The Chess Endgame Studies of Richard Réti : Knights and bishops
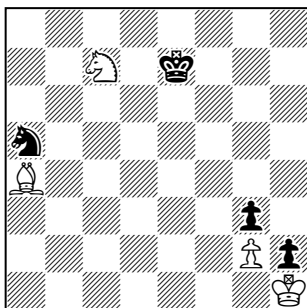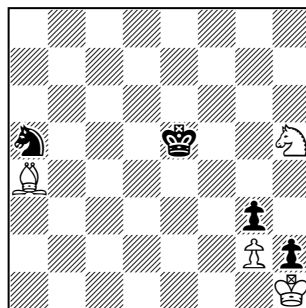
John Beasley, 14 January 2012, minor correction 2 March

5.1 (M 28) **5.1a**

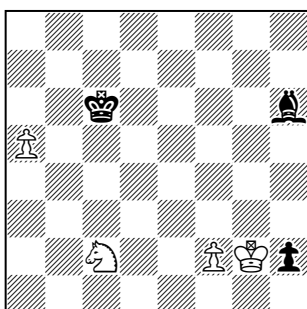
White to play and win

5.1, dedicated to Dr G. C. A Oskam, appeared in *Tijdschrift v. d. NSB* in 1922. White needs to capture the pawn on g3 and the knight can attack it within three moves, but the Black king needs only three moves to get into position to defend it. However, with a little care White can prevent the Black king from making a diagonal move downward on to the f-file, and this is sufficient to keep it away from the pawn: **1 Ne8 Ke6** (...Kf6 not available) **2 Ng7+ Ke5** (...Kf5 not available) **3 Nh5** (see **5.1a**), and the pawn is lost because ...Kf4 is not available. Black can of course try to defend the pawn with his knight instead of with his king, but a timely Bc2 will keep the knight away from the danger square e4, and if the knight plays to any other square defending g3 the bishop will have time to attack it.

5.2 (M 29) **5.2a**
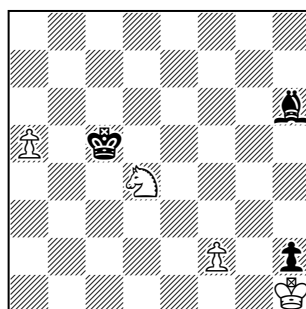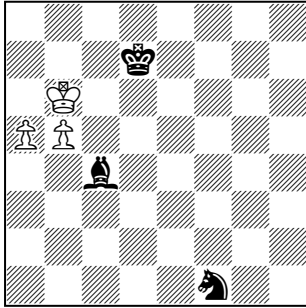

White to play and win After 2 Kh1

The main line in **5.2** (*Hastings and St Leonards Post*, January 1922, version) is even shorter. Black threatens 1...Kb5 picking up the pawn, so **1 Nd4+** is almost automatic, and can Black play 1...Kb7 and attack the pawn from the front? No, he will be one move too late: 2 Kxh2 Ka6 3 Nb3 Bf4+ 4 Kh3 Kb5 5 Kg4 Bb8 6 f4 Kb4 7 f5 Kxb3 8 f6 Kb4 9 a6 Kb5 10 f7 and the bishop is overloaded. If instead 1...Kd5 then 2 a6 and the pawn promotes at once, hence **1...Kc5**, and now 2 Nb3+ Kb5 will be good for Black because after 3 Kxh2 he will be a tempo ahead of the line 1...Kb7 2 Kxh2 Ka6 3 Nb3.
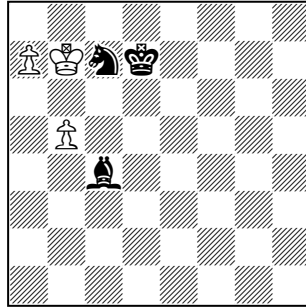
But White needn't save his knight. If he tries 2 Kxh2 then of course he fails (2...Bf4+ 3 K~ Kxd4 4 a6 Bb8), but he can play **2 Kh1** giving **5.2a**. Black is now completely helpless. Any bishop move other than 2...Be3 allows a fork, as does 2...Kd6, and any other king move allows 3 a6 promoting at once.
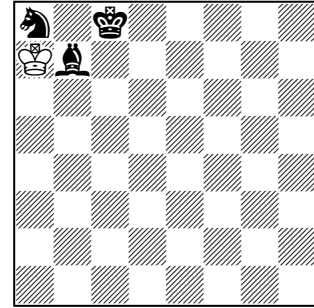
5.3 (M 35)   **5.3a**   **5.3b**

White to play and hold the draw

After 3...Nc7

7...Bxb7 stalemate

K + B + N have a routine win against a bare king, so in a position like **5.3** (*28. říjen*, 26 September 1925) White must do something before Black can mop up the pawns. 1 a6 will allow 1...Kc8 winning without difficulty (2 a7 Bd5 etc) and 1 Ka7 throws away the b-pawn to no useful purpose, and the move is **1 Kb7** keeping Black's king at bay. Taking the b-pawn now would serve no useful purpose (1...Bxb5 2 a6 and White's remaining pawn will cost Black his bishop), nor would a bishop check (1...Bd5+ 2 Ka7 and this time it is the b-pawn that will cost Black his bishop). This leaves only **1...Ne3** hoping to get back to c7.

If now 2 b6 then 2...Nd5 with ...Nb4 to follow, and Black will soon mop up. But the natural and correct move is **2 a6**, and after **2...Nd5 3 a7** (if instead 3 b6 to cover c7 then again 3...Nb4) **Nc7** we have **5.3a**. If now 4 b6 to chivvy the knight then 4...Bd5+ 5 Kb8 Na6 will be mate, and if 4 Kb8/Kb6 then again 4...Bd5. This leaves only **4 a8Q**, and after **4...Bd5+ 5 Ka7 Nxa8** the new queen has been taken without compensation (but not by 5...Bxa8, when 6 b6 does successfully chivvy the knight). Now the b-pawn takes up the baton, **6 b6**, and if Black plays **6...Kc8 7 b7 Bxb7** to prevent its promotion he finds that he has given an attractive stalemate (see **5.3b**).
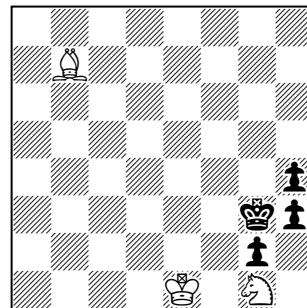
"28. říjen" means "October 28", the anniversary of the founding of the independent Czechoslovak state after the First World War.

**5.4** (M 36)   **5.4a**
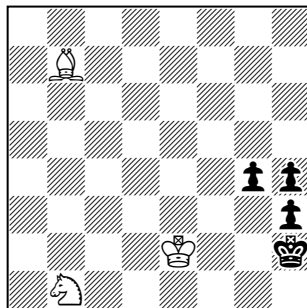
White to play and win

After 4 Ng1

In **5.4** (*Časopis československých šachistů*, 1924), Black threatens to draw either by 1...g3 etc or by 1...Kg1 etc, so we need to bring the knight into play, but 1 Nd2 is met by 1...Kg1 2 Ne4 h2 3 Nf2 h1Q 4 Nxh1 g3 5 Bd5 (White has no more useful move) Kh2 6 Kf1 h3 etc, and 1 Nc3 is soon seen to do nothing useful about 1...g3. A king move to the f-file will allow Black a tempo-gaining check, and the rather surprising answer is **1 Ke1**. This seems a very leisurely move when all the need would appear to be for urgent action, but it vacates e2 for the knight while still remaining poised ready to intervene as necessary, and we shall see that this makes all the difference.

If now **1...g3** then **2 Nd2 g2** (2...Kg1 3 Nf3+ Kg2 4 Bd5 with 4...h2 5 Ng5+ Kg1 6 Nh3 mate or 4...Kh1 5 Kf1 g2+ 6 Kf2 and mate in a few) **3 Nf3+ Kg3 4 Ng1** (see **5.4a**) **h2** (4...Kg4 5 Bc8+ and 6 Bxh3, after which White will mop up) **5 Ne2+** (ah!), and if **5...Kh3** to keep in touch with the g-pawn then **6 Bc8** is elegantly mate. If instead 1...Kg1 then 2 Nc3 g3 3 Ne2+ Kh2 with either 4 Bc8 g2 (4...Kg2 5 Nf4+) 5 Kf2 etc or 4 Nd4 g2 5 Nf3+ transposing back into the main line, while 1...Kg3 allows 2 Kf1, with Nc3 and Ne2+ to follow, and the pawns are soon seen to be doomed.
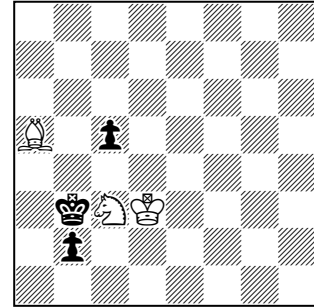
5.5 (M 37)   **5.5a**   **5.5b**
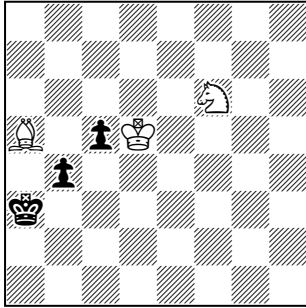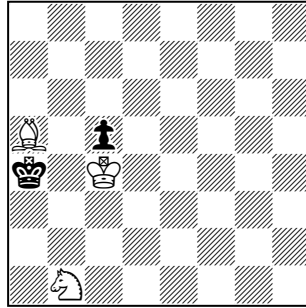
White to play and win   1 Kc4, after 4...Ka4   Main line, after 4 Kd3

5.5 appeared in *Teplitz-Schönauer Anzeiger* in 1922. Try the obvious 1 Kc4, homing in on the pawns: no, 1...b3 2 Ne4 b2 3 Nc3 b1Q 4 Nxb1+ Ka4 gives **5.5a**, and if the bishop moves to safety it will give stalemate. Nor is 1 Ne4 better, because 1...b3 2 Kc4 transposes into the same line, and if White tries 2 Nc3 instead Black will play 2...Kb2 with ...Kc2 and ...b2 to follow.
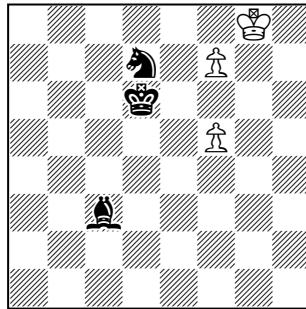
   The correct move is **1 Ke4**, approaching more circumspectly. Black must still try **1...b3** to promote his pawn (other moves give no trouble), but after **2 Nd5 b2 3 Nc3** he cannot sacrifice because there will be no stalemate. Worse, after **3...Kb3 4 Kd3** (see **5.5b**) he will soon be left without a safe move (4...c4+ 5 Kd2 Ka3 6 Kc2, 4...Ka3 5 Kc2 c4 6 Bc7) and White will mop up.

5.6 (M 38)   **5.6a**   **5.6b**
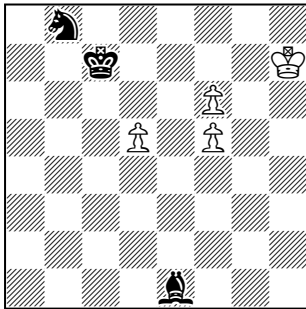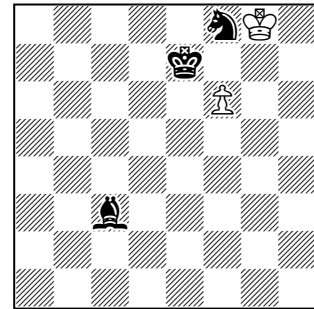

White to play and hold the draw   After 4 Kg8   After 6 f6+

In **5.6** (3rd Prize, *Shakhmatny Listok*, 1927/II), Black threatens to put an iron blockade on White's pawns by 1...Bb4 and 2...Nd7, after which he will mop up at leisure. The only answer to this is to block the diagonal b4-f8, and it must be done at once: **1 d6+**. There follows **1...Kxd6** (declining the offer doesn't help) **2 f7** (we'll look at 2 Kg7 and 2 Kg8 in a moment) **Nd7** (2...Ke7 3 Kg7 leads to the same finish, 3...Bc3+ 4 Kg8 Ne7 etc) **3 Kg7** (luring the bishop to c3) **Bc3+ 4 Kg8** (see **5.6a**) **Ke7** (if 4...Nf6+ then 5 Kg7, with 5...Ng4+ 6 f6 Bxf6+ 7 Kg6 and 7...Be7 8 Kg7 Bf6+ 9 Kg6 repeating or 7...Ke7 8 f8Q+ Kxf8 9 Kf5 winning a piece, or 5...Nd7+ 6 Kg8 repeating, or 5...N~+ 6 f6 Bxf6+ 7 Kg8 with 8 f8Q to follow) **5 f8Q+** (5 f6+ Nxf6+ is good for Black) **Nxf8 6 f6+** (see **5.6b**) with **6...Bxf6 stalemate** or **6...Ke8 7 f7+** and again stalemate. If 3 Kg8 then 3...Ke7, and with the bishop not yet lured to c3 the sacrificial promotion 4 f8Q+ will not lead to stalemate; if 2 Kg8 then 2...Nd7 3 f7 Ke7 and the same; and if 2 Kg7 then 2...Bc3 pinning the pawn, with a straightforward win to follow.
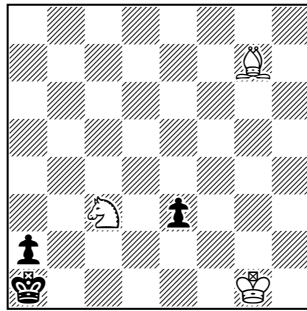
5.7 (M 40)   **5.8** (M 41)
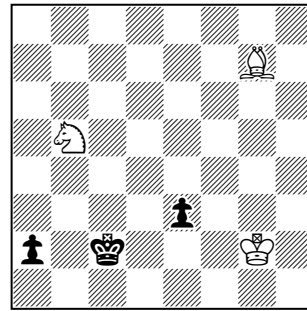
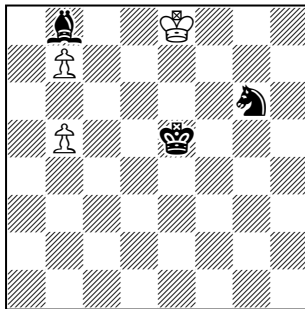

White to play and win   White to play and win

According to Kalendovský, Réti described **5.7** and **5.8** as offshoots from study **5.10** below. In **5.7** (*Münchner Zeitung*, 8 June 1929) **1 Kf1 Kb2 2 Nb5+ Kb1 3 Na3+ Kc1 4 Ke1** (not 4 Ke2 a1Q 5 Bxa1 stalemate) **e2 5 Nc4** (simplest) **Kb1 6 Nd2+** etc. There is claimed to be a further try in 1 Kg2 again refuted by stalemate (1...Kb2 2 Nb5+ Kb1 3 Na3+ Kc1 4 Kf3 e2 5 Kxe2 a1Q 6 Kxa1), but 1 Kf1 is so much White's most natural move that I don't think I would have noticed this line (unless I had been probing the position for cooks) had not the commentary explicitly pointed it out to me.
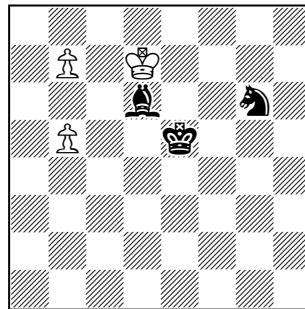
In **5.8**, also published in *Münchner Zeitung* in 1929, **1 Kf3**, and there is a nice point after 1...Kd2: 2 Nc3, and a pawn goes. But the main line is **1...Kd3 2 Nd6 e2 3 Kf2 Kd2 4 Ne4+ Kd3**, and now given is **5 Ng5 Kc2 6 Nf3 Kb1 7 Nd2+** although the natural 5 Kg3 wins more quickly.
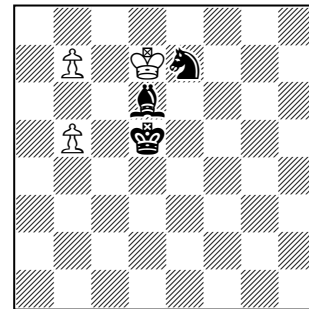
5.9 (M 42)   **5.9a**   **5.9b**

White to play and hold the draw   1 Kd7, after 1...Bd6   Main line, after 4 Kd7

The natural move in **5.9** (Commendation, *Magyar Sakkvilág*, 1928) is 1 Kd7 threatening 2 Kc8 B~ 3 b8Q winning the bishop, but Black replies 1...Bd6 and White has a problem (see **5.9a**). If he continues 2 Kc8, Black will reply 2...Ne7+ 3 Kd7 Nd5, and any further move Kc8 will be met by ...Nb6+. If instead he tries 2 b6 then 2...Kd5, and 3 Kc8 can be met by 3...Ne7+ and 4...Nc6.

The solution is **1 Kd8**. This again threatens 2 Kc8 etc, and if **1...Bd6** White now has **2 Kd7**. This gives **5.9a** with Black to play, and what is Black to do? The bishop must continue to guard b8, and if 2...Bb8 then 3 Kc8 B~ 4 b8Q as before. 2...Ne7 overloads the bishop, allowing an immediate draw by 3 b8Q, and any other knight move takes it out of range of e7 and allows 3 Kc8 etc. This leaves only **2...Kd5**, and **3 Kc8 Ne7+ 4 Kd7** gives **5.9b**. The bishop being overloaded, White threatens 5 b8Q, and after a nondescript knight move such as 4...Nf5 there will follow 5 Kc8 Ne7+ 6 Kd7 repeating the position; the move ...Nd5 which previously won the game for Black is now unavailable because his king is occupying that square.
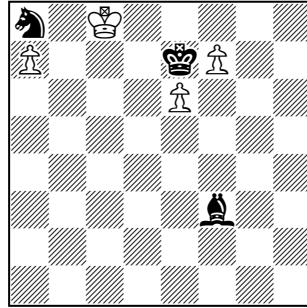
The unexpected damage done to Black's winning chances by the apparently innocent move ...Kd5 makes **5.9a** one of the collection's more amusing examples of reciprocal zugzwang.
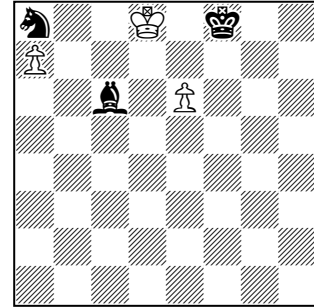
5.10 (M 43)   **5.10a**   **5.10b**
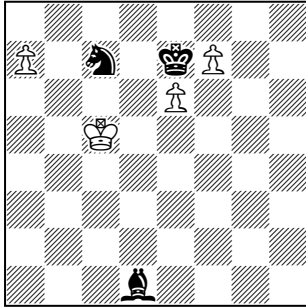
White to play and hold the draw

After 3 Kc8

After 5 Kd8

5.10 (*Národní listy*, 24 March 1929, awarded a Special Prize, dedicated to Minister Dr Vavro Šrobar) looks very promising for Black, whose king stops the two connected pawns and whose minor pieces will be able to command a8. Nevertheless, let's see. Try 1 Kc6: no, 1...Nxe6 2 Kb7 (2 a8Q Bf3+) Nc5+ 3 Kc6 (3 Kb6/Kb8 Nd7+ 4 Kc7 Bf3) Nd7 4 f8Q+ Nxf8 5 Kb7 Bf3+ 6 Kb8 Nd7+ 7 Kc7 Bf3. Try 1 f8Q+: again no, 1...Kxf8 2 Kc6 Na8 3 Kd7 (hoping for 3...Bg4 4 Kd8 Bxe6 stalemate) Ba4+ 4 Kc8 Ke7 5 Kb7 Kd6, with 6 Kxa8 Kc7 and White gets mated or 6 e7 Bc6+. Correct is **1 Kb6**, and after **1...Na8+ 2 Kb7 Bf3+** then **3 Kc8** giving **5.10a** (but not 3 Kb8, when 3...Bd5 will wait for 4 Kc8 and then take the e-pawn with check).

   White now threatens 4 f8Q+ Kxf8 5 Kd7, and if 5...Bg4 pinning the pawn then again 6 Kd8 Bxe6 stalemate. 3...Nb6+ gets nowhere (4 Kc7, with 4...Na8+ 5 Kc8 repeating or 4...N~ 5 Kb8), 3...Bg2 does nothing about the threat 4 f8Q+ etc, and the only move to apply pressure is **3...Bc6**. Now, after **4 f8Q+ Kxf8**, 5 Kd7 is unavailable, but **5 Kd8** ties Black's bishop to the diagonal a4-e8 (see **5.10b**), and if it moves along this diagonal, say 5...Bb5, White will play 6 Kc8 and the threat of 7 Kb7 will bring it straight back to c6 – no it won't, 6...Ke7 7 Kb7 Kd6 8 Kxa8 Kc7 and again White gets mated. The e-pawn must advance first, 6 e7+ Kf7, and now 7 Kc8 does force 7...Bc6 (7...Kxe7 will remove the e-pawn, and without its presence to give White a move there will be no mate). Now 8 Kd8 gives **5.10c** below, and the draw is clear (8...Be8/Bb5/Ba4 9 Kc8 Bc6 10 Kd8 repeating).

   So a bishop move in **5.10b** doesn't work, and a knight move will lose a piece. Only the king remains, and **5...Kg7** is clearly its more promising option. (Réti's endgame studies being what they are, we probably ought to look at 5...Kg8 as well, since an immediate 6 e7 will be met by 6...Kf7 giving **5.10c** with White to move and the e-pawn is lost at once, but it gives no trouble: 6 Kc8, with 6...Kf8 7 Kd8 repeating or 6...Kg7 7 e7 Kf7 8 Kd8 and again **5.10c**.) If (after 5...Kg7) 6 e7 then 6...Kf7 or 6 Kc8 then 6...Kf6, and in either case the e-pawn goes, which leaves only **6 Ke7**. The only reply to break new ground for Black is **6...Kg6** (typical alternatives are 6...Kg8 7 Kd6 Ba4 8 Ke7 and 6...Ba4 7 Kd8 Kf6 8 e7 Kf7 9 Kc8, and although there is some branching they all lead back into known territory). White must meet 6...Kg6 by **7 Kf8** (not 7 Kd6, when 7...Ba4 8 Ke7 Kf5 wins), and if 7...Kf6 then 8 e7 with an amusing simultaneous overload of Black's pieces (8...Nc7 9 a8Q B/NxQ 10 e8Q, or 9 e8Q similarly). 7...Nc7 is met by 8 e7 and much the same (8...Ne6+ doesn't help because 9 Kg8 leaves the bishop overloaded, and 9...Nc7/Ng7 will let the White king back to f8), and the main line move is **7...Nb6**.
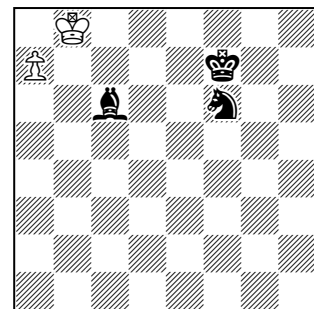
5.10c   **5.10d**   **5.10e**
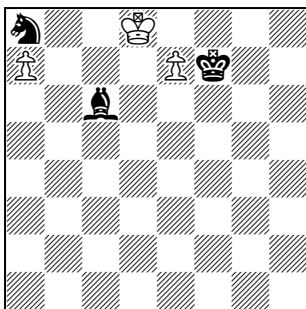
5...B~, after 8 Kd8
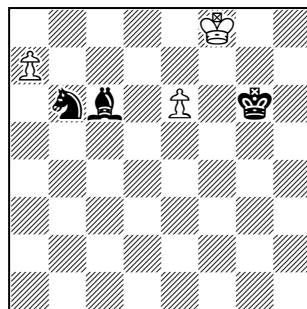
Main line, after 7...Nb6

After 13 Kb8

   This has brought us to **5.10d**. Not now 8 Ke7, met by 8...Nc8+, but **8 e7 Nd7+ 9 Ke8** (9 Kg8 Bd5+ 10 Kh8 Nf6 and both pawns go) **Nf6+ 10 Kd8** (10 Kf8 Nh7+ 11 Kg8 Bd5+ etc) **Kf7 11 e8Q+** (11 Kc7 Bf3 12 Kb8 Nd7+ etc) **Nxe8 12 Kc8 Nf6 13 Kb8** (see **5.10e**) **Nd7+ 14 Kc7 Ne5 15 Kb8** and a draw by repetition.
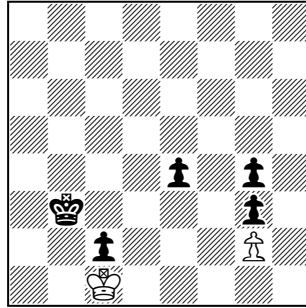
   A *tour de force* of analysis, wide-ranging and precise even if it lacks the clarity and shapeliness of most of Réti's studies. According to the definitive results with K + 2P v K + B + N now available, White's play in the main line has had to be completely accurate from 5 Kd8 right through to the end.
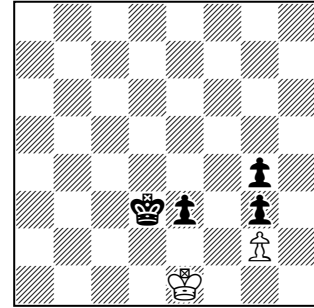
5.11 (M 44)   **5.11a**   **5.11b**
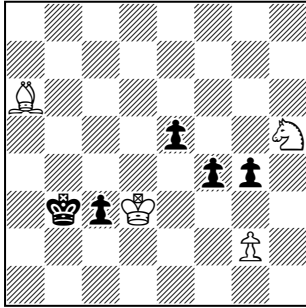
White to play and hold the draw   After 6 Kc1   After 9 Ke1

There will be no question of a White win in **5.11** (*Shakhmatny Listok*, 1928), despite his having the bishop and knight; he will be well content to escape with a draw, and his first task is to deal with the dangerous c-pawn. Try 1 Bb5, to meet 1...c2 with 2 Ba4+? No, Black will play 1...e4+ first, and after 2 Ke2 f3+ 3 gxf3 c2 4 Ba4+ Kxa4 5 Kd2 Kb3 he wins (6 Kc1 exf3 7 Ng3 f2 8 Nf1 Kc3 9 N~ Kd3 10 Kf1 Ke2 11 Ng3+ Ke1). 1 Nxf4+ exf4 diverts the e-pawn but at too great a cost (2 Bb5 c2 3 Ba4+ Kxa4 4 Kxc2 f3 etc), and surely **1 Ng3** is not going to help?

Let's play on. **1...fxg3** (1...c2 2 Ne2 f3 3 gxf3 gxf3 4 Nc1+ Kb2 5 Kd2 e4 6 Bf1 e3+ 7 Kxe3 Kxc1 8 Bd3) **2 Bb5**, and if now 2...c2 then 3 Ba4+ Kxa4 4 Kxc4 and White will have a comfortable draw against K + Pe4 (the blocked pawns on the g-file won't help Black). But again Black can interpolate **2...e4+**. The natural and correct reply is **3 Ke2**, but if 3 Ke3 instead the answer is not the natural 3...c2, met by 4 Ba4+ Kxa4 5 Kd2 as in the solution, but 3...Ka3 (if now 4 Ba4 then 4...Kxa4 takes the bishop without losing the c-pawn, and if anything else then 4...c2 and 5...Kb2 forces the pawn through).

Reverting to the main line 3 Ke2, play continues **3...c2 4 Ba4+ Kxa4 5 Kd2 Kb3 6 Kc1**, and we have **5.11a**. Now both 6...Kc3 and 6...e3 will give stalemate, but Black also has **6...Kc4**, and in the absence of the g-pawns this would give him a win (7 Kxc2 e3 8 Kd1 Kd3 taking the opposition, or 8 Kc1 Kc3 and the same). Not so in their presence, however: **7 Kxc2 e3 8 Kd1 Kd3 9 Ke1** (see **5.11b**), and the normally winning move **9...e2** gives yet another stalemate.