces, save two pawns, are defended, and Black has a big attack on the cappy file.



Since White loses by mating with a rook or queen, the continuation 1 ♖xb7+ ♜b8 2 ♖a6+ ♜a7 3 ♜b7+ ♜xa6 4 ♜c6+ ♜a5 is a win for Black. But, beware the swinging rook:

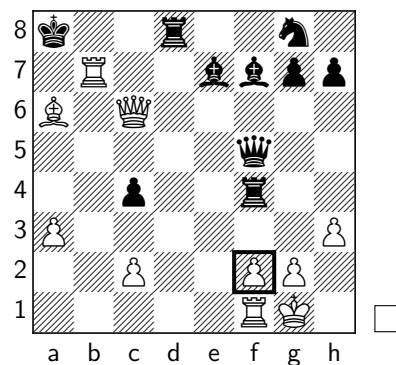
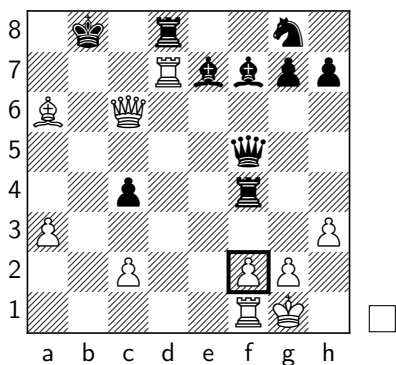
1 ♜c6+! ♜b8

2 ♜xb7+ ♜a8

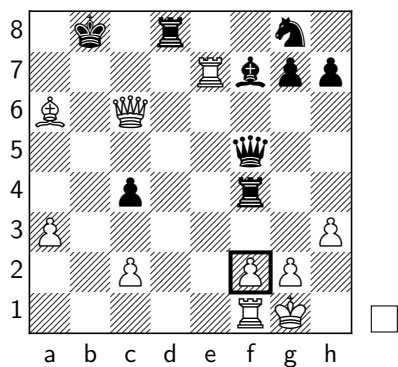


3 ♜xd7+ ♜b8

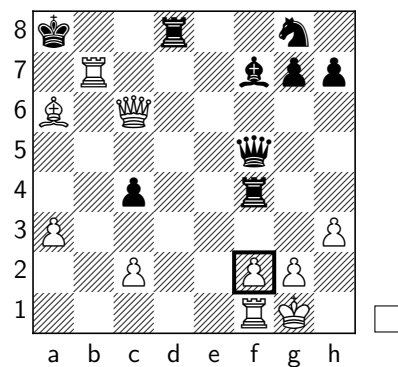
4 ♜b7+ ♜a8



5 ♖xe7+ ♜b8

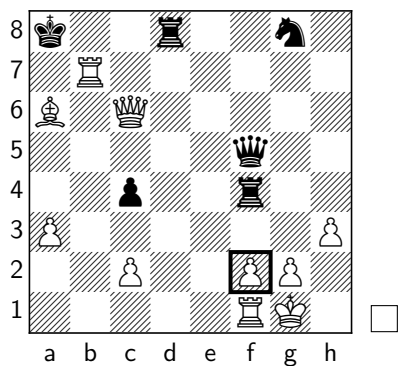


6 ♜b7+ ♜a8

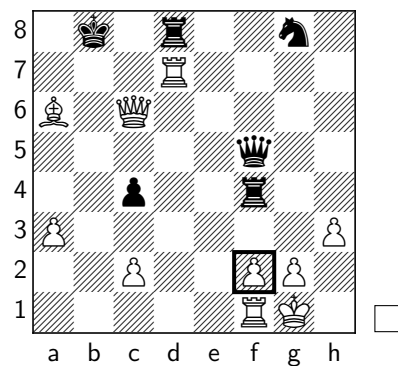


You get the idea. The rook swings back and forth from b7, clearing the seventh rank. Several moves later we come to the eighth-rank “mop”:

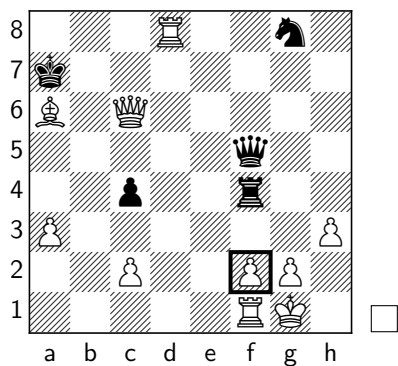
12 ♜b7+ ♜a8



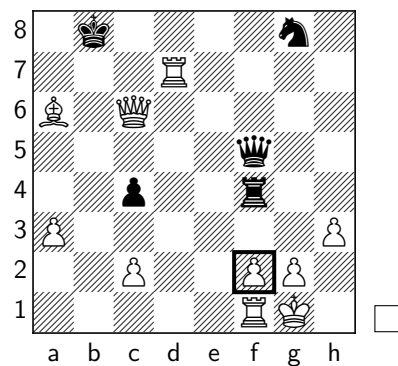
13 ♜d7+ ♜b8



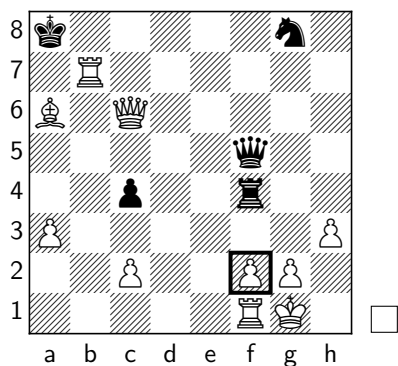
14 ♜xd8+ ♜a7



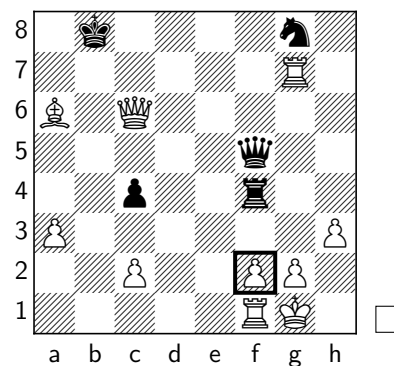
15 ♜d7+ ♜b8



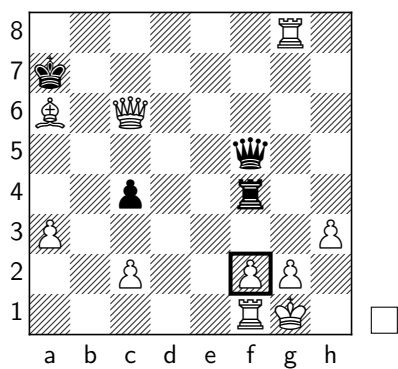
16 ♖b7+ ♜a8



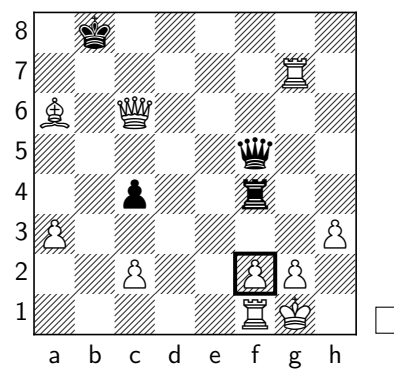
17 ♖g7+ ♜b8



18 ♖xg8+ ♜a7

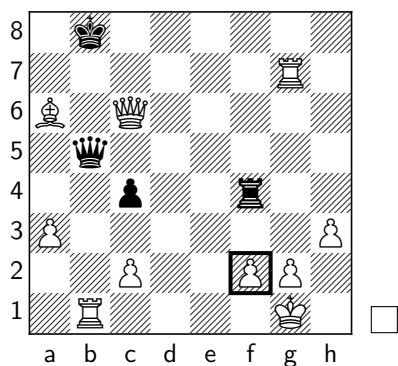


19 ♖g7+ ♜b8

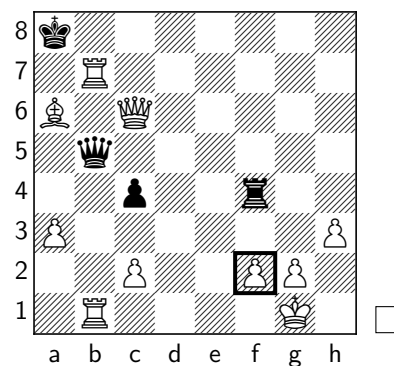


How to part Black from his last two pieces? Another form of the mop:

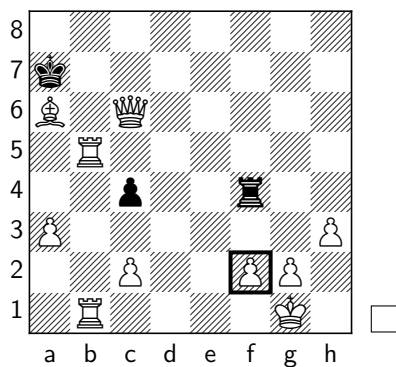
20 ♖b1+ ♜b5



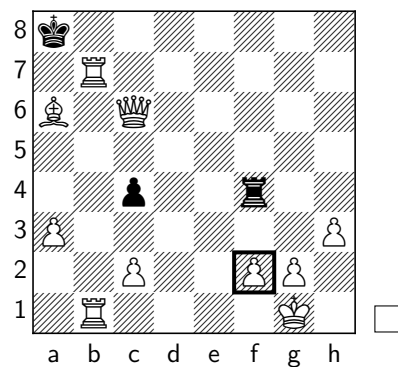
21 ♖b7+! ♜a8



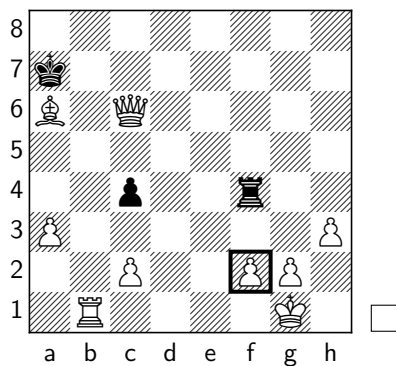
22 ♖f7×b5+ ♔a7



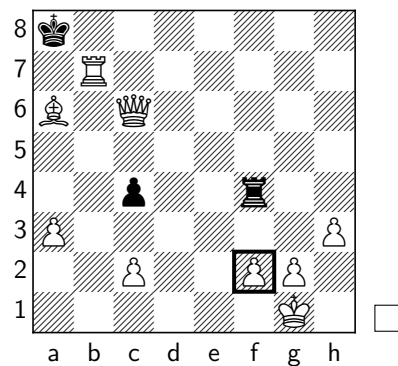
23 ♖b7+ ♔a8



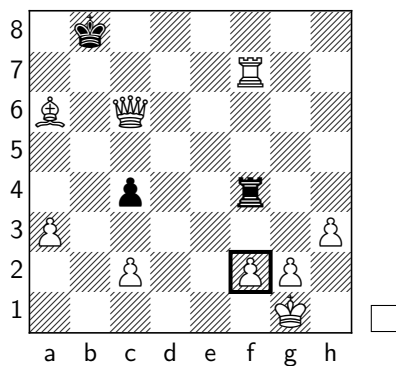
24 ♖a7+! ♔xa7



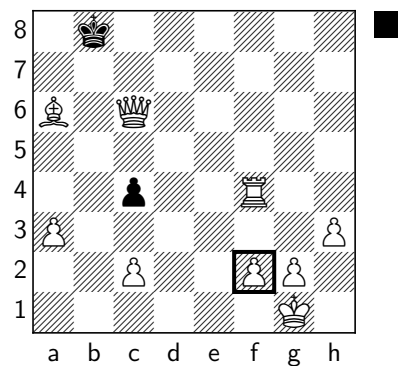
25 ♖b7+ ♔a8



26 ♖f7+ ♔b8



27 ♖×f4 and wins.

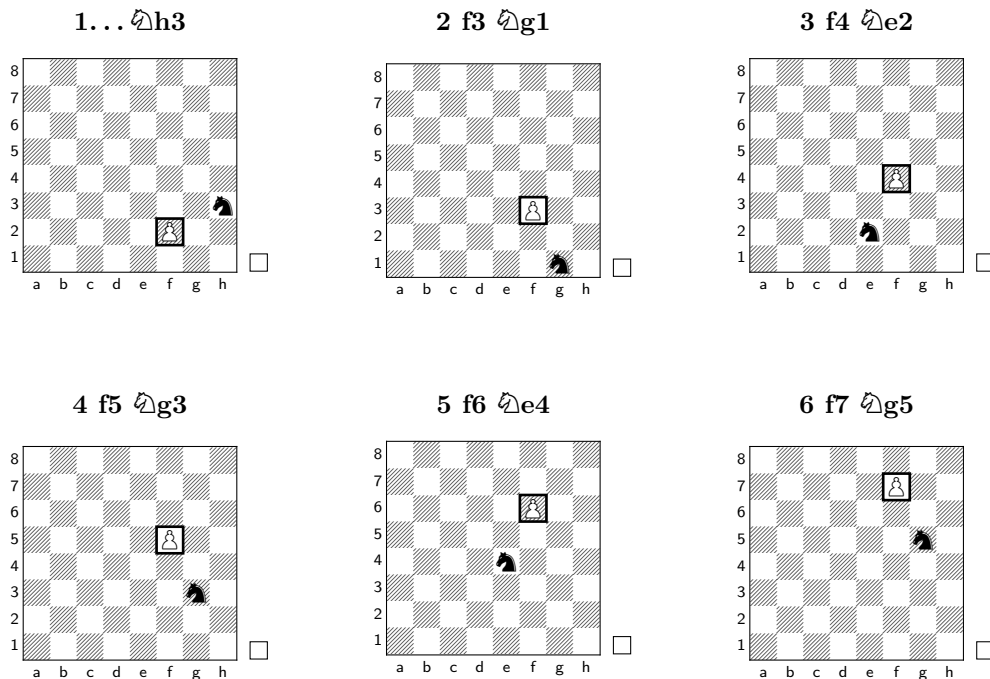


White checked the Black king for 26 consecutive moves!

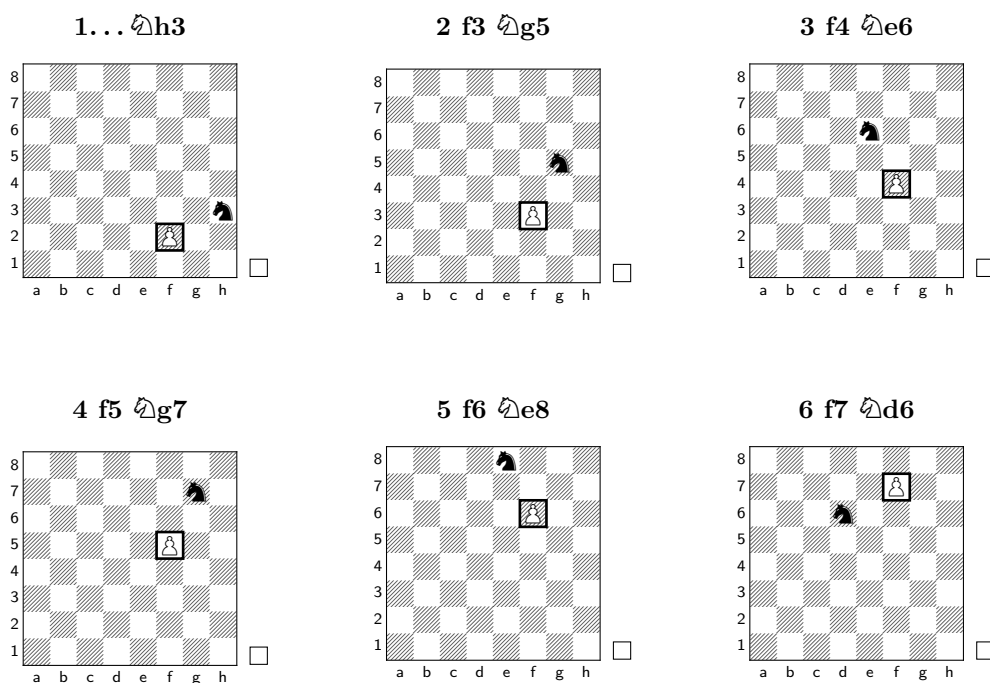
The end comes three moves sooner if Black either interposes on f7 or captures on b7 when he might have. For example, 19... ♖f7 20 ♖×f7+ ♖×f7 21 ♖c5+ ♔b8 22 ♖e5+ ♔a7 23 ♖e3+ ♔×a6 24 ♖e6+. With the clock, the extra moves can make the difference.

1.6 The Chase

On an open board, “the chase” is shown starting with the cappy on f2.

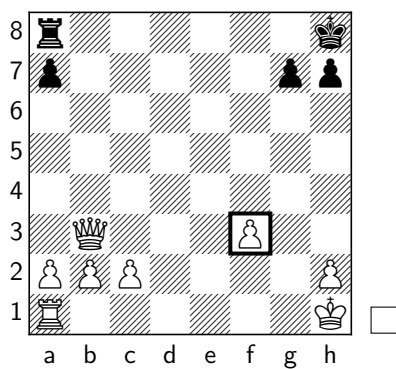


Black wins. The chase also takes a slightly less elegant form (“the come-on”?).

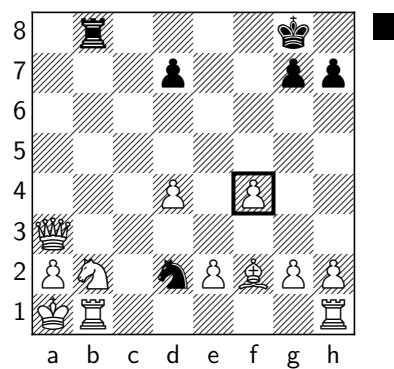


1.7 The Mate Defense

This play can be most annoying to White. In Position D below, White would gladly swap both pieces for the rook, but after 1 ♖f7, Black wins with 1... ♜f8.



Position D

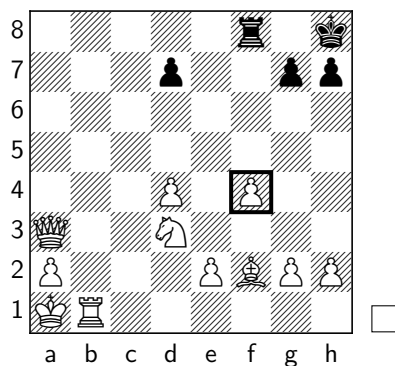
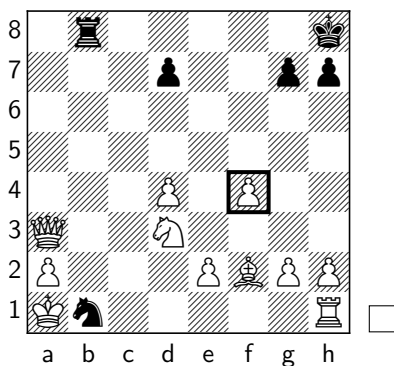


Position E

We show how it can take a huge material loss to (almost) thwart the mate defense. In Position E above, 1... ♜h8 loses quickly for Black:

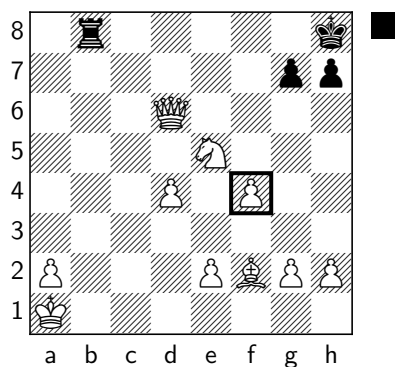
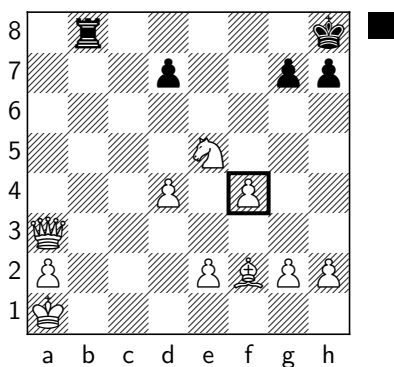
2 ♘d3 ♘xb1

3 ♜xb1 ♜f8



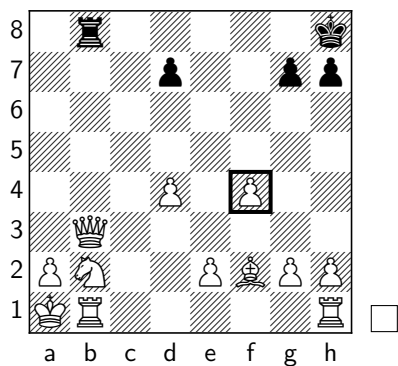
4 ♜b8 ♜xb8 5 ♘e5

5... d6 6 ♖xd6 and 7 ♘g6 looms.

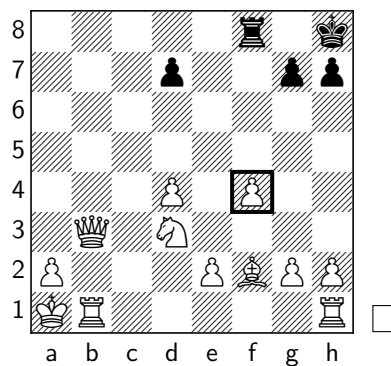


A direct assault on the cappy by 1...g5 2 f5 ♖b5 loses to 3 ♙c5. But after 1...♘b3+! White cannot play 2 a×b3 as the ♖b8 deflection vanishes. So...

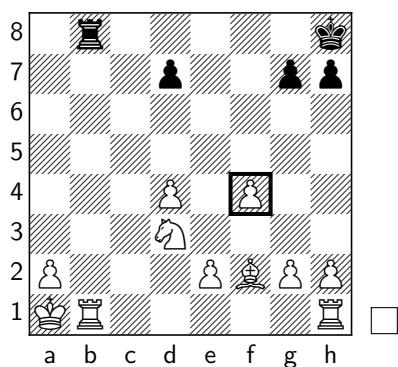
2 ♙×b3+ ♙h8!



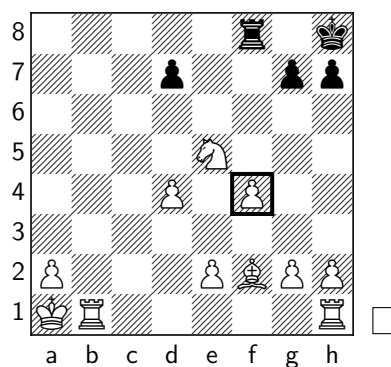
3 ♘d3 ♖f8



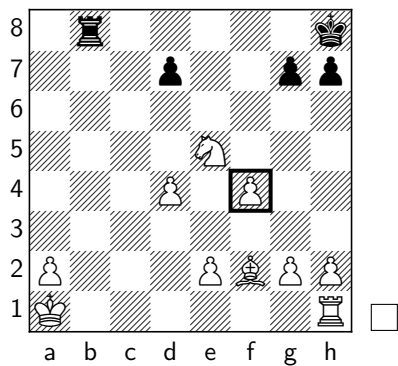
4 ♙b8 ♖×b8



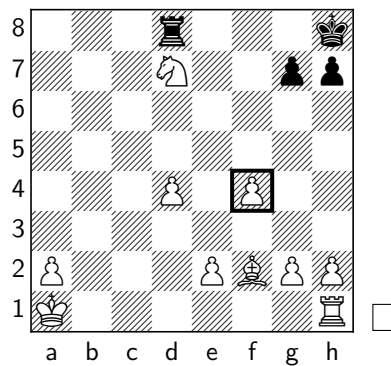
5 ♘e5 ♖f8



6 ♖b8 ♖×b8

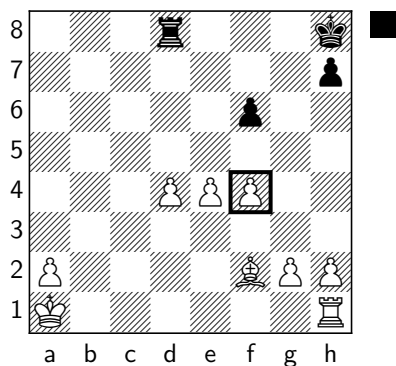


7 ♘d7 ♖d8

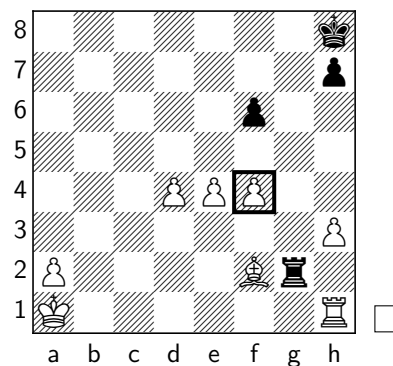


7...♖e8 loses to 8 ♖b1 then 9 ♖b8. It begins to get interesting, and White is lost. The White tries are 8 ♖b1 and 8 ♘f6. 8 ♖b1 loses quickly:

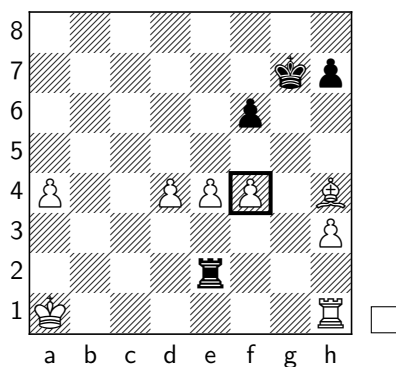
8 ♘f6 gxf6 9 e4



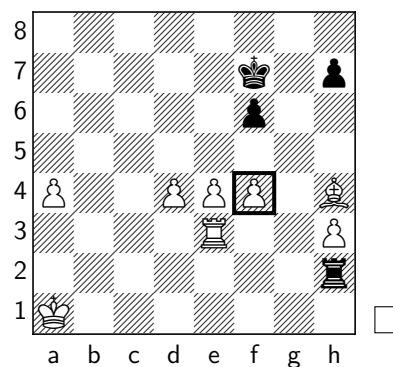
9... ♖g8 10 h3 ♖xg2



11 ♖h4 ♗g7 12 a4 ♖e2

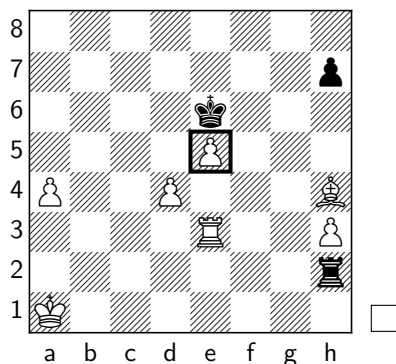


13 ♖e1 ♖h2 14 ♖e3 ♗f7

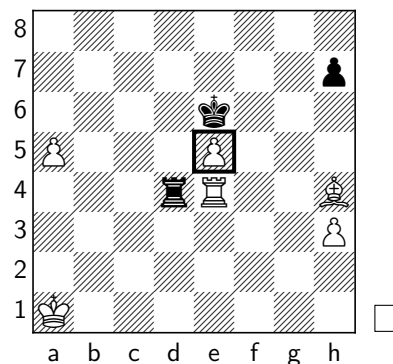


(The last move, 14... ♗f7, was to avoid ♖g1 or ♖g3 at the wrong moment.) In this position either 15 ♖e1 ♖h1 or 15 d5 ♖h1+ 16 ♖e1 ♖xh3 win for Black. No better was 11 ♖f1 ♖h2 12 h4 ♖h3 13 ♖e1 ♖e3 14 f5 ♖xe4 15 ♖c3 ♖xh4. The only other try seems to be 15 e5:

15 e5 fxe5 16 fxe5 ♗e6



17 a5 ♖d2 18 ♖e4 ♖xd4 and Black wins.



This position demonstrated many Cappy strategies—the mate defense (three times), deflection (with the rook pins), masking the cappy, and finessing to win the cappy against superior material.

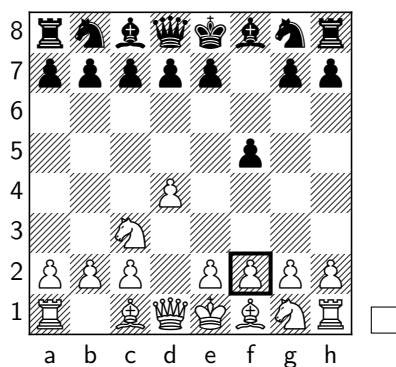
Chapter 2

Eight Games

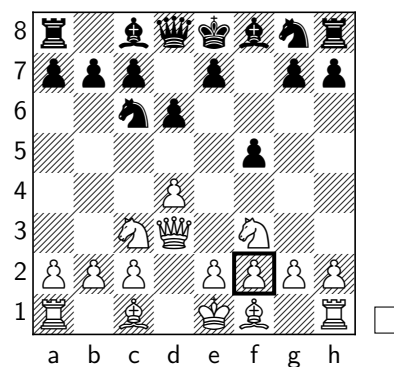
We use initials only to mask the identities of the culprits. More recently discovered games on Cgame.log.tex.

2.1 Game A: GS–DR, 3/29/84. Cappy on f2

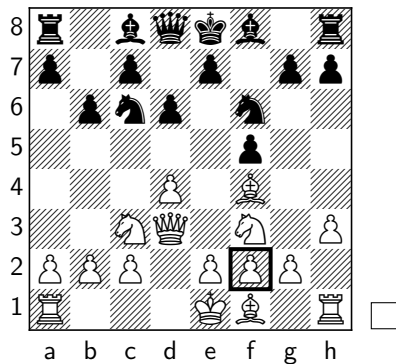
1 d4 2 ♘c3 f5



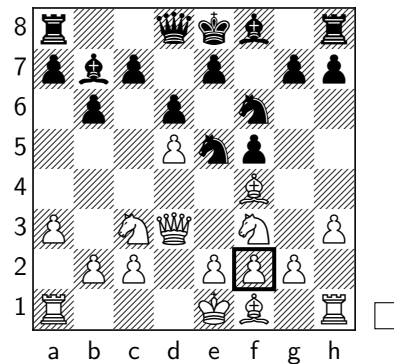
3 ♖d3 d6 4 ♘f3 ♘c6



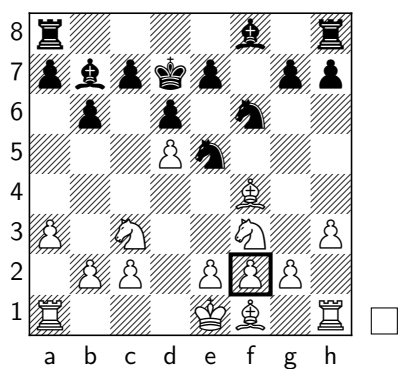
5 ♗f4 ♘f6 6 h3 b6



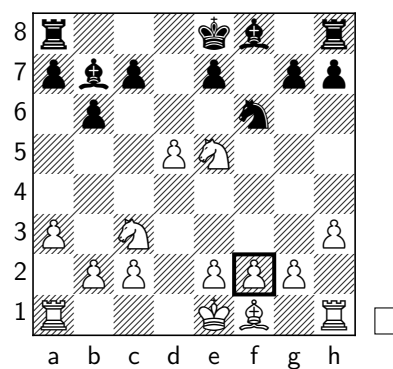
7 a3 ♗b7 8 d5 ♘e5



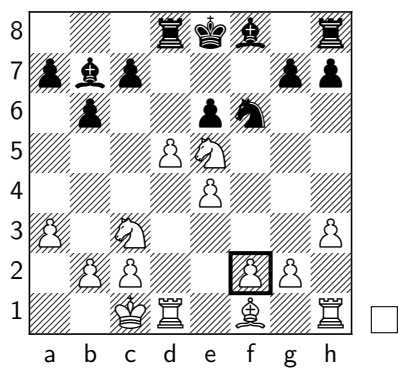
9 ♖xf5 ♗d7 10 ♖xd7+ ♘xd7



11 ♕xe5 dxe5 12 ♘xe5+ ♖e8

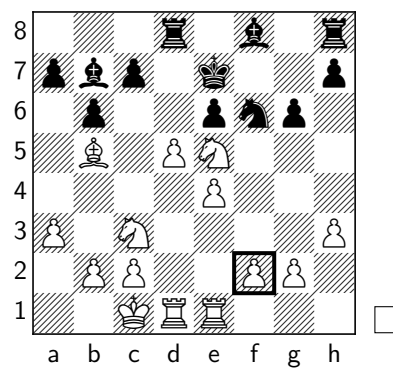


13 O-O-O ♖d8 14 e4 e6

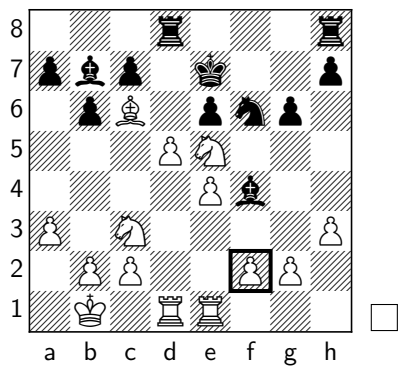


15 ♕b5+ ♖e7 16 ♖he1 g6

Black has a good idea, but he should play 17... ♕xc6 next.

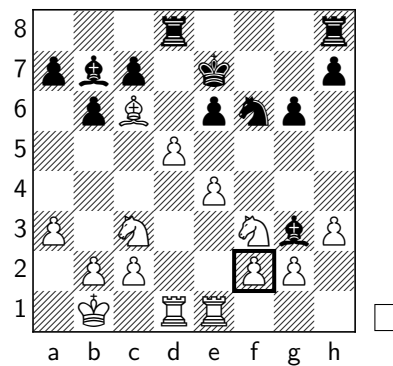


17 ♕c6 ♕h6+ 18 ♖b1 ♕f4

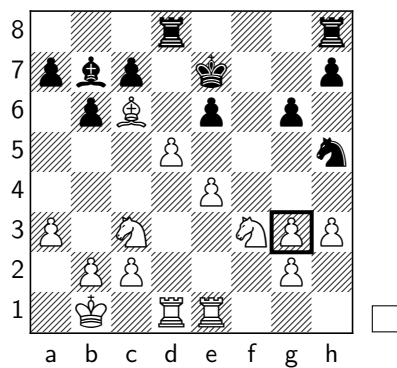


19 ♘f3 ♕g3

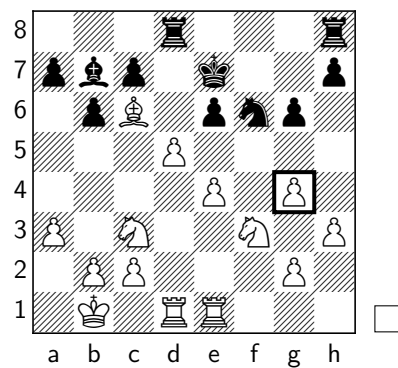
A typical exposure maneuver.



20 f×g3 ♖h5

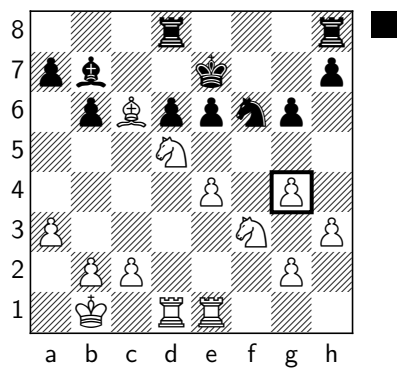


21 g4 ♗f6

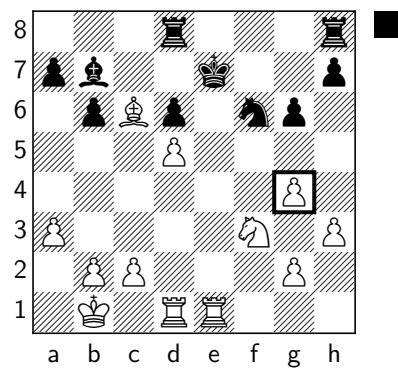


It looks like the cappy is a dead duck, but Black goes astray with some stock responses.

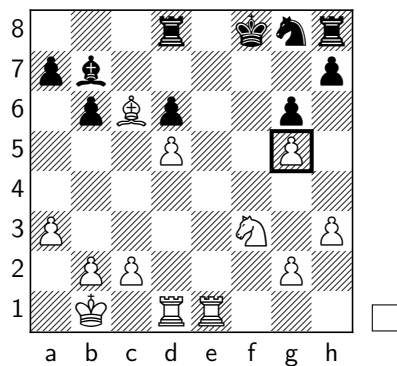
22 d6+ c×d6 23 ♗d5+



23... exd5 24 exd5+

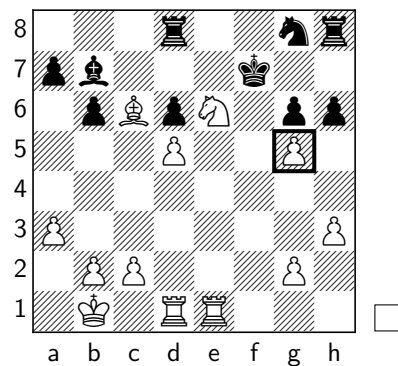


24... ♖f8 25 g5 ♗g8

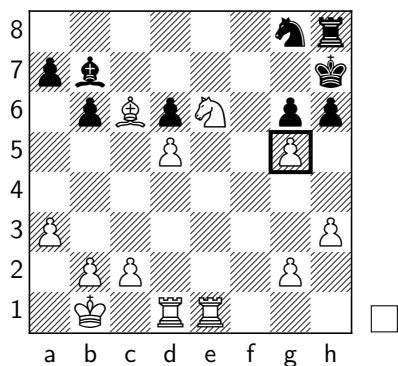


26 ♗d4 h6 27 ♗e6+ ♖f7

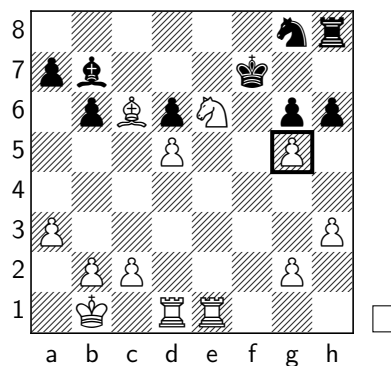
King to e7-f7-g7-h7 still wins.



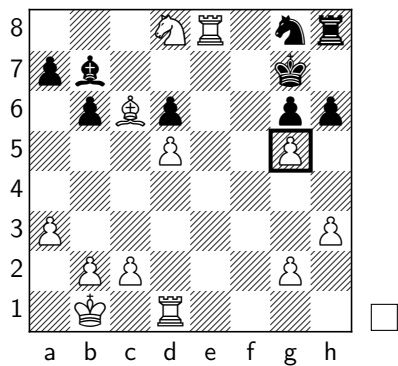
28 ♖xd8+ ♔g7 29 ♖e6+ ♔h7



30 ♖f8+ ♔g7 31 ♖e6+ ♔f7

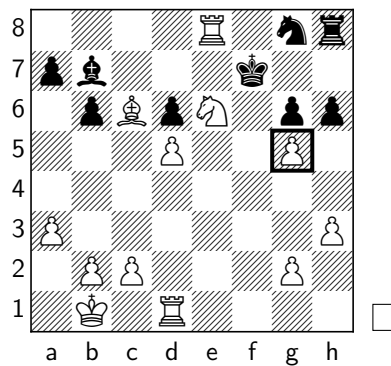


32 ♖d8+ ♔f8 33 ♔e8+ ♔g7

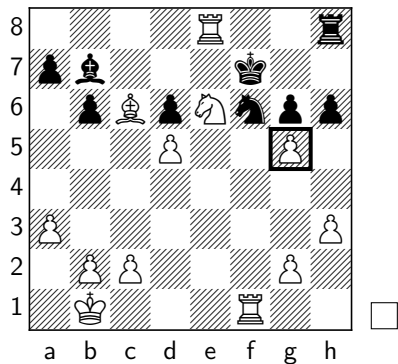


34 ♖e6+ ♔f7

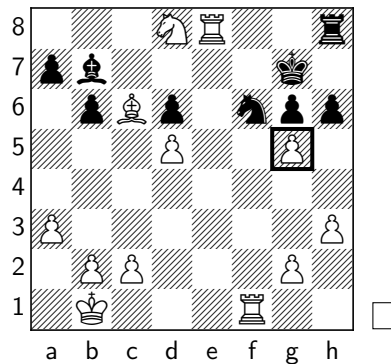
Last chance to draw was 34... ♔h7.



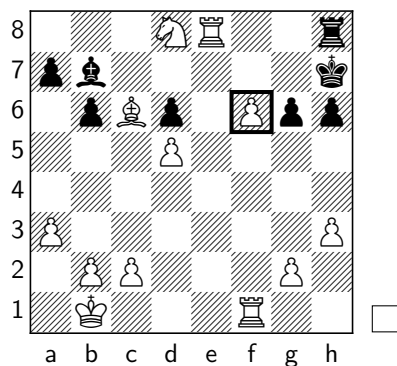
35 ♔f1+ ♖f6



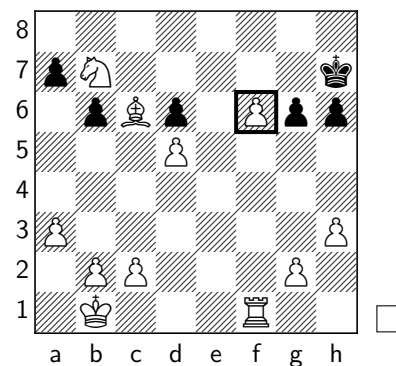
36 ♖d8+ ♔g7



37 gxf6+ ♔h7



38 ♖xh8+ ♕xh8 39 ♘xb7 ♕h7



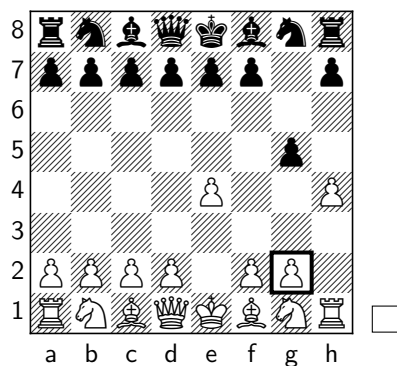
The cappy was hanging for 16 of 17 moves, 11 in a row, but the bishop was hanging for 22 straight moves!

It's mate in 13 or so: 40 g4 g5 41 ♕e8 h5 42 ♖e1 a6 43 ♖e7+ ♕h6 44 ♖g7 hxg4 45 hxg4 a5 46 ♖g6+ ♕h7 47 ♘d8 b5 48 ♘e6 b4 49 ♘g5+ ♕h8 50 ♖h6+ ♕g8 51 ♘e6 bxa3 52 f7#

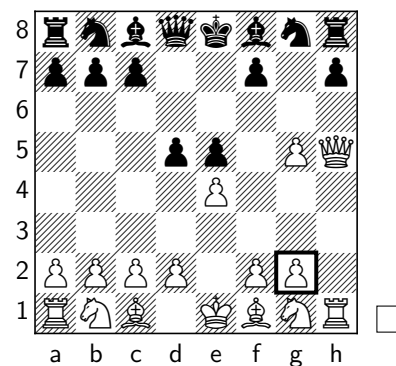
2.2 Game B: GS-AR, 2/25/88. Cappy on g2

This game illustrates the “punching bag”; the Black king gets shoved around the board until a piece (or pieces) threatening the cappy gets caught in the crossfire. Get out an extra chess set.

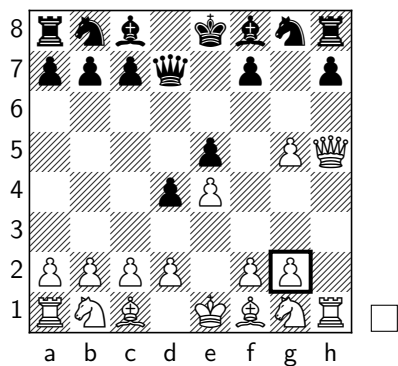
1 e4 2 h4 g5



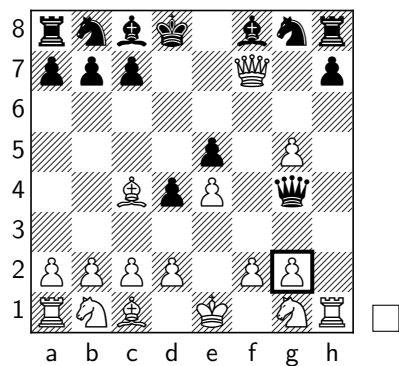
3 hxg5 e5 4 ♔h5 d5



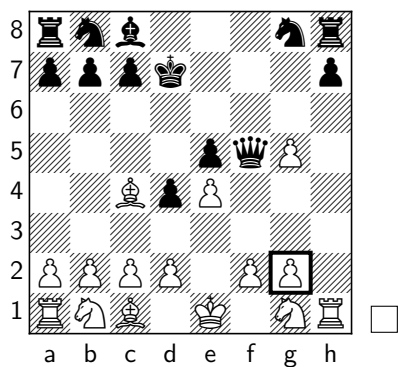
5 ♖c3 d4 6 ♖b1 ♔d7



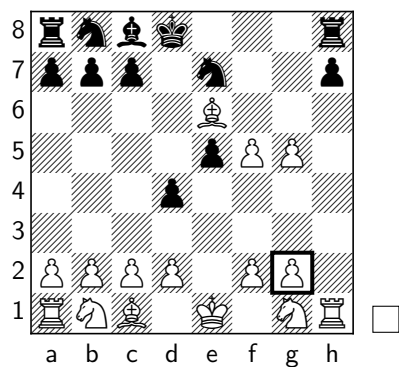
7 ♘c4 ♔g4 8 ♔xf7+ ♔d8



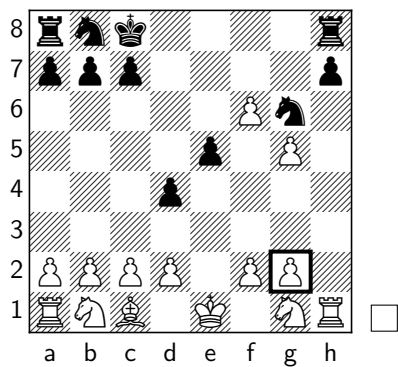
9 ♔xf8+ ♔d7 10 ♔f5+ ♔xf5



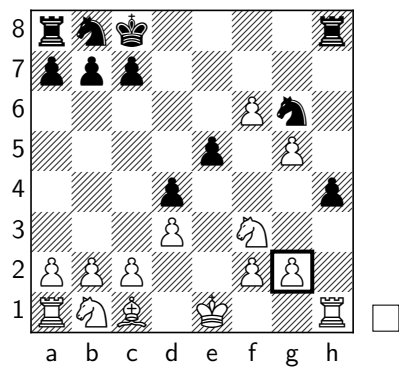
11 exf5 ♖e7 12 ♘e6+ ♔d8



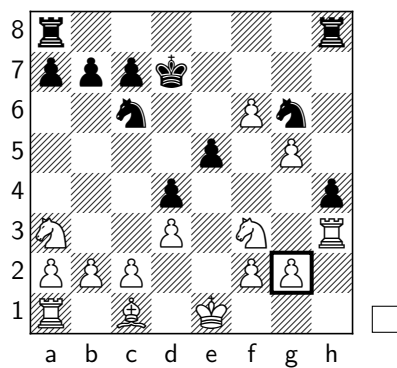
13 ♘xc8 ♔xc8 14 f6 ♖g6



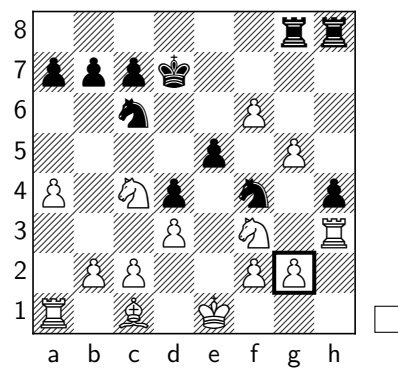
15 d3 h5 16 ♖f3 h4



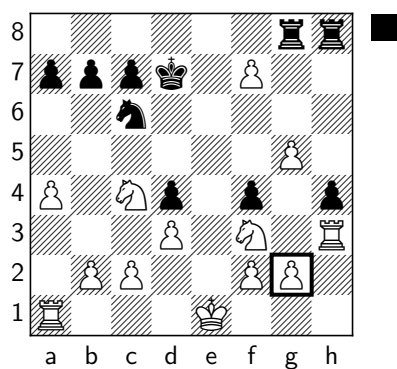
17 ♖h3 ♘d7 18 ♜a3 ♜c6



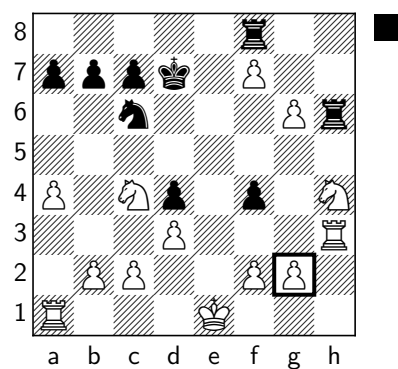
19 ♜c4 ♖ag8 20 a4 ♜f4



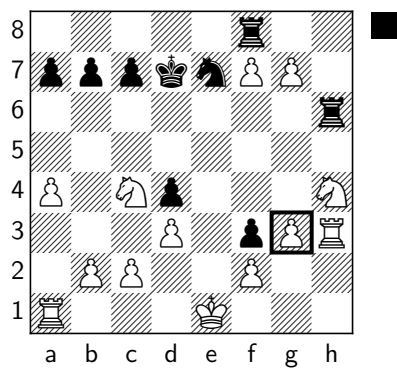
21 ♜xf4 exf4 22 f7



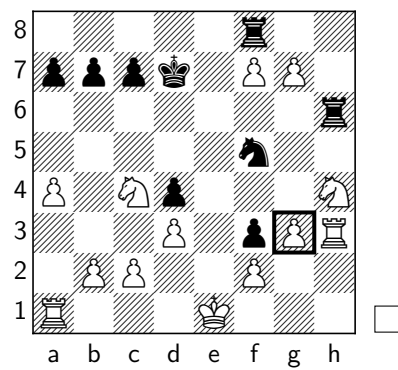
22... ♖f8 23 g6 ♖h6 24 ♜xh4



24... f3 25 g3 ♜e7 26 g7

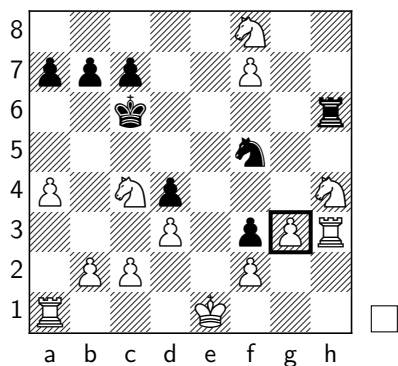


26... ♜f5

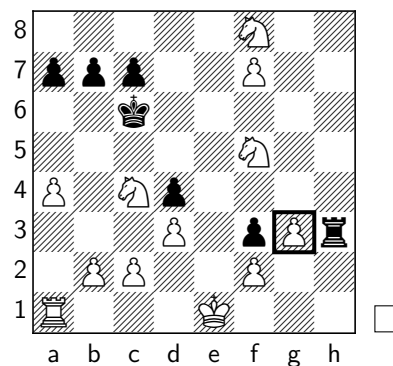


Black thinks a kill is at hand, but this move loses “quickly.”

27 gxf8 ♖+ ♜c6

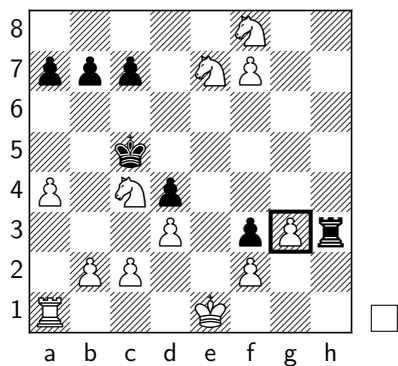


28 ♖xf5 ♜xh3

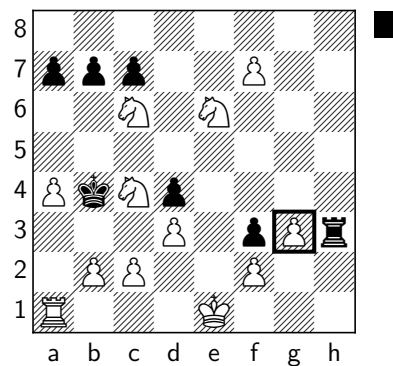


If the king were on c8, White could win, as here, with 29 g4 ♜h1+ 30 ♜d2 ♜xa1 31 ♖g3 ♜b8 (31... ♜xa4 32 ♖d7!) 32 ♖d7+ ♜a8 33 ♖cb6+ cxb6 34 ♖xb6+ axb6 35 f8 ♜+.

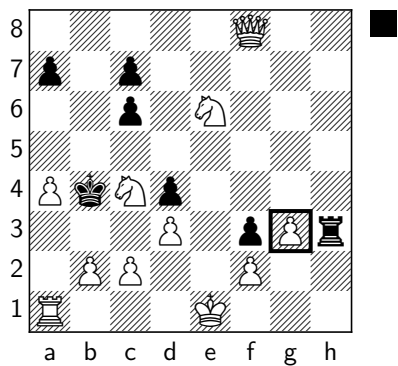
29 ♖e7+ ♜c5



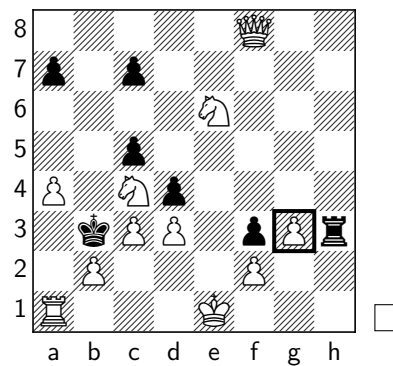
30 ♖e6+ ♜b4 31 ♖c6+



31... bxc6 32 f8 ♜+

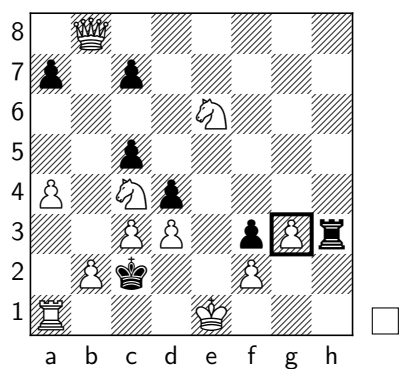


32... c5 33 c3+ ♜b3

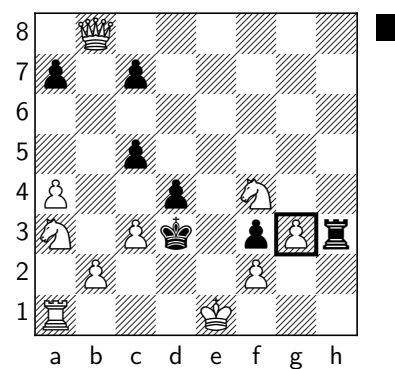


If 33... dxc3 then 34 ♜xc5+ ♜b3 35 ♜a3+ ♜c2 36 ♖e3+ ♜xd3 37 ♖f4+ wins the rook.

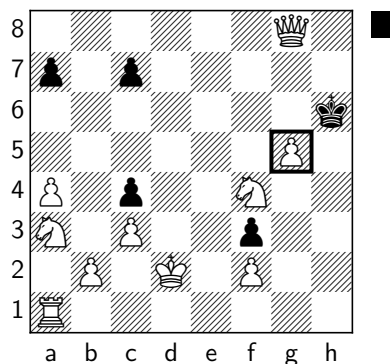
34 ♖b8+ ♔c2



35 ♘a3+ ♕xd3 36 ♘f4+



White mates in 8 with 36... ♕e4 37 ♖e8+ ♕f5 38 ♖e6+ ♕g5 39 ♘xh3+ ♕h5 40 ♖g8 d3 41 ♘f4+ ♕h6 42 g4 d2+ 43 ♕xd2 c4 44 g5#.

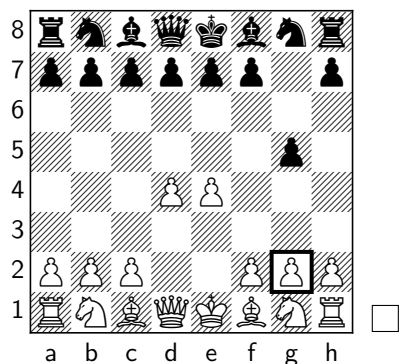


Did you miss two quick wins for Black? After 22 f7 ♖g7! the advanced pawns fall. And after 26 g7 ♖e6+! and 27... ♖xf7 it's curtains.

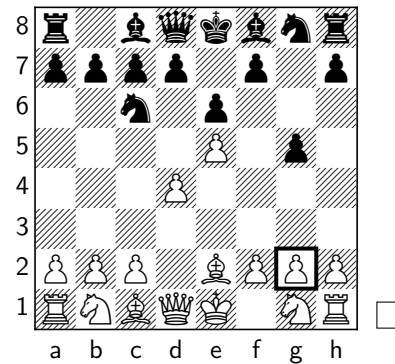
2.3 Game C: GS-AR, 8/5/96. Cappy on g2

Black misses a quick win, then falls for a trap, losing two pieces.

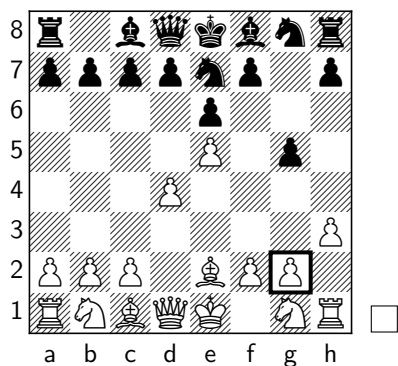
1 e4 2 d4 g5



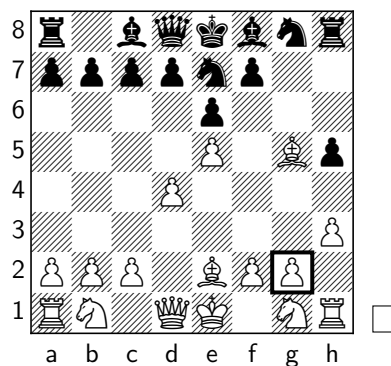
3 e5 e6 4 ♘e2 ♘c6



5 h3 ♖ce7

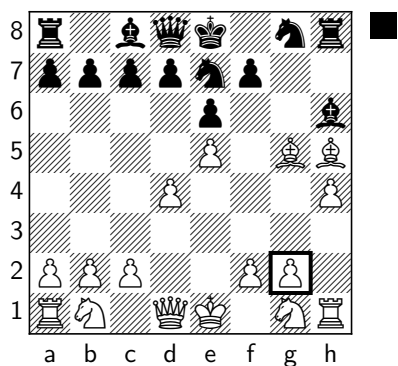


6 ♗xg5 h5

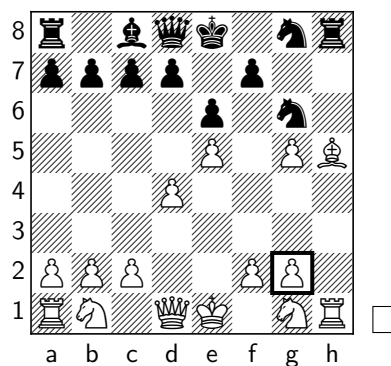


The kibitzers were pushing for 6... ♖g6 7 ♗xd8 ♖f4, but with no convincing line put forward, Black settles for a slower assault.

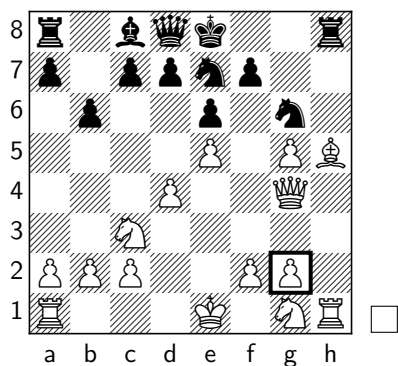
7 h4 ♗h6 8 ♗xh5



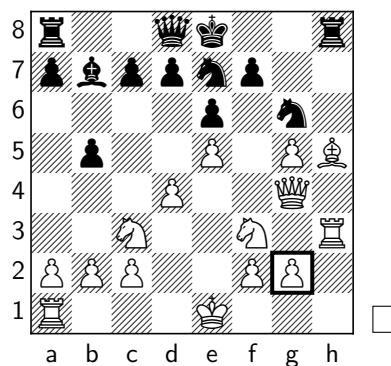
8... ♗xg5 9 h×g5 ♖g6



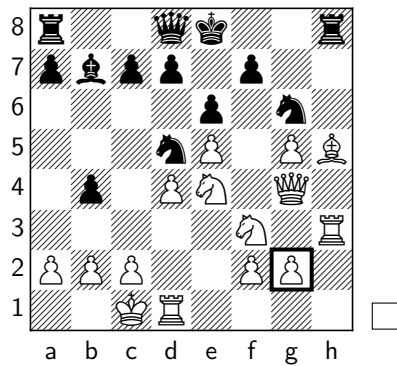
10 ♖g4 ♖8e7 11 ♖c3 b6



12 ♖h3 ♗b7 13 ♖f3 b5

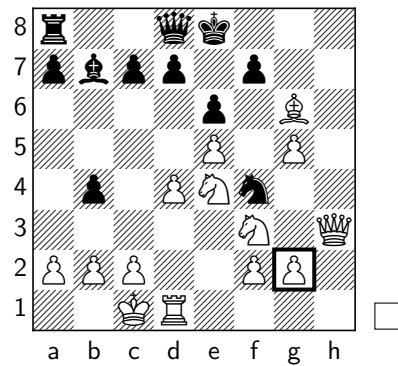


14 O-O-O b4 15 ♖e4 ♘d5

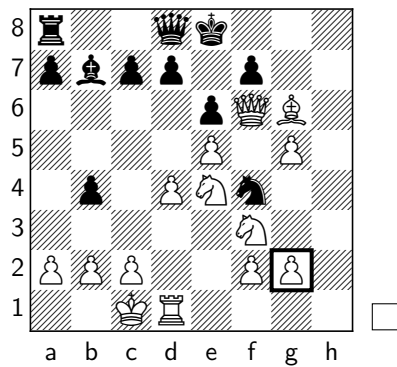


16 ♙xg6 ♗xh3 17 ♜xh3 ♘f4?

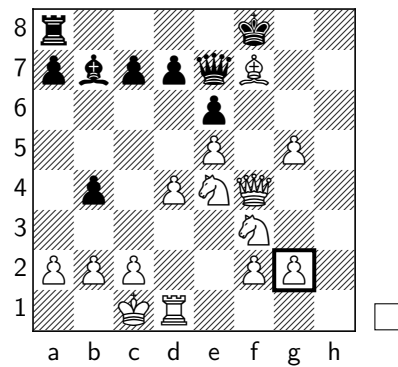
Falls for the trap. It's a draw after 17...f×g6
18 ♜h8+.



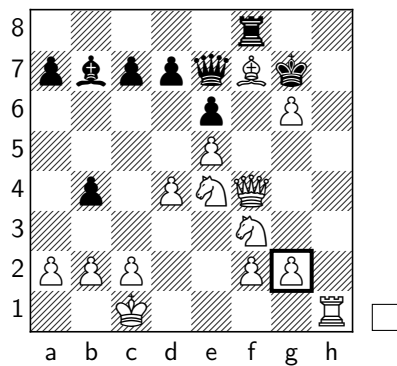
18 ♜h8+ ♔e7 19 ♜f6+ ♔e8



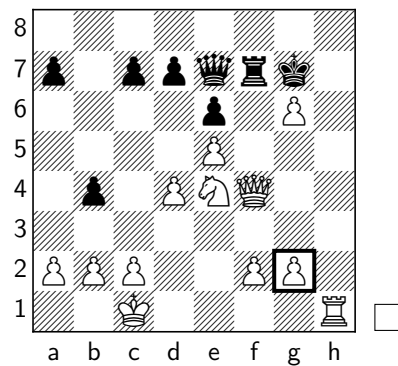
20 ♙xg6 ♗xh3 21 ♜xh3 ♘f4?



22 g6 ♔g7 23 ♖h1 ♖f8

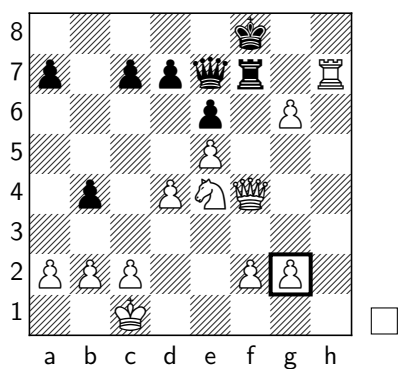


24 ♘fg5 ♙xe4 25 ♘xe4 ♖xf7



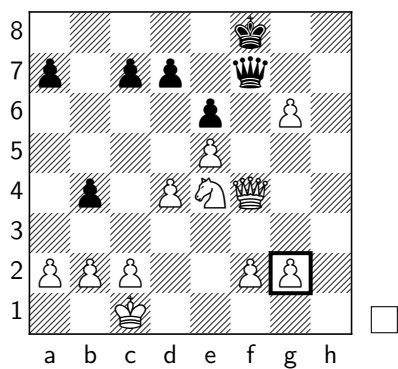
Black thinks White can't mate with about 4 seconds on his clock. Oops.

26 ♖h7+ ♜f8



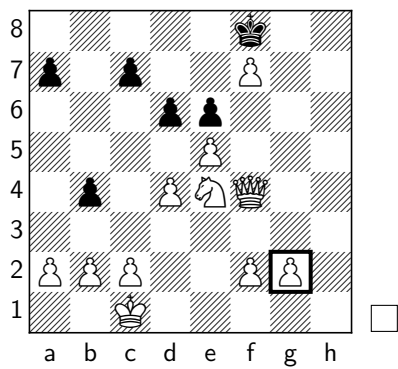
26... ♜xg6 27 ♖h6+ ♜f5 would have lost even faster.

27 ♖xg7+ ♜xg7

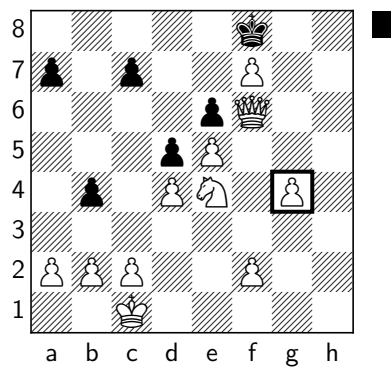


27... ♜e8 holds on a bit longer.

28 gxf7 d6



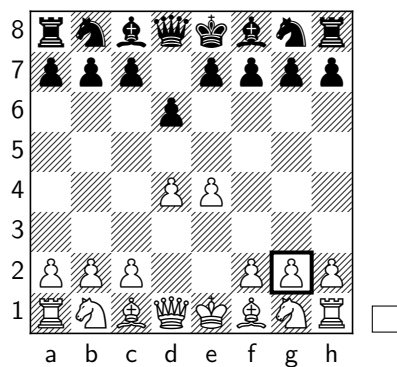
29 ♖f6 d5 30 g4 and White wins.



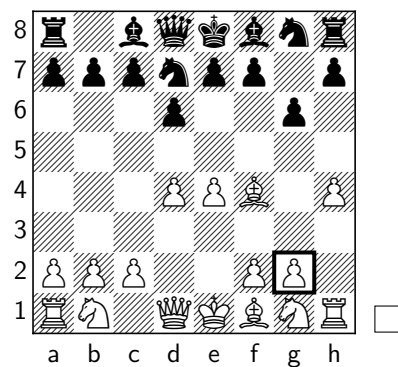
2.4 Game D: GS-RC, 8/16/96. Cappy on g2

White misplays a good position, but Black telegraphs his intentions.

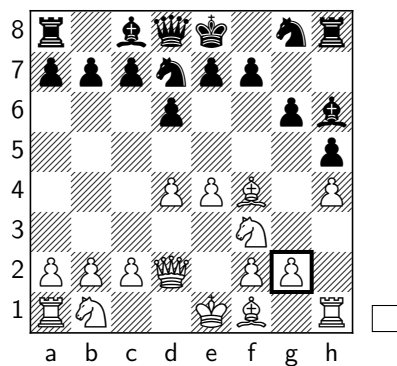
1 e4 2 d4 d6



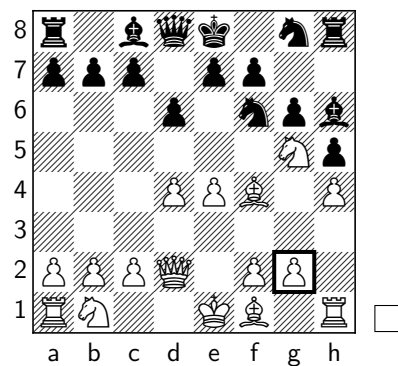
3 ♘f4 ♘d7 4 h4 g6



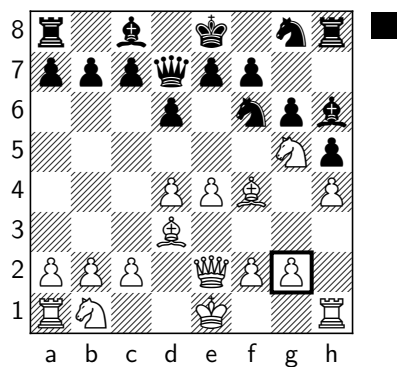
5 ♘f3 h5 6 ♖d2 ♗h6



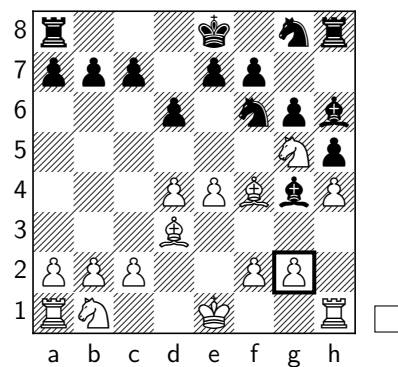
7 ♘g5 ♘df6



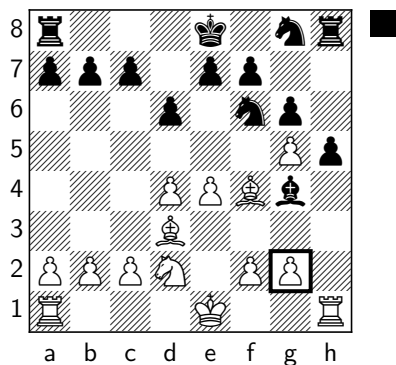
8 ♗d3 ♖d7 9 ♖e2



9... ♖g4 10 ♖xg4 ♗xg4

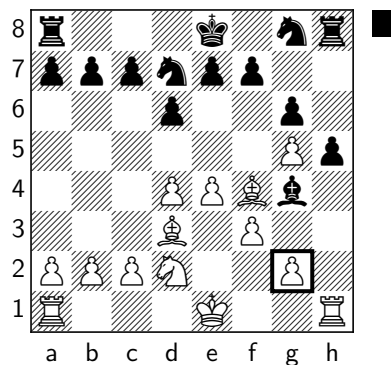


11 ♖d2 ♗xg5 12 h×g5

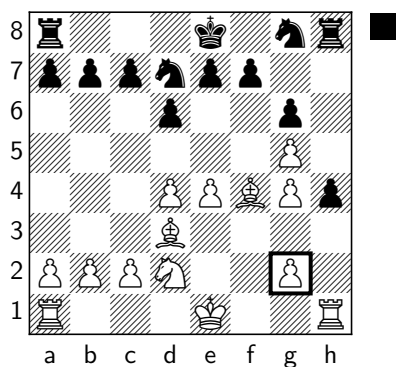


12... ♖d7 13 f3!?

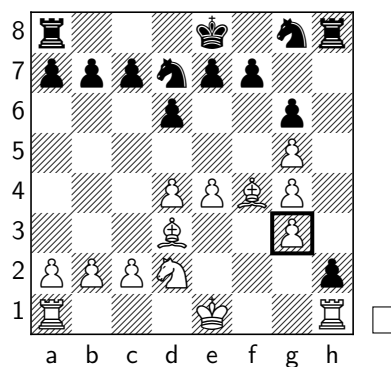
A risky move, but White must take chances.



13... h4 14 f×g4

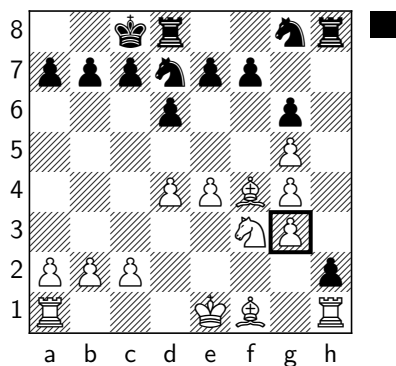


14... h3 15 g3 h2

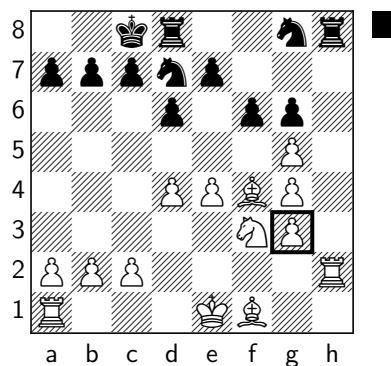


16 ♗f1 O-O-O 17 ♖f3?

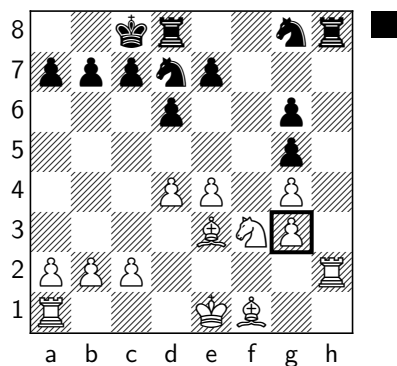
A big mistake. 17 ♖f2 and 18 ♖g2 and 19 ♗xh2 was safer.



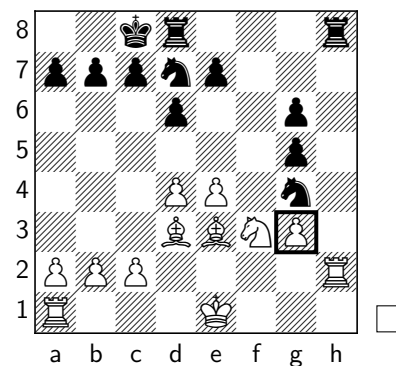
17... f6 18 ♗xh2



18...fxg5 19 ♖e3

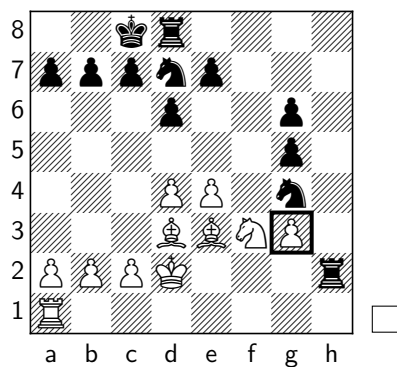


19... ♜gf6 20 ♖d3 ♜xg4

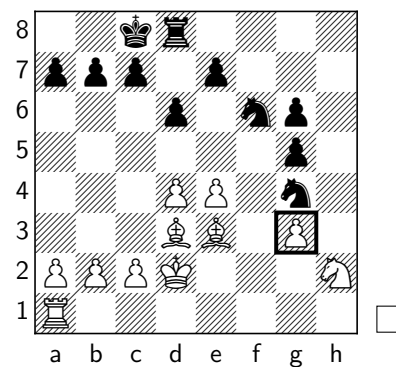


21 ♜d2 ♜xh2+

The kibitzers wanted 21... ♜xh2, but Black sees a win.



22 ♜xh2 ♜df6

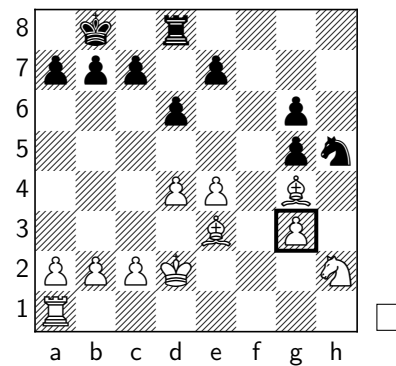
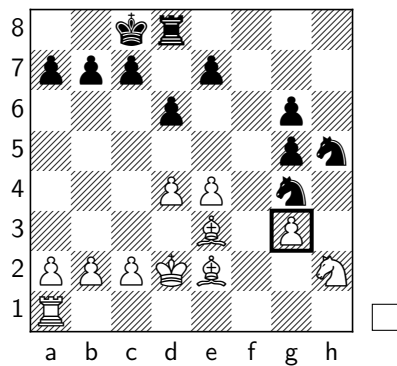


Black announces that 23... ♜h5 can't be stopped, so why slow down the win with 22... ♜xh2?

23 ♖e2 ♜h5?

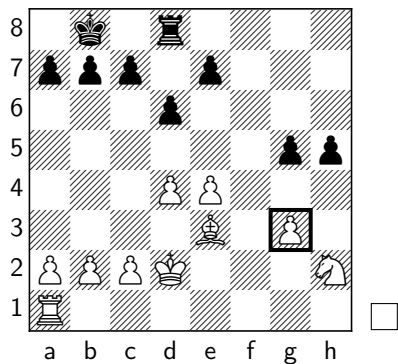
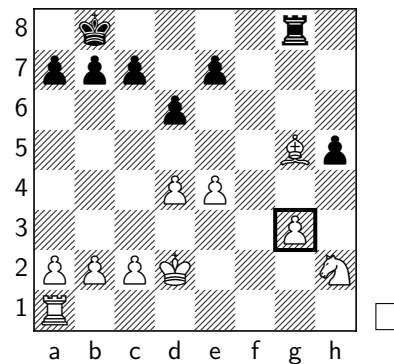
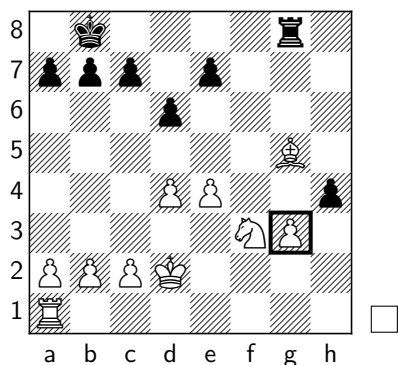
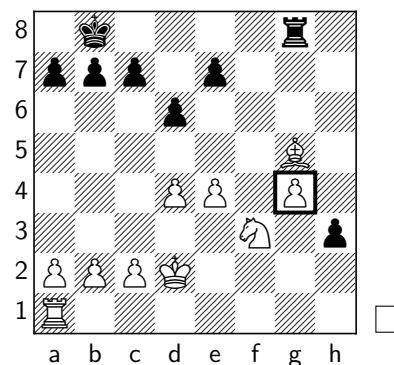
Black misses 23... ♜xh2+ by sheer momentum.

24 ♖xg4+ ♜b8



25 ♖xh5 g×h5

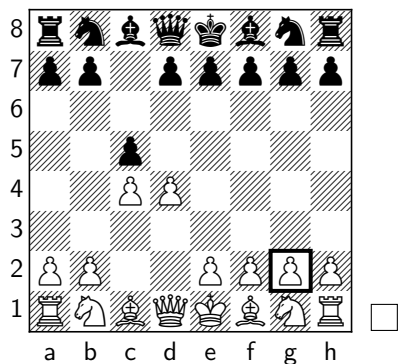
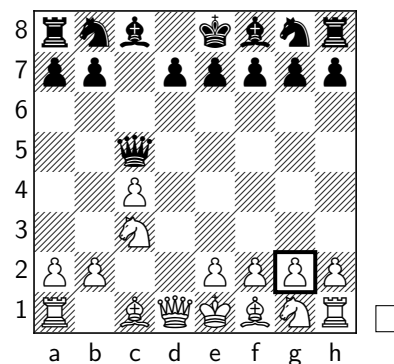
The rook and the pawns on g5 and h5 aren't enough to draw.

**26 ♖xg5 ♖g8****27 ♖f3 h4****28 g4 h3**

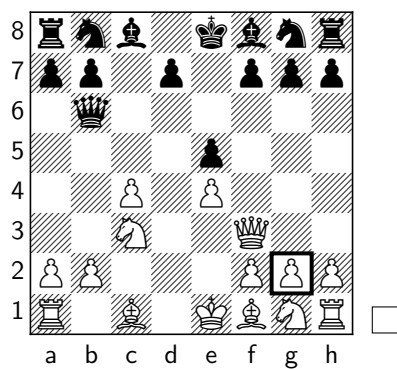
White now trades rooks or promotes a pawn. Black can only delay by opening files.

2.5 Game E: GS–PL, 9/6/96. Cappy on g2

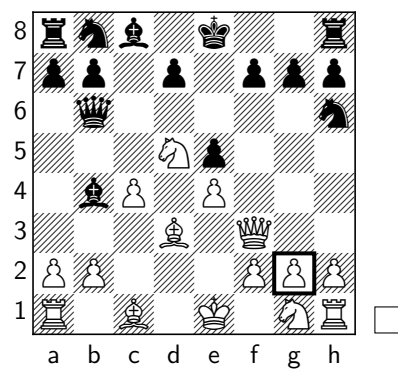
Black falls behind in development, and falls...

1 d4 2 c4 c5**3 dxc5 ♖a5+ 4 ♖c3 ♖xc5**

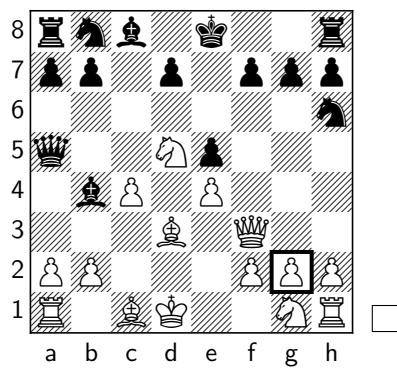
5 e4 ♖b6 6 ♖f3 e5



7 ♘d3 ♜h6 8 ♜d5 ♙b4+

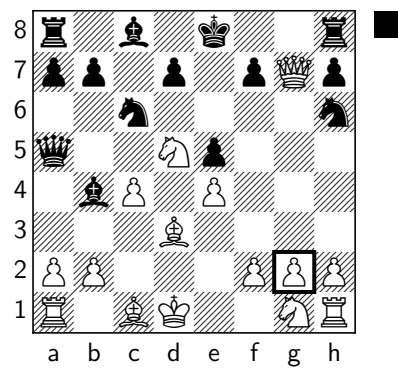


9 ♘d1 ♖a5

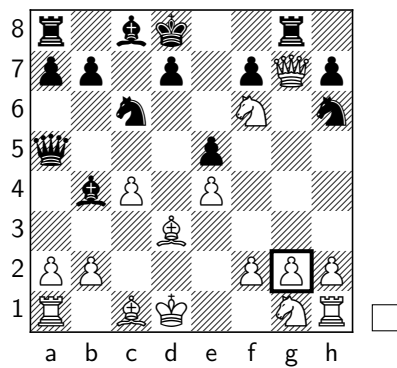


10 ♖g3 ♜c6 11 ♖xg7

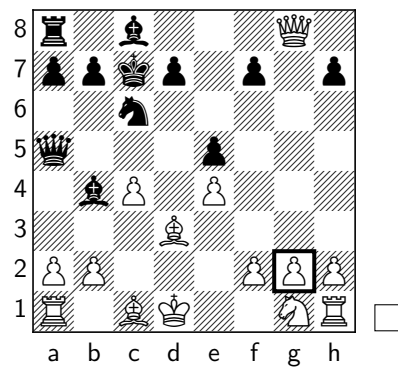
Now, it may already be a win for White.



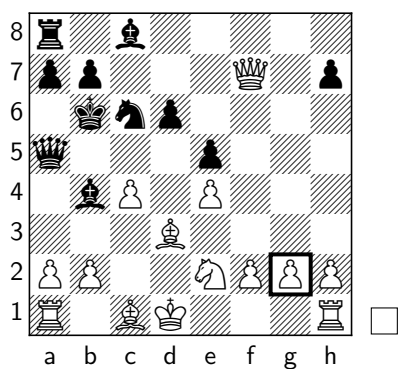
11... ♜g8 12 ♜f6+ ♘d8



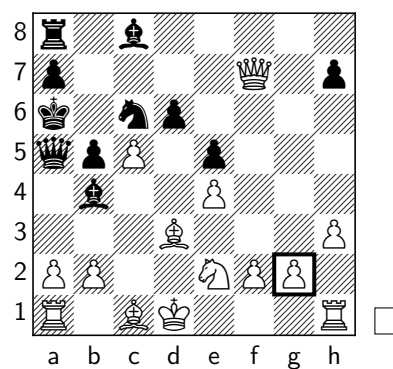
13 ♜xg8 ♜xg8 14 ♖xg8+ ♘c7



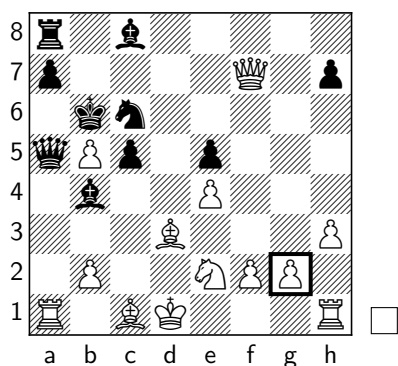
15 ♖xf7 ♜b6 16 ♞e2 d6



17 h3 ♜a6 18 c5 b5

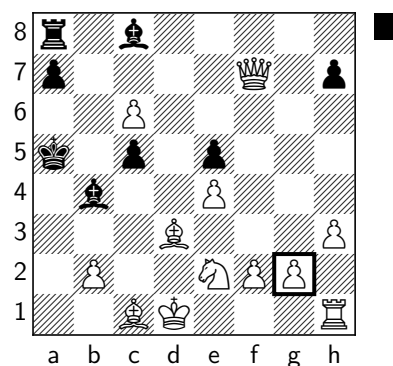


19 a4 dxc5 20 axb5+ ♜b6



21 ♖xa5 ♜xa5 22 bxc6

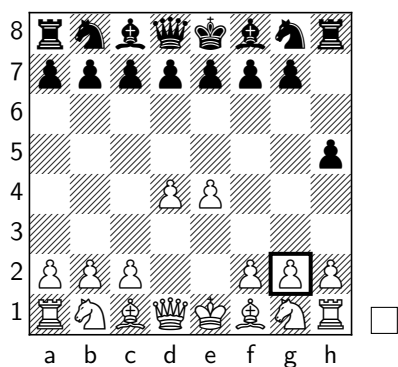
Black lost on time.



2.6 Game F: GS–DM, 9/26/96. Cappy on g2

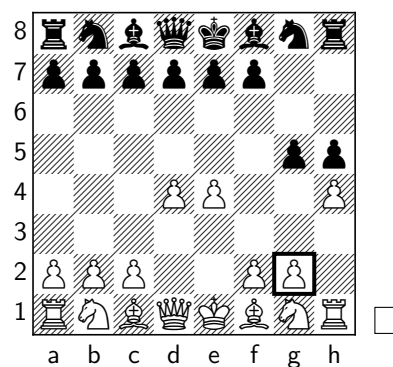
Black uses the mate defense for an (over-)extended period.

1 e4 2 d4 h5

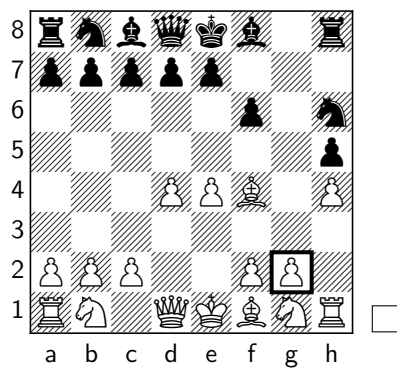


3 h4 g5

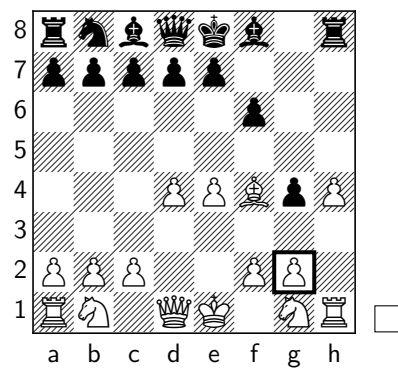
Black overplays opening the kingside.



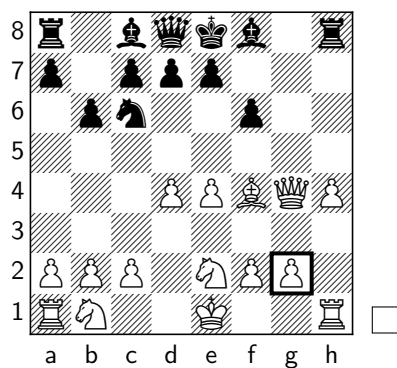
4 ♖xg5 f6 5 ♖f4 ♜h6



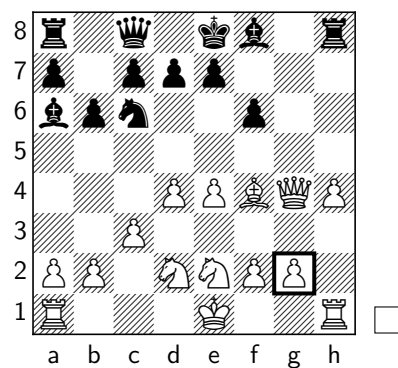
6 ♖e2 ♜g4 7 ♖xg4 h×g4



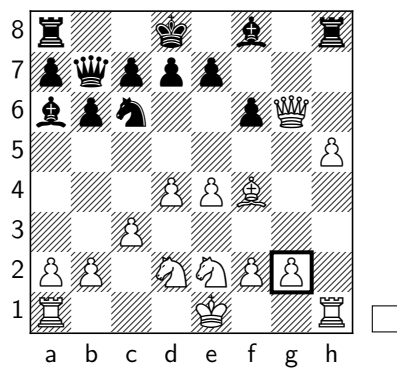
8 ♜xg4 ♜c6 9 ♜e2 b6



10 ♜d2 ♖a6 11 c3 ♜c8

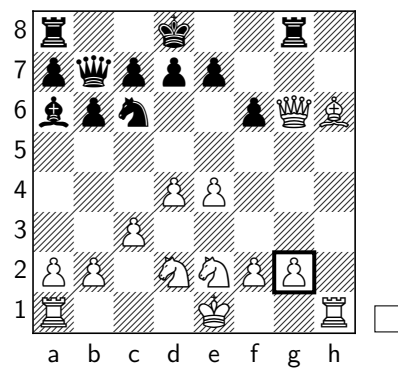


12 ♜g6+ ♔d8 13 h5 ♜b7

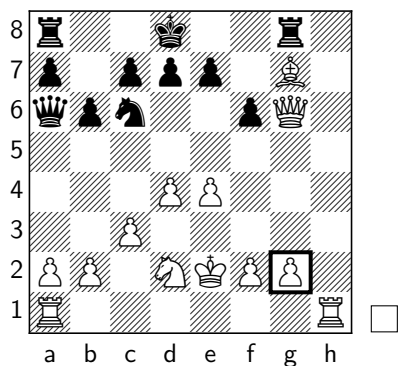


14 h6 ♖xh6 15 ♖xh6 ♜g8

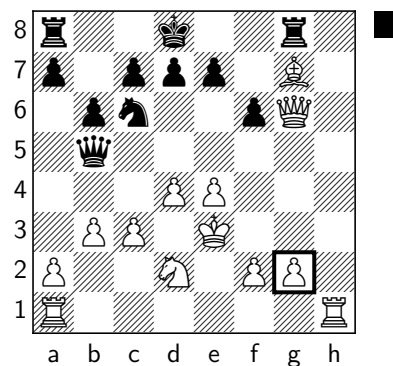
The rook is keeping the bishop and queen busy.



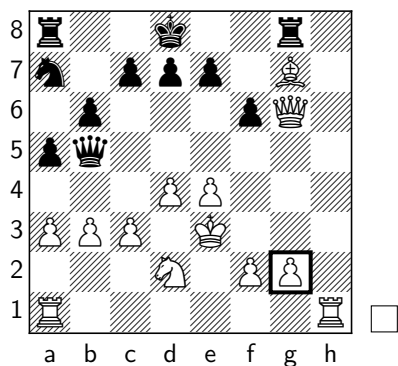
16 ♘g7 ♙xe2 17 ♔xe2 ♚a6+



18 ♙e3 ♚b5 19 b3

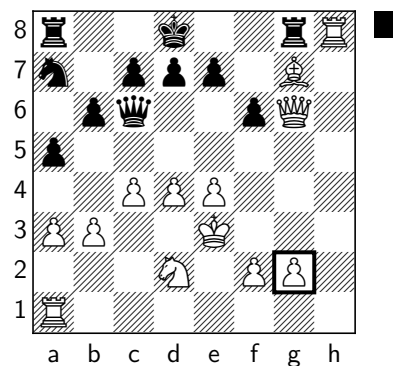


19... a5 20 a3 ♘a7

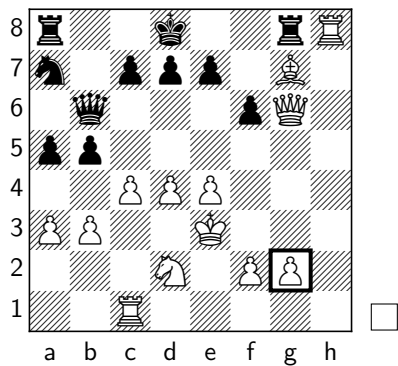


21 c4 ♚c6 22 ♖h8

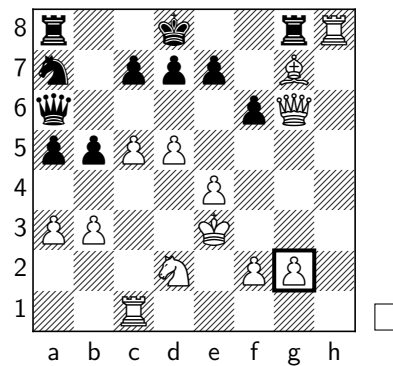
Now the queen is available.



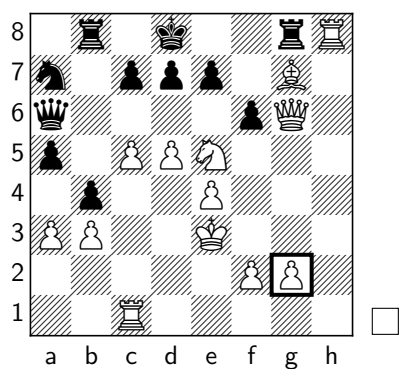
22... b5 23 ♖c1 ♚b6



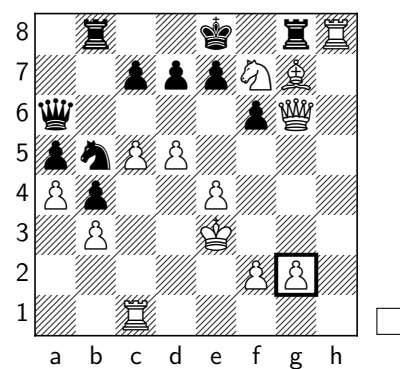
24 c5 ♚c6 25 d5 ♚a6



26 ♖f3 ♜b8 27 ♖e5 b4

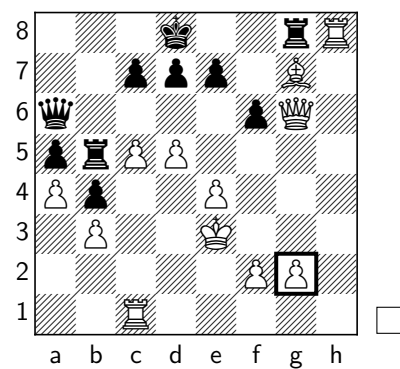
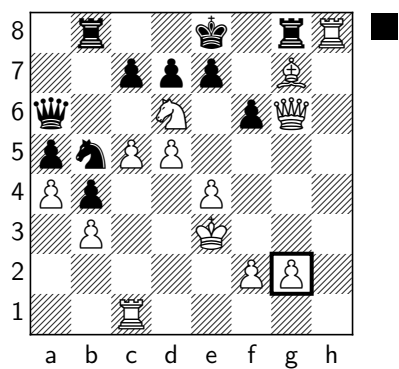


28 a4 ♖b5 29 ♖f7+ ♜e8



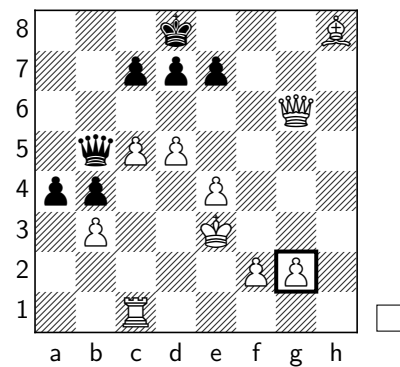
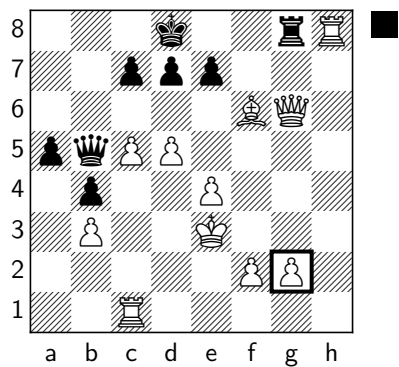
30 ♖d6+ Squeezing Black is more satisfying than the rook.

30... ♜d8 31 ♖xh5 ♜xh5

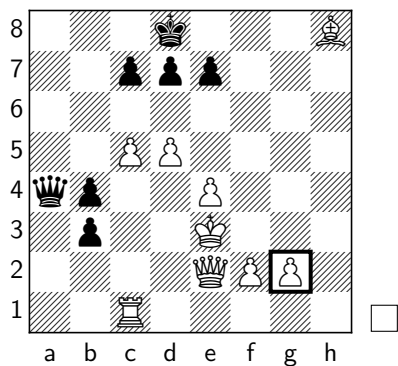


32 a×b5 ♜×b5 33 ♜f6 Typical maneuver for stopping the mate defense.

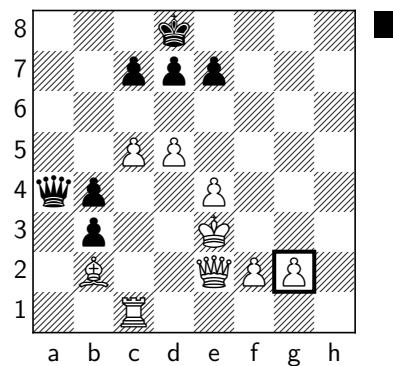
33... ♜xh8 34 ♜xh8 a4



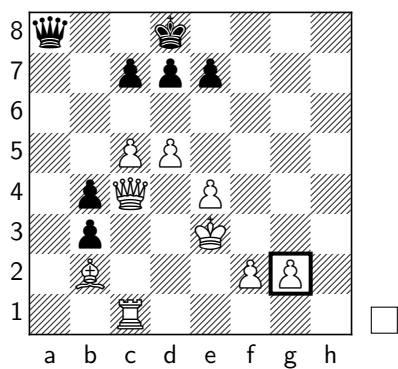
35 ♖h5 axb3 36 ♖e2 ♖a4



37 ♜b2? Oops. 37 ♖a1 won quickly.

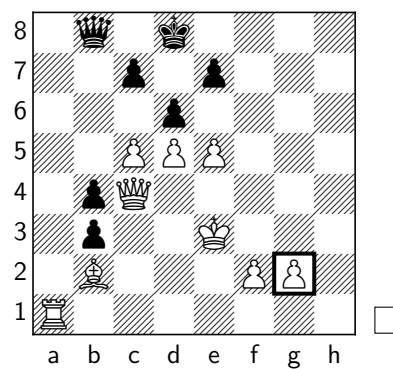


37... ♖a7 38 ♖c4 ♖a8

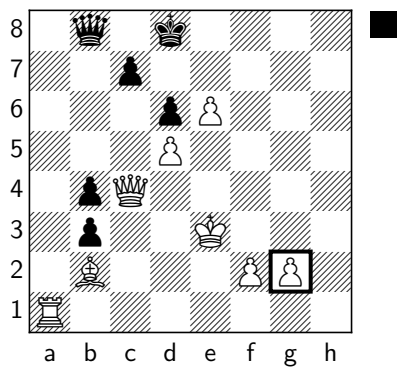


39 ♖a1 ♖b8 40 e5 d6

At last Black must abandon the mate defense.

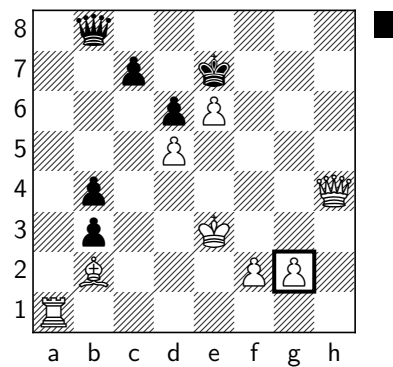


41 cxd6 exd6 42 e6



42... ♔e7 43 ♖h4+

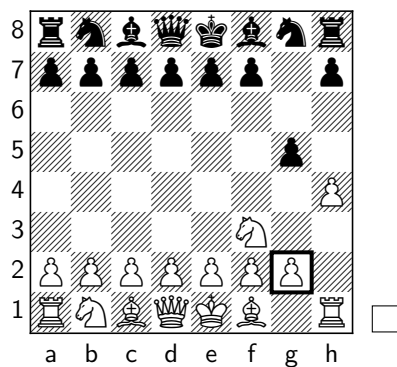
Black's queen is lost; White wins.



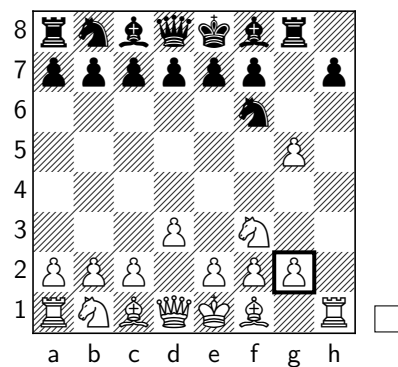
2.7 Game G: GS-AR, 9/30/97. Cappy on g2

Black gets overly frisky with his king, and a swinging knight mops up.

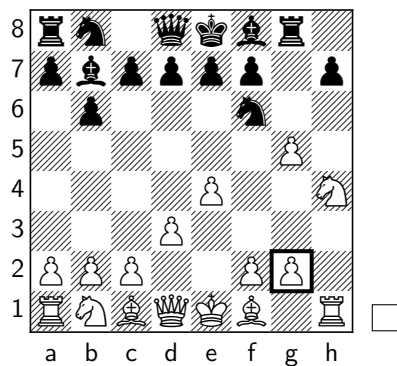
1 ♖f3 2 h4 g5



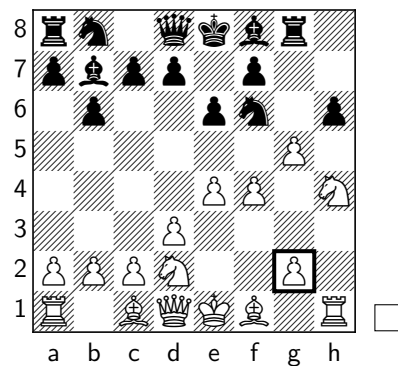
3 h×g5 ♖f6 4 d3 ♜g8



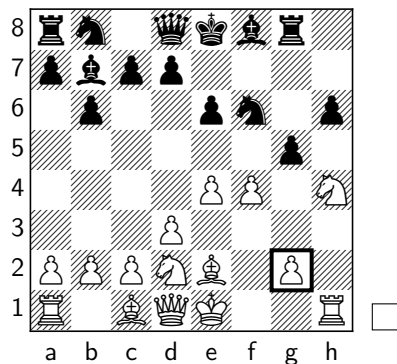
5 ♖h4 b6 6 e4 ♙b7



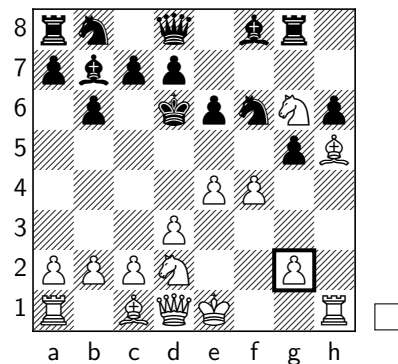
7 f4 e6 8 ♖d2 h6



9 g6 f×g6 10 ♙e2 g5

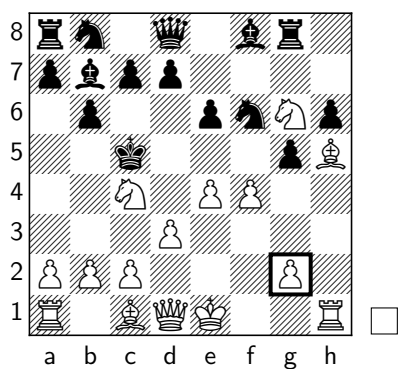


11 ♙h5+ ♜e7 12 ♖g6 ♜d6

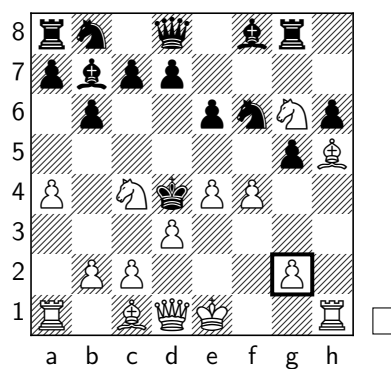


Black missed a good shot: 12... ♜f7! after which Black finds a haven at h8.

13 ♖c4+ ♜c5

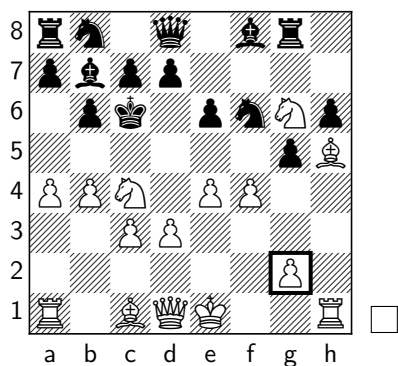


14 a4 ♜d4

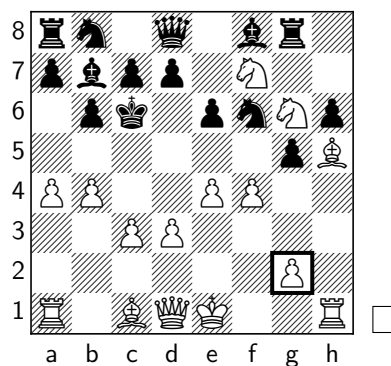


If 14... ♖xe4 15 ♙e3+ ♜b4 16 c3+ ♖xc3 17 bxc3+ ♜xc3 18 ♖c1+ ♜b4 19 ♙d2+ ♜c5 20 ♖ce5+ ♜d4 21 ♙e3+ ♜xe3 22 ♖e2+ ♜d4 23 ♖f2+ ♜d5 24 ♙f3+ ♜d6 25 ♙xb7 wins.

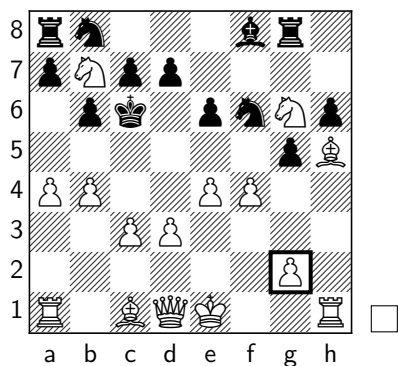
15 c3+ ♜c5 16 b4+ ♜c6



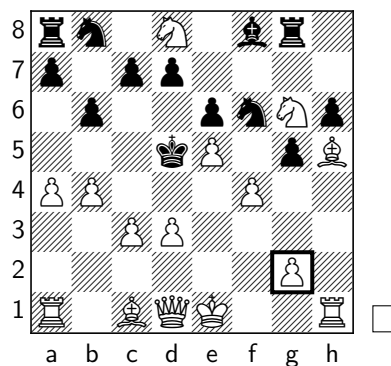
17 ♖ce5+ ♜d6 18 ♖f7+ ♜c6



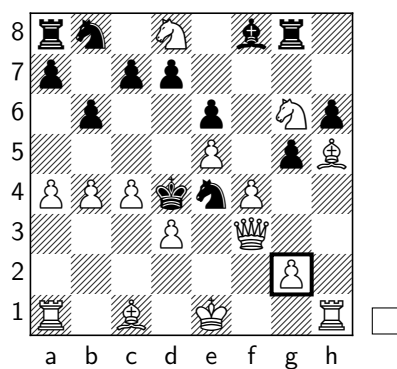
19 ♖xd8+ ♜d6 20 ♖xb7+ ♜c6



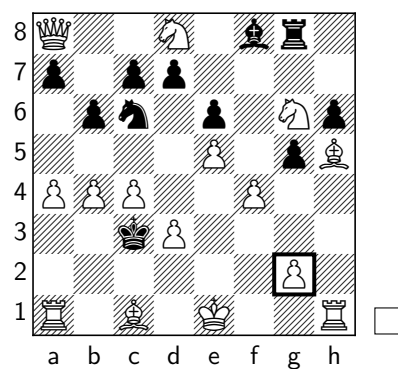
21 ♖d8+ ♜d6 22 e5+ ♜d5



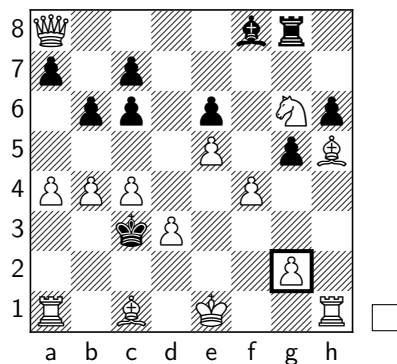
23 ♖f3+ ♜e4 24 c4+ ♝d4



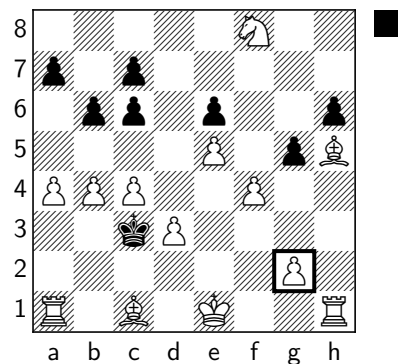
25 ♜xe4+ ♝c3 26 ♜xa8 ♜c6



27 ♜xc6 dxc6



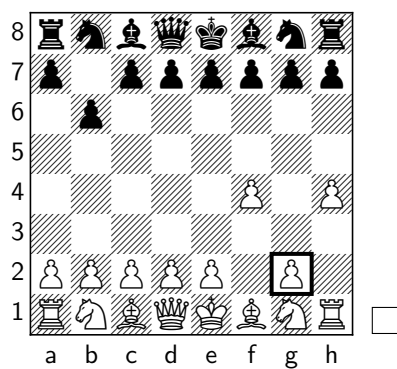
28 ♜xf8 ♜xf8 29 ♜xf8 mop.



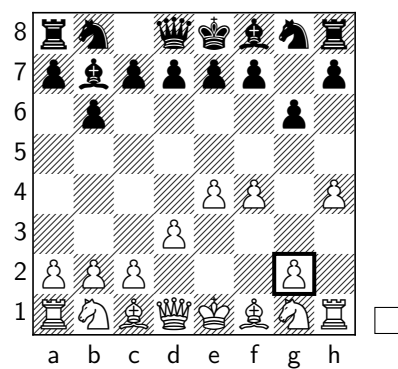
2.8 Game H: GS-AR, 9/10/99. Cappy on g2

Black is late in opening the g-file.

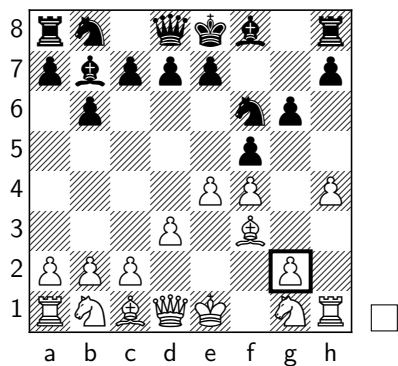
1 f4 2 h4 b6



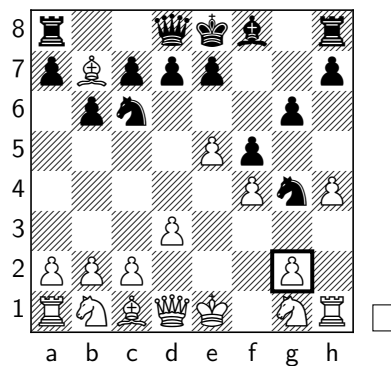
3 e4 ♗b7 4 d3 g6



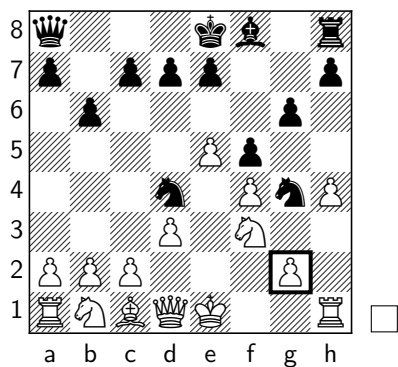
5 ♖e2 f5 6 ♖f3 ♘f6



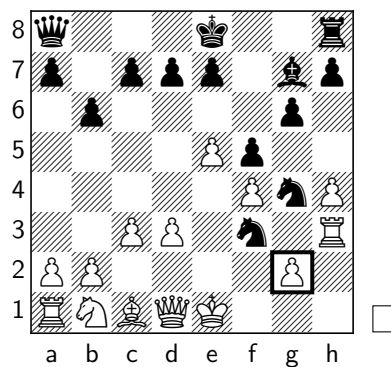
7 e5 ♘g4 8 ♖xb7 ♘c6



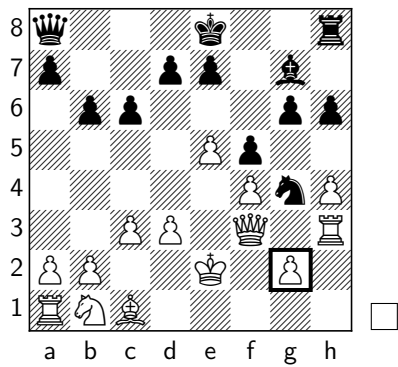
9 ♖xa8 ♜xa8 10 ♘f3 ♘d4



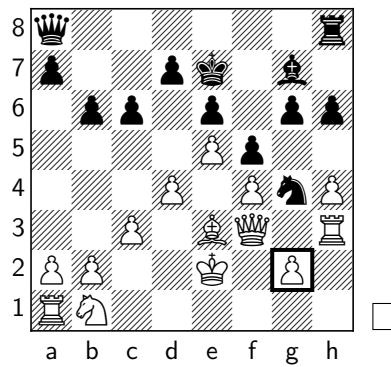
11 ♜h3 ♖g7 12 c3 ♘xf3



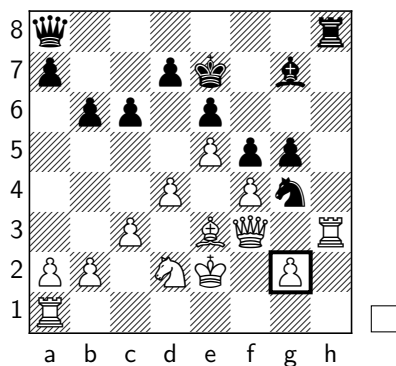
13 ♜xf3 c6 14 ♖e2 h6



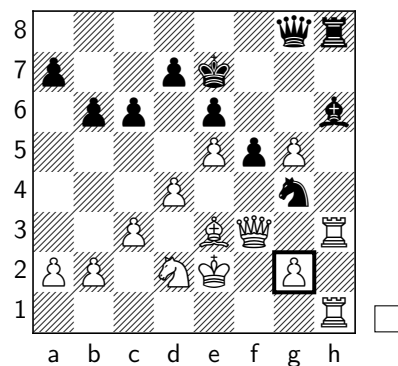
15 ♖e3 e6 16 d4 ♖e7



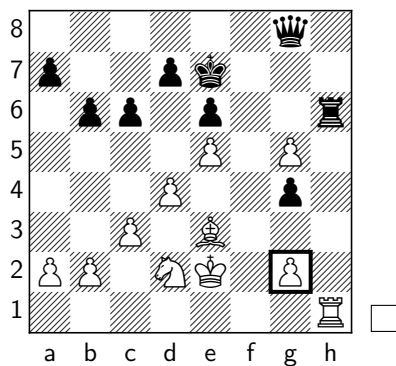
17 ♖d2 g5 18 h×g5 h×g5



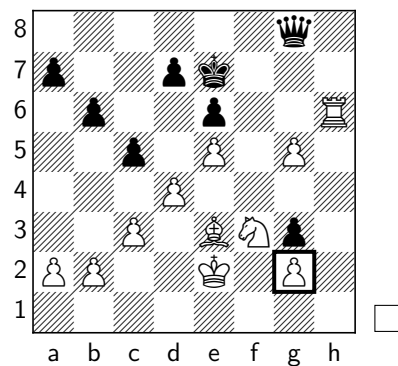
19 f×g5 ♖g8 20 ♜ah1 ♙h6



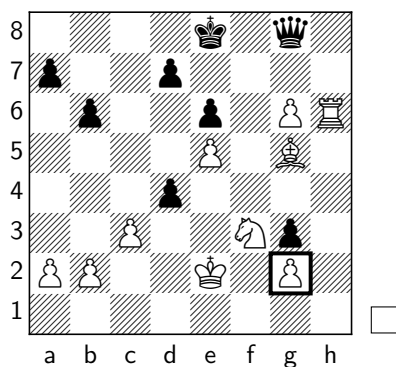
21 ♖×g4 f×g4 22 ♜×h6 ♜×h6



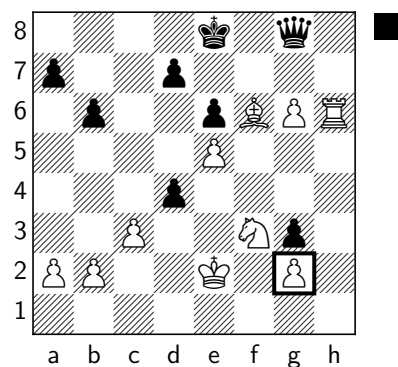
23 ♜×h6 g3 24 ♖f3 c5



25 g6 cxd4 26 ♙g5+ ♔e8



27 ♙f6 White wins.

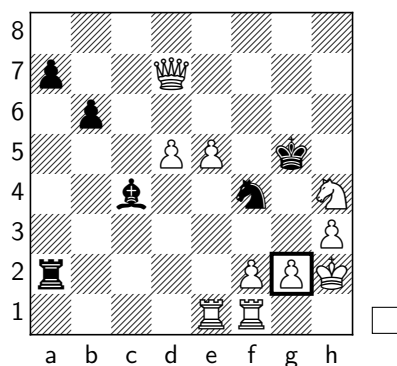


Until the last move, the game was still on the line. If carelessly 27 cxd4 instead, 27... d5 draws for Black. E.g., 27 cxd4 d5 28 exd6 ♖d7 29 ♙f4 ♖f8 30 ♜h7+ ♖c6 31 ♙×g3 ♖f5 32 ♜c7+ ♖b5 32 g7 ♖e4+ forces a draw. (*Editor's note:* On move 29, White has a better move; 27 cxd4 d5 28 exd6 ♖d7 29 ♖e5+ ♖×d6 30 ♜h8! ♖g7 31 ♜d8+ ♖c7 32 ♜d7+ wins the queen, or if 29... ♖c8 30 d7+ and White promotes. The original manuscript contained some further analysis, which we have omitted because it is no longer relevant in light of this variation.)

Chapter 3

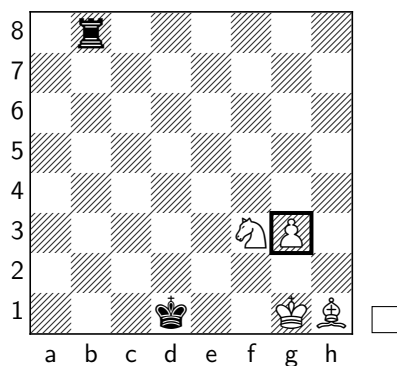
Miscellany

3.1 Can White Mate Quickly?

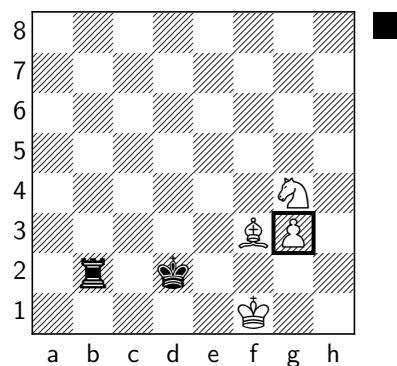


When time is running out, White needs a mate, not a mop. A quick mate follows **1 ♖e7+ ♜h6 2 ♘f5+**: (a) **2... ♜h5 3 ♗h7+ ♜g5 4 ♗h6+** or (b) **2... ♜g6 3 ♗g7+**. If **1... ♜h5 2 ♗f7+** and (a) **2... ♜h6 3 ♘f5+ ♜g5 4 ♗f6+** or (b) **2... ♜xh4 3 ♗f6+** or (c) **2... ♘g6 3 ♗xg6+**.

3.2 The Curious Case of the Cloistered Cappy



Position F1

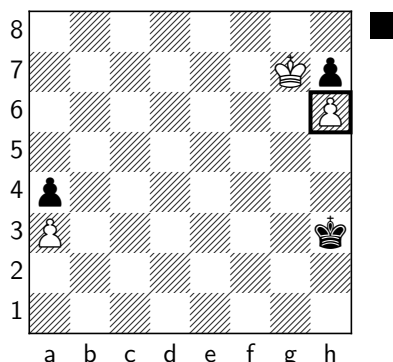


Position F2

It might seem that White is lost in Position F1, with so many lines open and the cappy moved. Yet **1 ♘h2** draws. After **1... ♜e1 2 ♙f3 ♜b3 3 ♜g2 ♜b2+ 4 ♜g1 ♜f2 5 ♙g4 ♜f8 6 ♜g2 ♜g8 7 ♘f3+**

♖e2 8 ♜h2, etc. And 1... ♖e2 2 ♜f3+ ♖e3 3 ♖g2 is no better. After 1... ♜g8 2 ♜f3+ ♖d2 3 ♜g4 ♜b8 4 ♖f2 ♜b2 5 ♖f1 we arrive at the titled CCCC position in Position F2. Not only is the cappy cloistered, but so is the bishop: neither has to move again.

3.3 Pawn Ending

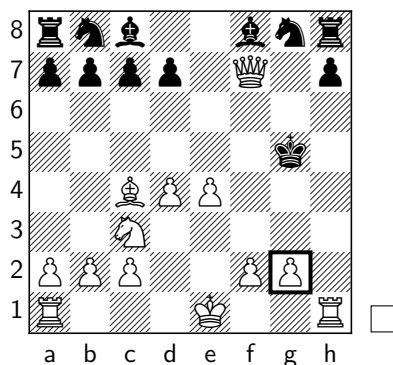


Black to move wins, but not with 1... ♖g3 2 ♖xh7 ♖f3 3 ♖g6 ♖e3 4 ♖f5 ♖d3 5 ♖f4 ♖c3 6 ♖e3 ♖b3 7 ♖d3 ♖xa3 8 ♖c3 ♖a2 9 ♖c2 a3 10 h7, which only draws. The win is to force h7 before capturing on a3: 1... ♖g4 2 ♖xh7 ♖f5 3 ♖g7 ♖g5 4 ♖h7 ♖f6 5 ♖g8 ♖g6 6 h7; then White has no tempo move after Black plays ... a3, so loses.

White to move can draw only if he gains the opposition with 1 ♖xh7 ♖h4 2 ♖h8 ♖g4 3 ♖g8 ♖f4 4 ♖f8 ♖e4 and then switches tactics to box in the king: 5 ♖g7! ♖d4 6 ♖f6 ♖c4 7 ♖e5 ♖b3 8 ♖d4, box. Note that 2 ♖h8 was mandatory, else Black takes the opposition. Forcing h7 costs the opposition, so this position, but with the kingside shifted down one square, is a draw.

3.4 Damiano Defence

With the cappy on g2, after the opening 1 e4 2 ♜c3 e5 3 ♜f3 f6 4 ♜xe5 fxe5 5 ♜h5+ ♖e7 6 ♜xe5+ ♖f7 7 ♜c4+ ♖g6 8 ♜f5+ ♖h6 9 d4+ g5 10 h4 ♖g7 11 ♜f7+ ♖h6 12 ♜xg5+ ♜xg5 13 h4xg5+ ♜xg5 we arrive at the following position:



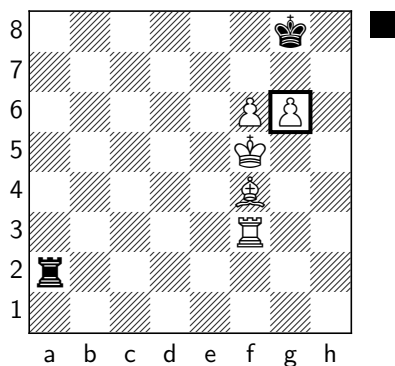
White has many ways to win, e.g., 14 ♜h5+ ♖g4 15 ♜h4+ ♖xh4 (or 15... ♖g5 16 ♜f5+ ♖xh4 17 g3#) 16 ♜f5 ♜d6 (mate in 6); or 14 f4+ ♖g4 15 ♜f5+ ♖g3 16 O-O followed by 17 ♜f3(+) and 18 g3# (mate in 5); or 14 ♜h5+ ♖g4 15 ♜g6+! h4xg6 16 ♜e2+ ♖f4 17 g3# (mate in 4).

With the cappy on f2 instead of g2, White wins with 14 ♖h5+ ♜g4 15 ♘e2 ♙b4+ 16 ♜f1 and 17 f3# (mate in 4).

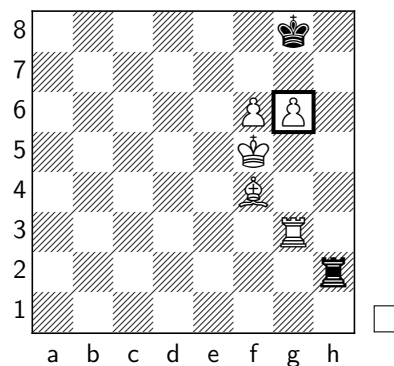
Other tempting lines allow Black to “escape.” After 14 f4+ ♜g4 15 ♜f2 ♘f6 16 ♙e2+ ♜xf4 17 ♙h5 ♙g8, Black escapes. After 14 e5 h5, Black escapes.

3.5 Almost a Win for White

Black is to move in Position G1 below. It is easy to see that if Black can trade his rook for the pawn, the game is drawn; if the cappy were on the fifth rank, White could mate, but it has been forced to the sixth rank for safety. After 1... ♙g2 2 ♙g3 ♙h2, we reach Position G2 below. How is White to continue? Black threatens to move his rook to h7–g7–g6.



Position G1

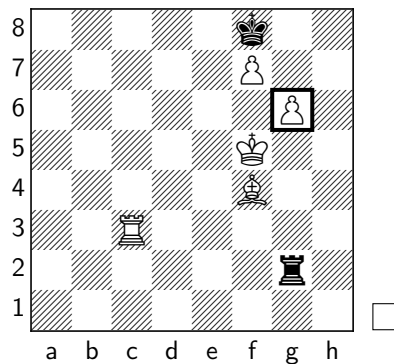
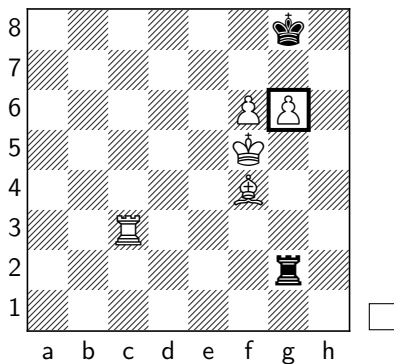


Position G2

After 3 ♙c3! ♙h7 4 ♙c7 ♙h5+, we reach Position G3 (shown later). To see how White can lose, consider instead the following.

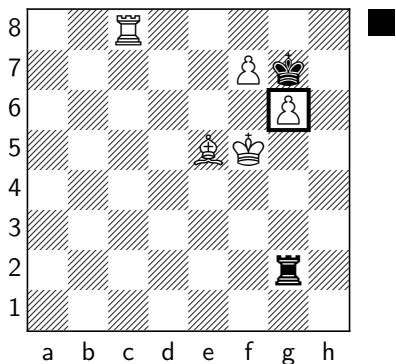
3 ♙c3 ♙g2

4 f7+ ♜f8

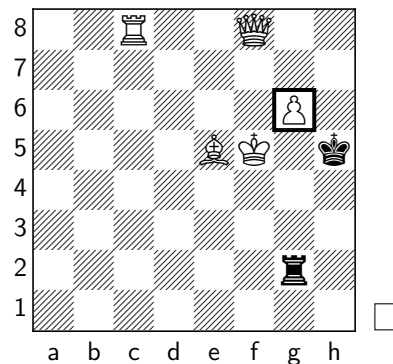


If instead 4... ♜h8 then 5 ♙h3+ ♜g7 6 ♙e5+ ♜f8 7 ♙h8+ ♜e7 8 f8♙+ wins for White.

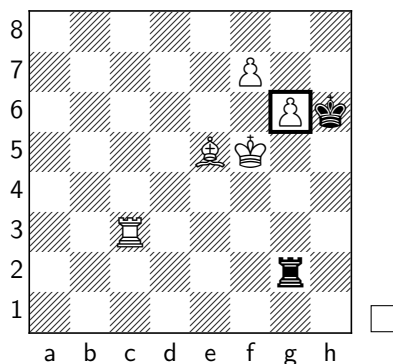
5 ♖c8+? ♜g7 6 ♙e5+



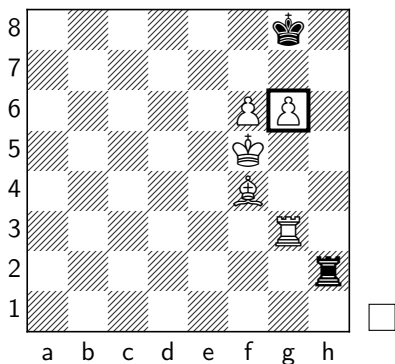
6... ♜h6 7 f8♞+ ♜h5 and Black wins.



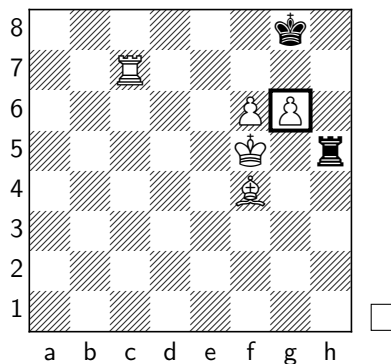
If instead 4... ♜g7 (or 4... ♜f8 5 ♙d6+ ♜g7) 5 ♙e5+ ♜h6 (5... ♜f8 6 ♖c8+ ♜e7 7 f8♞+ ♜d7 8 ♞d6+ and White wins), then we arrive at the position below.



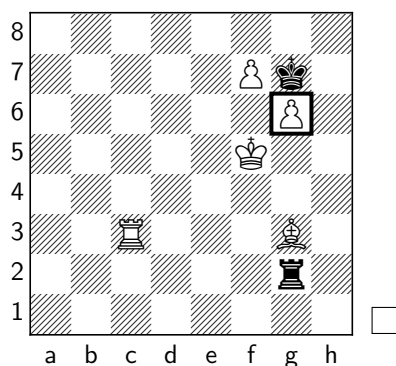
The obvious 6 f8♞+ only draws(!): 6... ♜h5 7 ♙g3 ♞f2+ or 7 ♞g3 ♞xg3. Tries for White are 6 ♙g3 ♜g7 (Position G4) and 6 ♞g3 ♞f2+ forcing 7 ♙f4+ ♜g7 (Position G5).



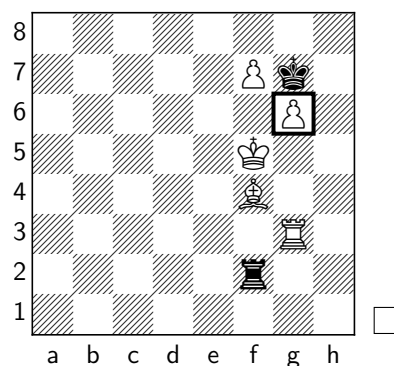
Position G2



Position G3

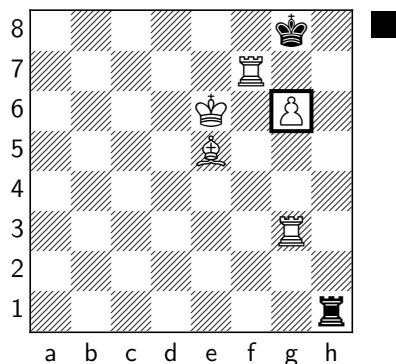


Position G4

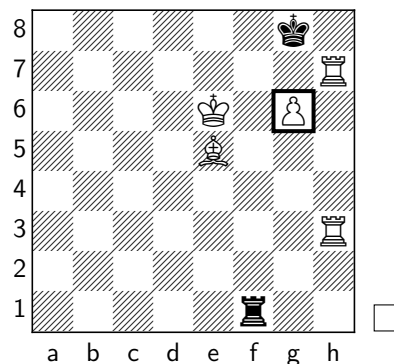


Position G5

What is the value of Positions G2–G5? Subsequent positions can be complex. Starting from Position G2, 3 f7+ ♖f8 4 ♖e6 ♜h7? (4... ♜h6 draws) 5 ♔d6+ ♖g7 6 f8♜ ♜h6 7 ♜f7+ ♖g8 draws (not 7... ♖h8 8 ♔e5+ ♖g8 9 ♜g7+ ♖f8 10 ♜f3+ ♖e8 11 ♜e7+ ♖d8 12 ♜d3+ ♖c8 13 ♜c7+ ♖b8 14 ♜h7+ when White wins with the swinging rook). If instead of 6... ♜h6 Black tries 6... ♜h1, then 7 ♜f7+ ♖g8 8 ♔e5 yields Position G6 below.



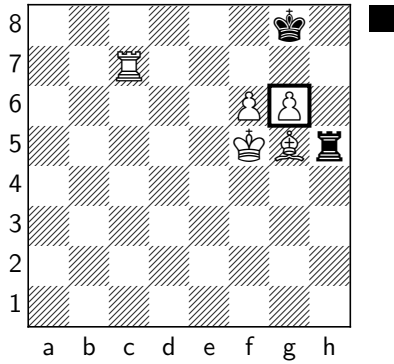
Position G6



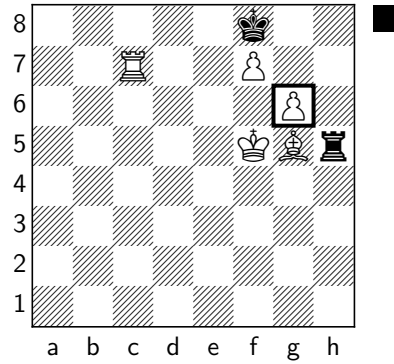
Position G7

Black must vacate the h-file as 9 ♜g7+ ♖h8 10 ♜h7+ wins the rook, and 9 ♜g7+ ♖f8 10 ♜f3+ yields the swinging rook as above. 8... ♜e1 sets the trap 9 ♜h3? ♜xe5+ 10 ♖e5 stalemate. Then 9 ♜g7+ ♖h8 10 ♜h7+ ♖g8 11 ♜gh3 threatens the swinging rook, but 11... ♜f1 (Position G7) seems to foil that plan.

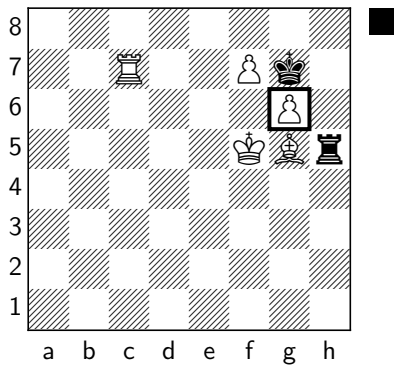
Starting from Position G3, 5 ♔g5 ♜h1 almost loses to 6 f7+. Note 6... ♖g7 7 ♔f6+ ♖h6 (7... ♖f8? 8 g7♯) 8 f8♜+ ♖h5 9 ♜e8+ wins for White. (If the rook on c7 were on c8, then after 9 ♜e8+ ♜f1 10 ♖e6 ♜e1 11 ♔e5 ♜g1! Black draws.) Or 6... ♖f8 7 ♔e7+ ♖g7 8 ♔f6+ ditto. But 6... ♖h8! 7 ♜c8+ ♖f7 8 ♔e5+, etc. With White to move after 5 ♔g5 ♖f8 or 5 ♔g5 ♖h8, can White force a win with the bishop pinned?



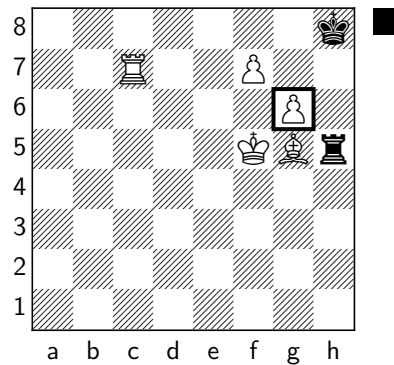
Position G8



Position G9



Position G10



Position G11

The question is with Black to move, from which positions G8–G11 can Black safely move the rook? From G8 or G9, none; from G10, $1\dots \text{R}h7$; from G11, $1\dots \text{R}h1$, $1\dots \text{R}h2$, $1\dots \text{R}h3$.

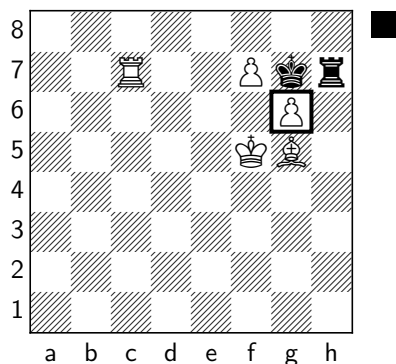
G8: If $1\dots \text{R}h8$ 2 f7+ $\text{Q}g7$ 3 Qf6+ $\text{Q}f8$ 4 g7\# . If $1\dots \text{R}h1$ 2 f7+ $\text{Q}f8$ 3 Qe7+ $\text{Q}g7$ 4 Qf6+ $\text{Q}h3$ ($4\dots \text{Q}f8$ 5 g7\#) 5 f8\# 6 Qe8 7 Qc1+ 8 Qe6 9 Qe1+ 10 Qe5 11 Qg1 12 Qh7+ and White wins. Note that 3 Qc8+ instead of 3 Qe7+ only draws.

G9: If $1\dots \text{R}h8$ then 2 Qc8+ wins. If $1\dots \text{R}h1$ then see G8 above. If $1\dots \text{R}h7$ 2 Qc8+ $\text{Q}g7$ 3 Qf6+ $\text{Q}h6$ 4 Qh8 5 Qh5 6 Qg7 and White wins.

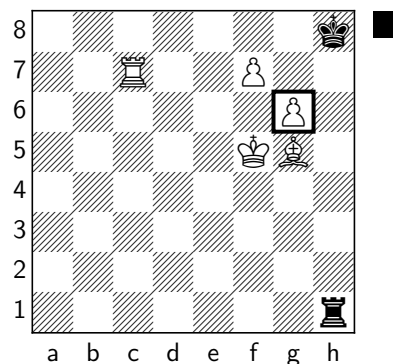
G10: If $1\dots \text{R}h8$ or $1\dots \text{R}h1$ then see G8 above. If $1\dots \text{R}h7$ then we obtain Position G12 below.

G11: If $1\dots \text{R}h7$ 2 Qc8+ $\text{Q}g7$ 3 Qf6+ then see G8 above. If $1\dots \text{R}h6$ then 2 Qc8+ wins. If $1\dots \text{R}h1$ then we obtain Position G13 below.

There appears to be no win for White from the initial position G1.

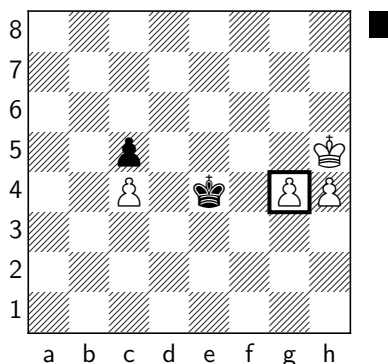


Position G12



Position G13

3.6 Can Black Win?



The position above presents unusual complications. Black to move can draw with **1... ♖d4 2 ♜g6 ♜xc4 3 h5 ♜d3 4 h6 c4 5 h7 c3 6 h8 ♜c2**, since later, with the Black king on b1, ♜b3+ is answered by ... ♖a1, a textbook maneuver. (*Editor's note:* 7 ♜h6 threatening 8 ♜c1 should win.) But can Black win?

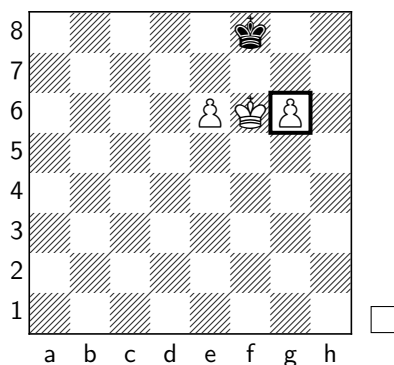
Instead, Black can try **1... ♜f4 2 g5 ♜f5**. Now White must lose the h-pawn or the cappy: **3 ♜h6 ♜g4** and if **4 h5 ♜f5 5 g6 ♜f6 6 ♜h7 ♜g5 7 h6 ♜f6 8 g7 ♜f7 9 ♜h8 ♜g6 10 h7 ♜f7** then Black wins. But White can draw if at move 4 he abandons the h-pawn: **4 ♜g6 ♜xh4 5 ♜f5 ♜g3 6 g6!** Either **6... ♜f3 7 g7** or **6... ♜h4 7 ♜f4** or **6... ♜h3 7 ♜g5** is a draw. White has just enough cappy moves left to buy the opposition. If the c-pawns were on c5 and c6 then White could “spend” g7 early and draw with **3 g6 ♜f4 4 g7 ♜f5 5 ♜h6 ♜g4 6 ♜g6 ♜h4 7 ♜f6!** (if **7... ♜h5 8 ♜f5** and if **7... ♜g4 8 ♜g6**) as he seizes triangular opposition.

The Black try **1... ♜f4 2 g5 ♜g3** only draws after **3 ♜g6 ♜xh4 4 ♜f5 ♜g3 5 g6** as above. But note that if the Kingside position is advanced one rank up the board, then the same maneuver wins for Black: **1... ♜f5 2 g6 ♜g4 3 ♜g7 ♜xh5 4 ♜f6 ♜g4 5 g7 ♜f4** and Black, having the opposition, wins White's pawn no matter where on the c-file it is blockaded.

3.7 Pawn + Cappy

When does a pawn plus the cappy win? The only cases of interest are Cf–h and Pb–g, as White can't mate with Ce or promote with Pa or Ph. Let the cappy and the pawn be on rank i , $1 < i < 7$, separated by j files ($j = 0$ was P6 in Section 1.4). Let the kings be in opposition, between the C and P on ranks $i - 1$ and $i + 1$ with Black to move. Aside from P6, the only cases which win are $j = 1$, $i < 6$ or $j = 2$ or $j = 3$, $i = 6$.

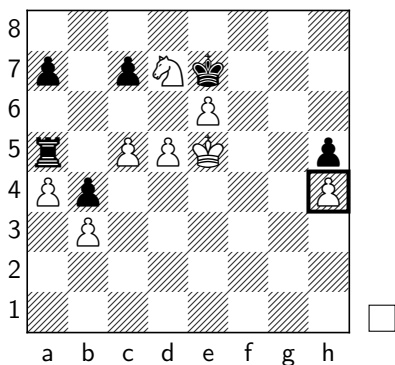
The surprises are: White to move doesn't help, and $j = 3$, $i = 5$ is a draw. The case $j = 1$, $i = 6$ is a draw as the position below is a draw with White to move; e.g. 1 ♔f5 ♜e7 2 ♜e5 ♜e8!, etc.



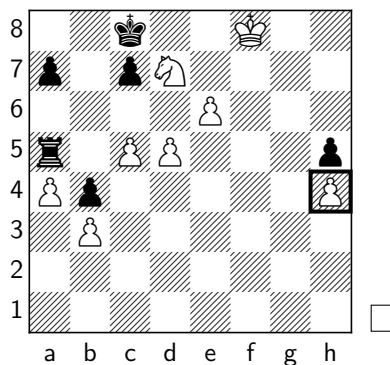
The case $j = 3$, $i = 6$ is a win for White as Black must approach the P from the 8th, and White can select the tempo, and so promote without moving the cappy.

3.8 When Queen vs. Rook May Not Draw

Consider Position H1 below, which is a win for White. Black's rook is hopelessly out of place. With his king on e7 or d8, 1... ♖a6 loses to 2 ♘b8. The quick win is 1 ♜f5 ♜d8 2 ♜f6 ♜e8 3 ♜g6 ♜e7 4 ♜g7 ♜d8 5 ♜f8 ♜c8, leading to Position H2 below.



Position H1

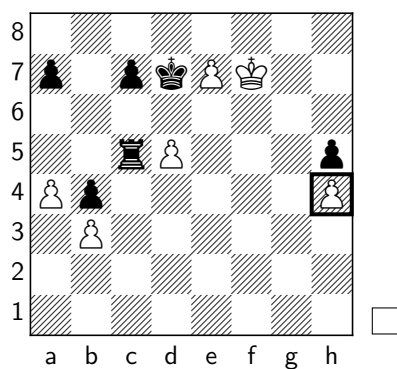


Position H2

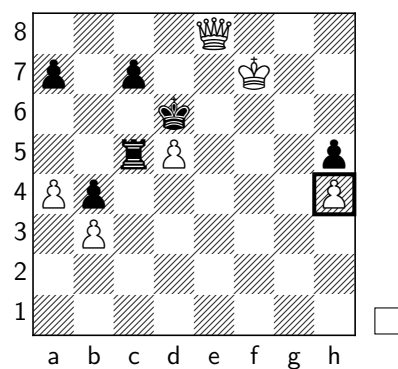
White now wins with 6 ♘e5 ♖xc5 7 e7 ♖xd5 8 e8♔+ ♖d8 9 ♜e7 ♖xe8+ 10 ♜xe8. Then the White king and knight win the a, b, c pawns and White promotes a pawn.

It might seem that 3 e7 ♜xd7 4 ♜f7 was a shorter route, but 4... ♖xc5 may be a win for Black!

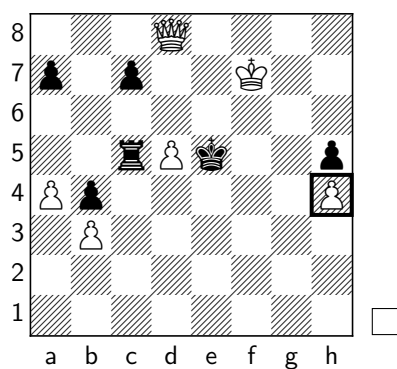
4 ♔f7 ♖xc5



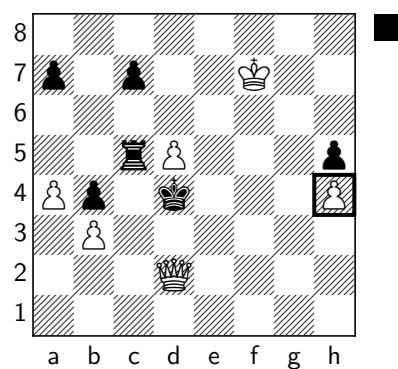
5 e8♔+ ♔d6



6 ♔d8+ ♚e5

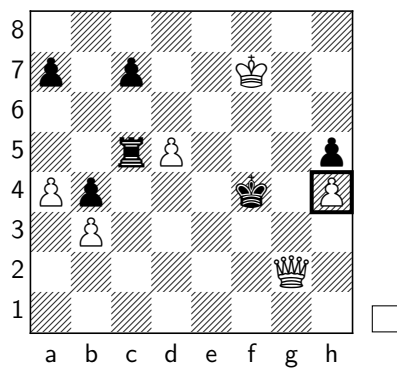


7 ♔g5+ ♚d4 8 ♔d2+

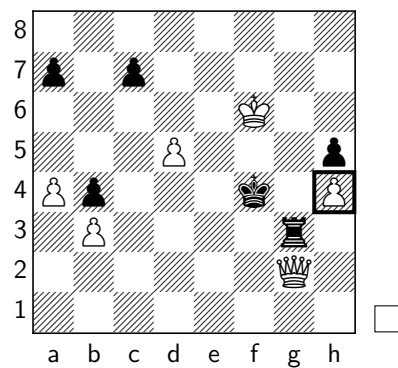


Better for White is 8 ♖e6, which probably draws. But 8... ♞c3 still presents problems as the White pawns are weak.

8... ♔e4 9 ♚g2+ ♕f4

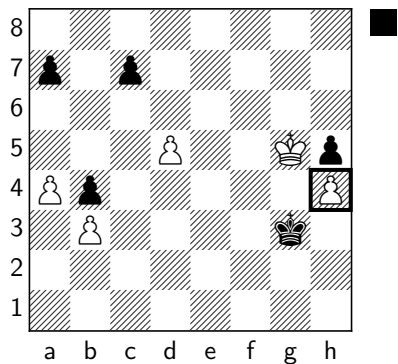


10 ♔e6 ♖c3 11 ♔f6 ♜g3

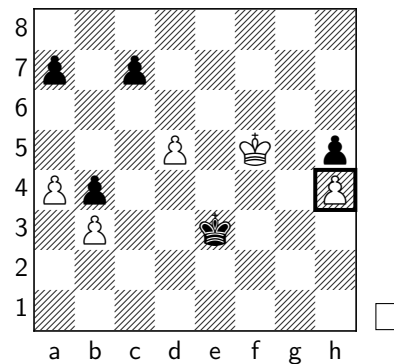


If now 12 ♖h1 then 12... ♜g4 and White does not have a perpetual check.

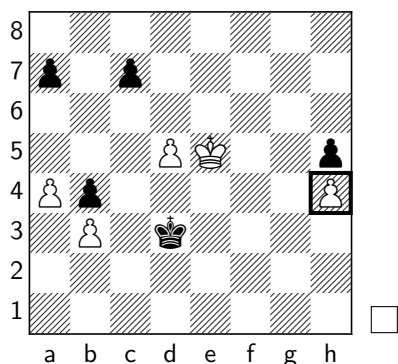
12 ♖xg3+ ♜xg3 13 ♜g5



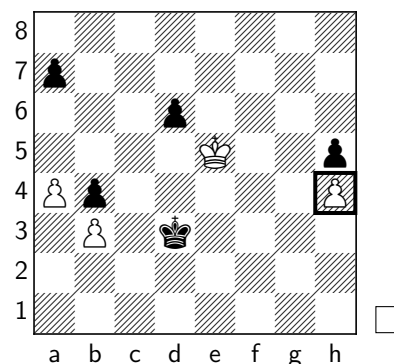
13... ♜f3 14 ♜f5 ♜e3



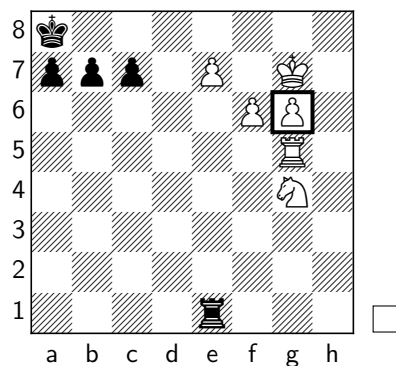
15 ♜e5 ♜d3



16 d6 cxd6+ and Black wins.

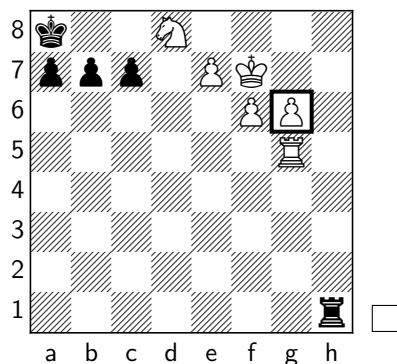


3.9 How Does White Win This Game?



How does White win this game? 1 ♜f8 ♜a1 2 f7 ♜a6 only draws.

Idea 1: Masking the e-pawn with the knight doesn't seem to work. Suppose White maneuvers his knight to d8, and achieves something like the position below.



Now 1 e8♚ ♖h6 2 ♜xb7+ ♜xb7 3 ♚e4+ c6 is only a draw! Or 3 ♚b5+ ♜c8 4 ♚a6+ ♜d8 draws. Or 3 ♚b5+ ♜a6 draws.

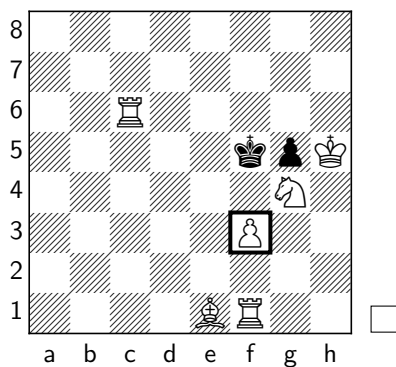
Idea 2: White can try to trade his pawn on e7 and his rook for Black's rook. 1 ♖h5 ♖g1 2 ♖h4 ♖a1. But 3 f7? ♖a5 wins for Black, 3 ♖h5 ♖g1 repeats, and 3 ♜e5 ♖g1 4 ♖g4 ♖h1 stops f7.

Idea 3: From the starting position, 1 ♖e5 ♖g1 2 ♖e4 ♖a1 3 f7 ♖a6 4 ♜f6 and ♖g4 wins quickly with e8♜ then soon f8♚.

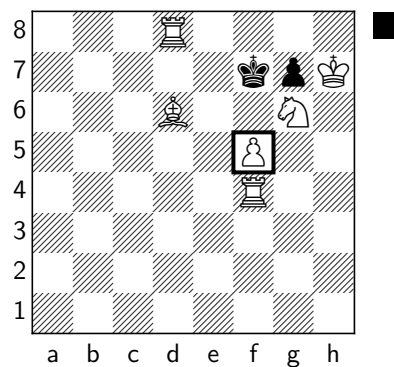
Idea 4: 1 f7 ♖xe7 2 ♜f6 ♖xf7+ 3 ♜xf7 wins by a slimmer margin.

3.10 Mating with Double Check

Minimum material seems to be N, B, R, R, C versus P. With room to maneuver (cappy on ranks 3–5, files e or f), White mates by blockading the Black pawn on an adjacent file with the N on a color opposite that of the bishop, forces the pawn to advance to the N, places his king next to the pawn, and hems the Black king into two squares as in Position I1 below. Then the mate is 1 ♖a5 ♜f4 2 ♜c7+ ♜f5 3 ♜f6 g4 4 f×g4♯.

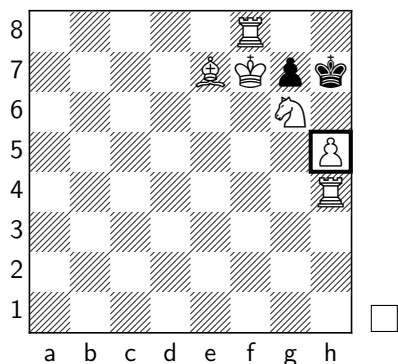


Position I1

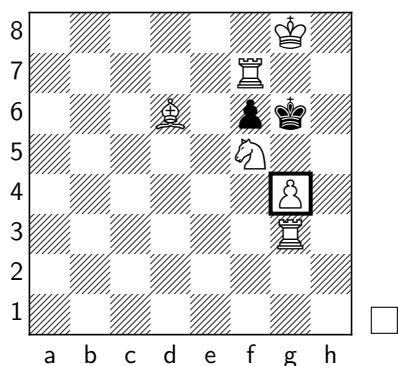


Position I2

In Position I2, it takes a while to hem in the Black king. 1... ♜f6 2 ♖e8 ♜g5 3 ♖e5 ♜h5 4 ♜c7 ♜g5 5 ♖h4 ♜f6 6 ♖g4 ♜f7 7 ♖f4 ♜f6 8 ♜d8+ ♜f7 9 ♖e7+ ♜f6 10 ♖e6+ ♜f7 11 ♜e5+ ♜f8 12 ♜d7+ ♜f7 13 ♖e5 and mate next move. If 13... g5 then it's en passant, double check, cappy mate. Nice. The position can be shifted to put the cappy on any of the files c–f and ranks 2–5.



In the position on the left, **1 ♖d6 ♜h6 2 ♜f4+ ♜h7 3 ♞h8** mates next move. The position can be shifted to put the cappy anywhere from h2–h5.

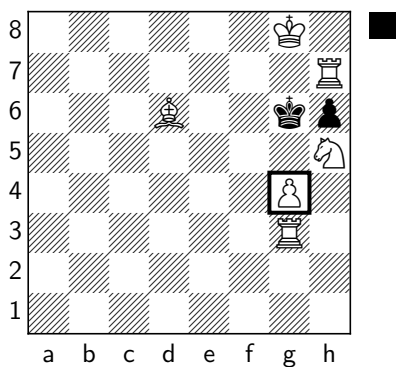


In the position on the left, we have **1 ♜c5 ♜g5 2 ♜e3+ ♜g6 3 ♞g7 f5 4 gxf5#**. The position can be shifted to put the cappy anywhere from g2–g4.

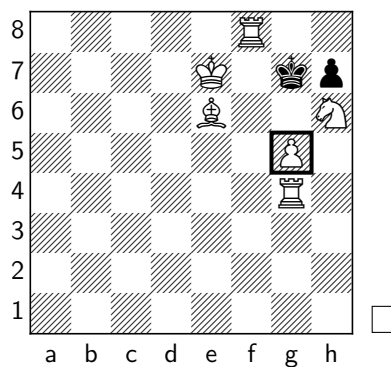
The same idea works with the Black pawn on the h-file, as in Position J1 below. **1... ♜g5 2 ♜c7 ♜h4 3 ♜b6 ♜g5 4 ♜d8+ ♜g6 5 ♞g7 h5 6 g×h5#**

With the cappy on g5 and the Black pawn on h7, as in Position J2, we have **1 ♜d7 ♜g6 2 ♜c8 ♜g7 3 ♜f5 ♜h8 4 ♜b7 ♜g7 5 ♜e4 ♜h8 6 ♜f8+ ♜g7 7 ♞f7** and mate next move.

The case where the cappy is on g5 and the Black pawn is on f7 seems to require more material.



Position J1



Position J2

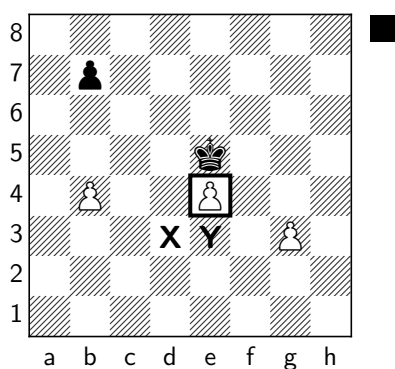
3.11 Pawn + Pawn + Cappy Versus Pawn

In this section, squares with letters X, Y, etc., are possible positions for the White king.

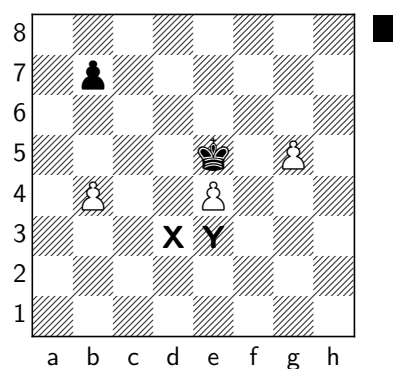
It would seem that in Position K0, White wins (*Editor's note:* in the original manuscript, there is no X on d3, but the analysis of Position K7 suggests that it should be there), even though to win he must promote one pawn without losing the other, as a single White piece plus a cappy on the e-file is a draw. It is easier to maneuver the White king behind the pawns than it is for the Black king to maneuver in front of the pawns. But a close look suggests the position is a draw.

We pose it as a three-pawn problem in which a pawn may not promote, and Black draws if he captures any pawn. Positions K0–K9 below are drawn, since the best White can do is reach another. Claim: in any of these positions, with White to move, 1 b5 b6 is always worse for White.

In Position K1, with the White king on X or Y, 1... ♔d6 leads to Position K3 below.



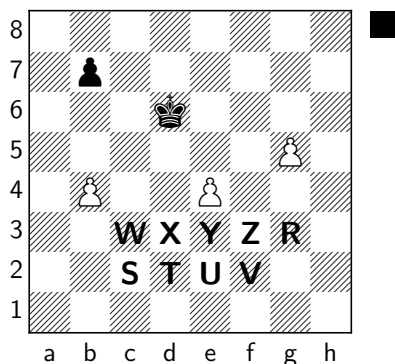
Position K0



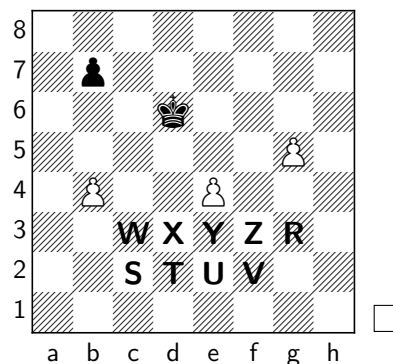
Position K1

In Position K2, 1... ♔e5 forces Position K1 (if the White king is on Z then White loses the pawn on b4).

In Position K3, 1 ♔c4 ♔e5 forces Position K1, 1 ♔d4 ♔e6 yields Position K4 with the White king on X, 1 ♔f4 ♔e6 yields Position K4 with the White king on Y, and other king moves yield Position K2.

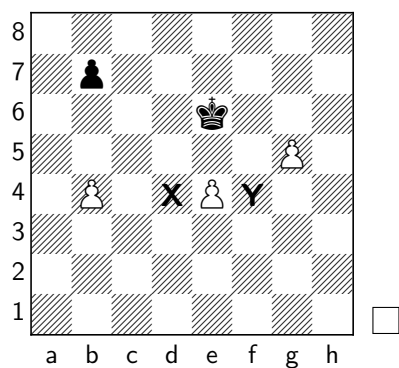


Position K2

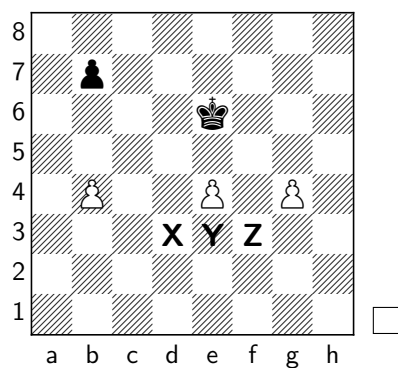


Position K3

In Position K4, 1 e5 or 1 g6 loses a pawn, and after any king move, 1... ♔e5 forces Position K1. In Position K5, 1 ♔d4 ♔f6 or 1 ♔f4 ♔d6 forces 2 ♔e3, and then 2... ♔e5 yields Position K6.

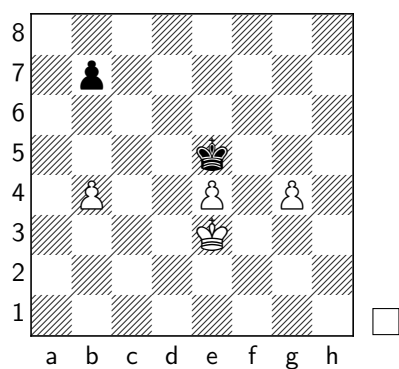


Position K4

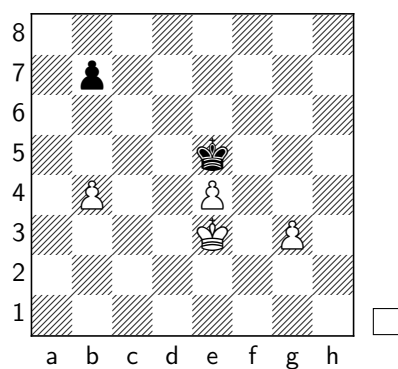


Position K5

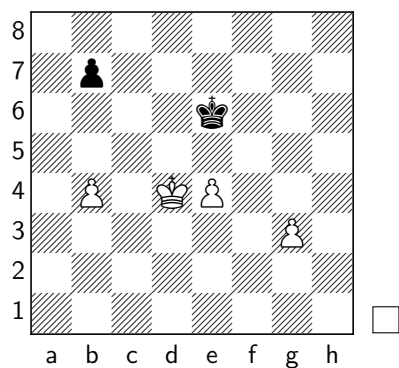
In Position K6, any White king move loses a pawn, and 1 g5 yields Position K1.
 In Position K7, 1 g4 ♖e6 yields Position K5, and 1 ♖d3 yields Position K0.



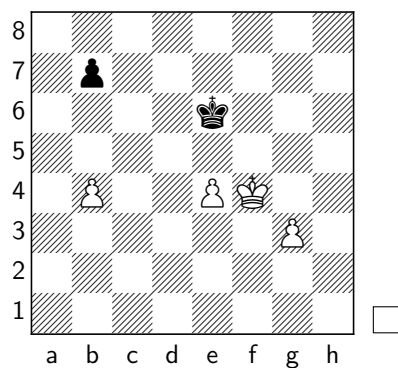
Position K6



Position K7



Position K8



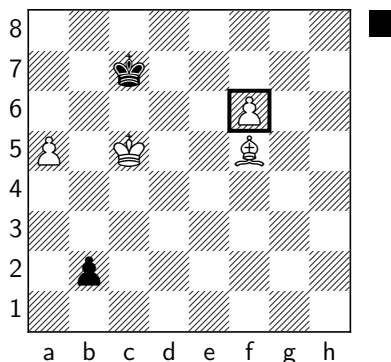
Position K9

In Position K8, 1 e5 ♖f5 loses the g-pawn, and 1 g4 ♖f6 2 ♜e3 ♜e5 yields Position K6.

In Position K9, 1 e5 ♜d5 loses the b-pawn, and 1 g4 ♜d6 2 ♜e3 ♜e5 yields Position K6.

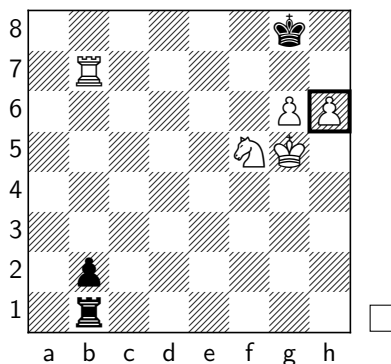
From Position K0, 1... ♜d6 2 ♜d4 ♜e6 yields Position K8, or 1... ♜f6 2 ♜f4 ♜e6 yields Position K9, or 1... ♜f6 2 ♜d4 ♜e6 yields Position K8. Draw.

3.12 How Does White Win?



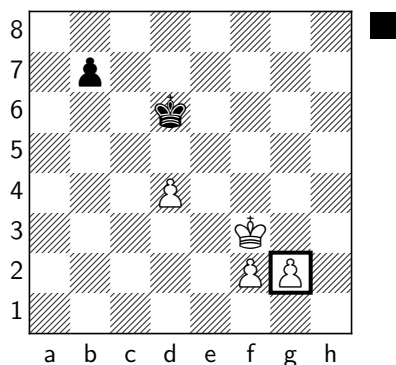
With White to move, 1 a6 seems to win as Black is in Zugzwang. But it's Black's move, and after 1... ♜b7 2 ♜d3, what? 2... ♜a7 3 ♜b5 ♜b7 4 ♜e4+ ♜c7 5 ♜c5 ♜d7 6 ♜d5 ♜c7 7 ♜e6 ♜b8 8 ♜d6 ♜a7 9 ♜c5 ♜a6 10 ♜b4 ♜a7 11 ♜b5 ♜b8 12 ♜b6 ♜c8 13 ♜f5+ wins for White. And 2... ♜c7 3 ♜e4 is a faster version of the above. Endgames like this aren't in the chess literature. Note that 2... ♜c7 3 a6 ♜d7 3 ♜f5+ ♜c7 is a draw, as both the c-pawn and the a-pawn are weak.

3.13 What Is the Outcome?



What is the outcome with White to move? 1 ♜e7+ ♜h8 2 g7+ ♜h7 3 g8♜+ ♜h8 4 ♜g6+ ♜xg8 5 h7 is mate. (So for example, if rook is on f7 not b7, then White wins.) 1 ♜e7+ ♜f8 2 g7+ ♜e8 3 g8♜+ ♜f7 4 ♜g6+ ♜e6 5 ♜f4+ ♜d6 6 ♜g6+ ♜c5 7 ♜xh5 ♜h1 8 ♜h5 ♜xh5+ is a draw. (*Editor's note:* In the original manuscript, 2... ♜e8? is given a question mark, but it is not clear why. The alternative 2... ♜f7 3 ♜f5+ ♜e8 4 ♜d6+ ♜d8 5 ♜f7+ also seems to lead to a draw, because if Black tries to evade perpetual check with 5... ♜c8 6 g8♜+ ♜xb7 7 ♜d8+ then White soon wins the rook and the game. Thanks to Noam Elkies for this analysis.)

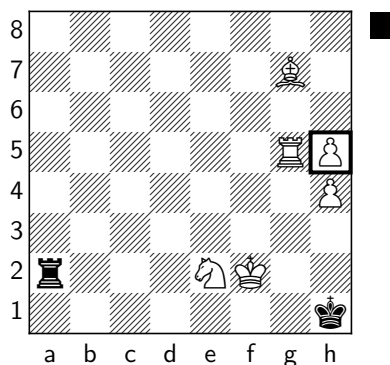
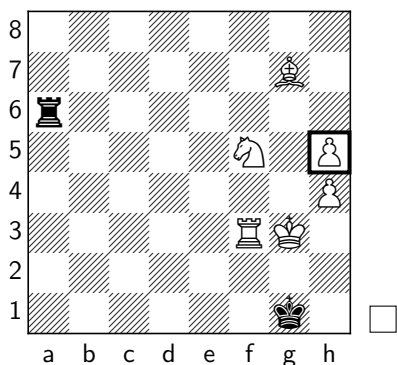
3.14 What Is the Outcome?



Black to move wins: 1... ♔d5 2 ♕e3 ♔c4 3 ♕e4 b5 4 d5 b4 5 d6 b3 6 d7 b2 7 d8 ♖b1 ♖+.

3.15 What Is the Outcome?

In the position on the left below, it is White to move. What is the outcome? It appears White may have enough to force a position as on the right, which wins.

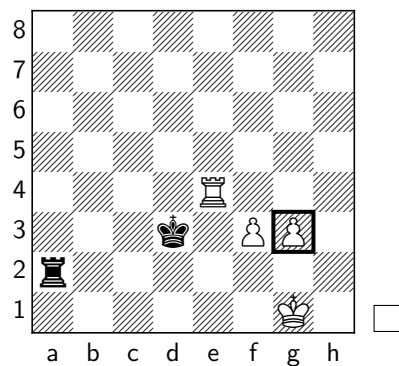


3.16 Can White Win?

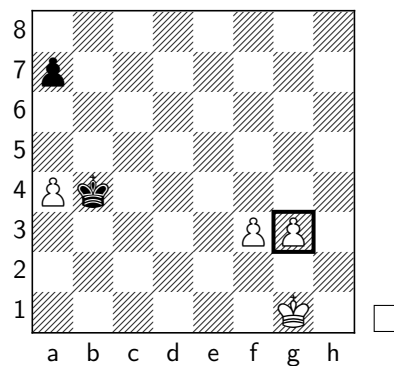
(*Editor's note:* In the first three diagrams below, in the original manuscript, both kings are black kings—an obvious typo. It is assumed here that the intent is for the White king to be on g1 in all three positions. Also, the original manuscript does not state whose turn it is to move.)

It once occurred to the Cappy players that White had earlier made an illegal move (possibly the best move for that position!). The net result has been that Black on occasion uses extra time checking that the last White move was kosher.

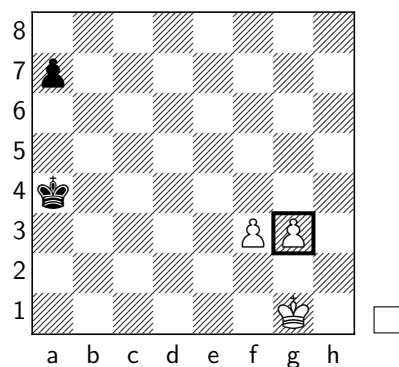
Found by Jack Rogers 7/6/97 on a Stash Earl Grey Tea wrapper: “There are few hours in life more agreeable than the hour dedicated to the ceremony known as afternoon tea.” Henry James.



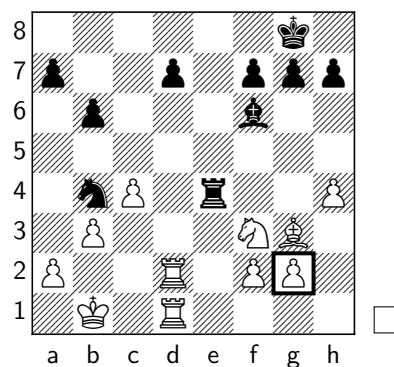
Draw



Black wins

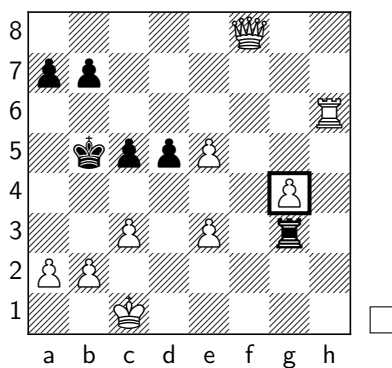


White wins



Can White win?

3.17 White Almost Wins

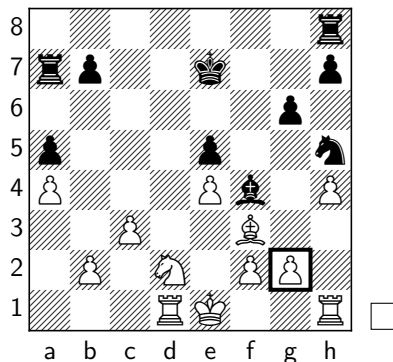


1 ♔e8+ almost wins, but Black has a narrow path to a draw. 1... ♙c4 2 ♔a4+ ♙d3 3 ♔d1+ and:

- 3... ♙c4 4 b3+ ♙b5 5 a4+ ♙a5 6 b4+ cxb4 7 cxb4+ ♙xb4 8 ♔e1+ and White wins.
- 3... ♙xe3 4 ♔e1+ ♙f3 5 ♔xg3+ ♙xg3 6 ♔g6 and White wins.
- 3... ♙e4 4 ♔h1+ ♙d3 5 ♔f1+ ♙e4 6 ♔f4+ and White wins.

The drawing line is 1... ♖a5 2 b4+ cxb4 3 cxb4+ ♖xb4 4 ♜f8+ ♖b5 5 ♜e8+ ♖a5 6 ♜d8+ ♖a4 7 ♜d7+ ♖a3 8 ♜e7+ ♖a4 9 ♜d7+ ♖a3 10 ♜d6+ ♖a4 11 ♜d7+ ♖a3 draw.

3.18 A Typical Escape by White



(*Editor's Note:* Thanks to Noam Elkies for assistance in correcting some typos in the original manuscript.) After 1 ♖f1, Black wins quickly with 1... ♜g8, threatening both 2... ♔d2+ and 2... ♔h2. Instead, he took the direct approach with 1... ♔d2+ 2 ♜xd2 ♖f4 3 g3 ♖h5 4 ♔xh5 g×h5 5 ♜d5 ♖e6 6 f4 e×f4 7 g×f4 ♜g8 8 ♖e3 ♜aa8 9 ♖f2 ♜ac8 10 ♜hd1 ♜cf8 11 ♜e5+ ♖f7 12 ♜f5+ ♖g7 13 ♜dd5 ♖h8 14 ♜x×f8 ♜x×f8 15 ♜f5 ♜d8 16 ♖d5 ♜g8 17 ♖f6 ♜c8 18 ♜xh5 ♜c7 19 ♜a5 ♖g7 20 ♖h5+ ♖g6 21 ♖f3 and Black lost on time.

3.19 GS–DR, 6/11/91. Cappy on g2

Black's pieces get snarled up.

1 e4 2 d4 e5 3 d×e5 ♖c6 4 ♔f4 ♖ge7 5 ♔g3 ♖g6 6 ♖f3 ♔c5 7 h4 O-O 8 h5 ♖ge7 9 ♔c4 d6 10 e×d6 c×d6 11 ♖bd2 ♔g4 12 c3 ♖e5 13 ♔e2 ♖7c6 14 ♖x×e5 ♖x×e5 15 ♔xg4 ♖d3+ 16 ♖f1 ♜f6 17 ♜f3 ♖x×b2 18 ♜x×f6 g×f6 19 ♔e2 ♖a4 20 ♜c1 ♖h8 21 ♔h4 h6 22 ♔x×f6+ ♖h7 23 ♔d3 ♜ae8 24 ♜h3 ♜e6 25 e5+ ♖g8 26 ♖e4 d×e5 27 ♜g3+ ♖h7 28 ♖x×c5+ e4 29 ♖x×e6 f×e6 30 ♜g7+ ♖h8 31 ♜f7+ ♖g8 32 ♜x×f8+ ♖x×f8 and White wins.

3.20 GS–AR, 4/15/98. Cappy on g2

1 e4 2 h4 g5 3 h×g5 ♖f6 4 e5 ♖d5 5 d4 h6 6 g6 f×g6 7 ♔d3 ♜g8 8 ♜g4 h5 9 ♜xh5 g×h5 10 ♜xg8 ♖b4 11 ♖f3 b6 12 ♖c3 ♔b7 13 ♖e4 ♖8c6 14 ♔h6 ♖x×d3+ 15 c×d3 a5 16 ♔x×f8 ♜a6 17 ♜h8 ♜a8 18 ♔h6+ ♖f7 19 ♖fg5+ ♖g6 20 ♜g7+ ♖f5 21 ♜f7+ ♖g4 22 ♜f3+ ♖h4 23 g3#

3.21 GS–AR, 9/11/??, early game. Cappy on g2

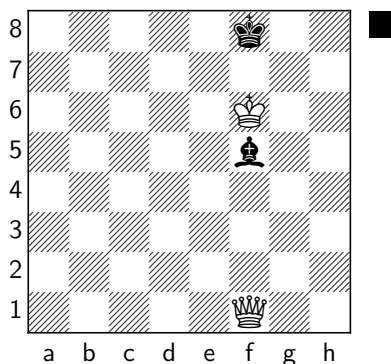
1 d4 2 ♖c3 d5 3 h4 h5 4 ♖f3 ♖c6 5 ♔f4 e6 6 e3 ♔d6 7 ♖e5 f6 8 ♖g6 ♜h7 9 ♔e2 ♔x×f4 10 e×f4 ♖ce7 11 ♔xh5 ♜xh5 12 ♜xh5 ♖xg6 13 ♜xg6+ ♖f8 14 O-O-O ♖e7 15 ♜h7 ♜e8 16 h5 e5 17 f×e5 ♔f5 18 ♜h8+ ♖g8 19 ♜de1 ♜f7 20 e×f6 ♜x×f6 21 f4 ♔e4 22 ♖x×e4 ♜x×f4+ 23 ♖d2 ♜e8 24 ♜ef1 ♜e1+ 25 ♜x×e1 ♜f2 26 ♜hf1 c6 27 ♜xg8+ ♖xg8 28 ♜x×f2 and White wins.

Chapter 4

Bonus Material

(*Editor's note:* The material here was included in the original manuscript, but has nothing to do with the capped pawn condition.)

4.1 Single Column Problem



Find a Black move which enables a White mate-in-2. Solution: **1... ♖h7 2 ♔h3**. (D. Monn 2005)

4.2 Keep Your King on the Pink Squares

Make a house with your pawns and your king will be safe inside. Is that a free pawn? 1/16/98, PL-GS (parentetical notes by the editor).

1 e4 c5 2 ♖c4 ♘c6 3 b3 e6 4 ♖b2 ♘f6 5 e5 ♘d5 6 ♔f3 ♘de7 7 ♘h3 ♘g6 8 ♔g3 ♔c7 9 f4 d6 10 exd6 ♖xd6 11 O-O a6 12 ♖xg7 ♗g8 13 ♖c3? (The more active 13 ♖f6 was better. On c3, the bishop interferes with the development of the knight.) **13... b5 14 ♖d3 ♖b7 15 ♖xg6** (It was more prudent to try to block the h1-a8 diagonal with 15 ♔e3 and 16 ♖e4.) **15... ♗xg6 16 ♔h4 ♘e7 17 ♗f2 ♔c6 18 ♔xh7** (Blocking the g-file with 18 ♘g5 was a better try.) **18... O-O-O** (Black could also play 18... ♗xg2+ immediately.) **19 ♔xf7 ♗xg2+ 20 ♘f1 ♗xf2+ 21 ♘xf2 ♔g2+ 22 ♘e3 ♘d5+ (22... ♔f3 was mate in one but it scarcely matters.) 23 ♘d3 ♘xf4+ 24 ♘e3 ♔e2#.**