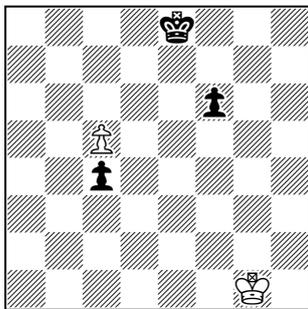
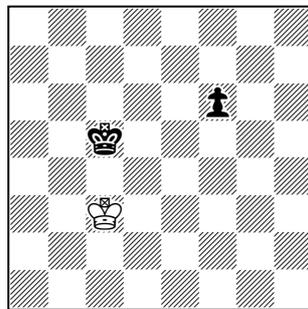


## Richard Guy 1916-2020

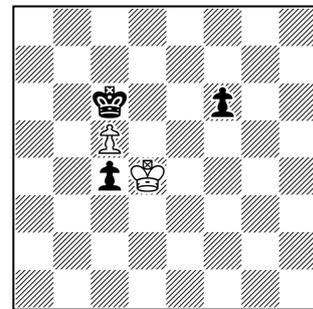
Richard Guy died in March 2020. He is best known for his authorship, with Elwyn Berlekamp and John Conway, of the already classic *Winning Ways for your Mathematical Plays*, but he was a keen chess enthusiast in his younger days; He published nearly two hundred endgame studies between 1937 and 1954 (John Roycroft published a collection in 1995), and he was endgame study columnist of the *British Chess Magazine* from 1947 to 1951.



**1** - White to play and draw

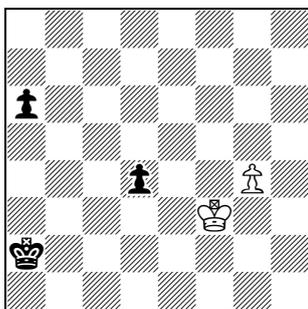


**1a** – reciprocal zugzwang

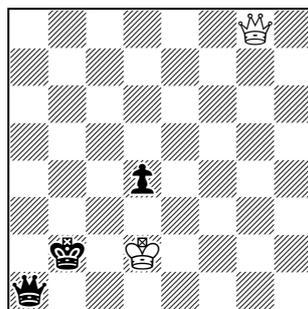


**1b** – main line, after 3 Kd4

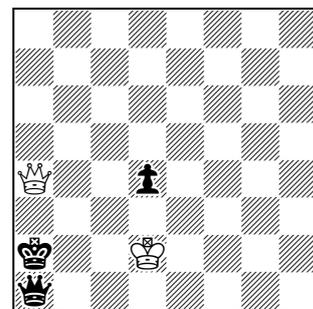
Richard took a particular delight in pawn studies. He never reached the depths probed by Grigoriev and others and the computer has had a few things to say, but his best studies made their points neatly and attractively. **1** (*British Chess Magazine* 1942), which was quoted by Alain Pallier as one of his examples in a special number of *British Endgame Study News* on the subject “Refusal to capture in pawn studies”, is based on the fact, taught in every elementary book on endgame play, that positions like **1a** are reciprocal zugzwang: the stronger side can win only if the opponent has the move. The kings come into play by **1-2 Ke3 Kc6 3 Kd4** (see **1b**), and if **3...Kb5** then White will play **4 c6 Kxc6 5 Kxc4** and draw in comfort. So Black plays **3...c3**, and after **4 Kxc3** he will play **4...Kxc5** and reach **1a** with White to play. All right, so White plays **4 Kd3!** and if **4...Kxc5** then **5 Kxc3** gives **1a** with Black to play. But two can play at that game: **4...Kd5!** and if **5 Kxc3** then **5...Kxc5** and once again we have **1a** with White to play. So the kings perform a stately dance back and forth, neither daring to capture the opposing pawn, and if Black tries to break the deadlock by playing **...c2** at any time White can now capture and meet Black’s reply **...Kxc5** by **Kc3**, again giving **1a** with Black to play.



**2** - White to play and win

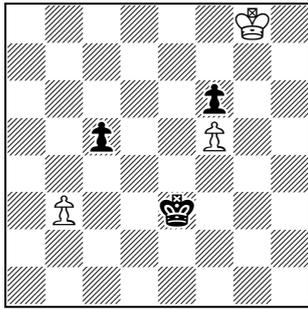


**2a** – after 6...a1Q

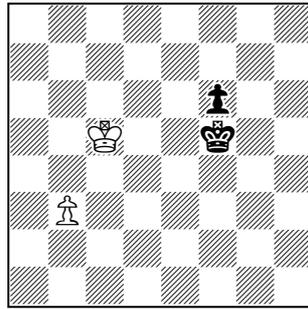


**2b** – after 19 Qa4+

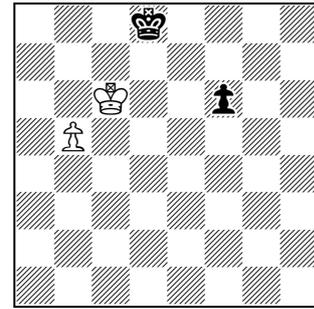
**2** (*L'Echiquier de Paris* 1946, refining some previous versions) also features one pawn against two, but this time the lone pawn wins. **1 Ke2 Kb2 2 Kd2** stops the d-pawn and makes the subsequent play possible by guarding c1 and c3, and **2...a5 3-6 g8Q a1Q** gives **2a**. Without the pawn on d4, this would be a standard Q v Q win; can the extra pawn save Black? No, it cannot; given as the main line is **7 Qb8+ Ka2 8 Qa7+ Kb1 9 Qh7+ Ka2 10 Qf7+ kb2 11 Qb7+ Ka2 12 Qa6+ Kb1 13 Qd3+ Ka2 14 Qc4+ Ka3 15 Qa6+ Kb2 16 Qb5+ Ka3 17 Qa5+ Kb2 18 Qb4+ Ka2 19 Qa4+** finally getting rid of the pawn since **19...Kb1 20 Qc2** will be mate (see **2b**), and the rest will be routine. There are alternatives for White at various points along the way, but in an ending like this what matters is not that the solution be unique but that the task be achievable at all.



3 - White to play and win



3a – after 4...Kxf5

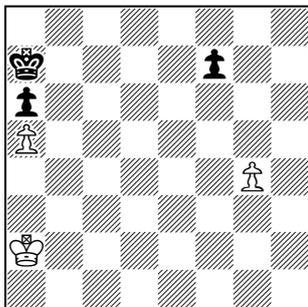


3b –after 7...Kd8

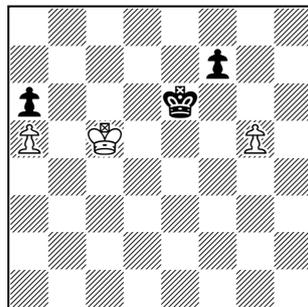
Many of Richard's pawn studies featured two pairs of pawns either blocked face to face on the same file or a knight's move apart on adjacent files, and a favourite theme was the rejection of an obvious capture of the nearer pawn in favour of an attack on the far one. **3** (*British Chess Magazine* 1944) is a case in point. After **1 Kf7** Black's f-pawn appears doomed, but Black plays **1...Kd3** and its capture by **2 Kxf6** will allow Black to escape with a Q v Pc2 draw. So White rejects this in favour of **2 Ke6** (the natural and obvious move, though **2 Ke7** is as good), and after **2...Kd4 3 Kd6** Black must concede the c-pawn. He therefore goes for White's f-pawn instead, **3...Ke4**, and after **4 Kxc5 Kxf5** we must again do some counting (see **3a**).

White's promotion on b8 will take five moves, and if Black simply runs his pawn it will still be on f2 after five moves and White's new queen will be able to get back to f1. So Black must think of something else, and after **5 b4** he plays **5...Ke6** aiming for c8 and b8. Now **6 b5** can be met by **6...Kd7**, after which the threat of **7...Kc8** will force White to block his own pawn by **7 Kb6** and Black will draw the pawn race (**7...f5 8 K-- f4 9-11 b8Q f1Q**).

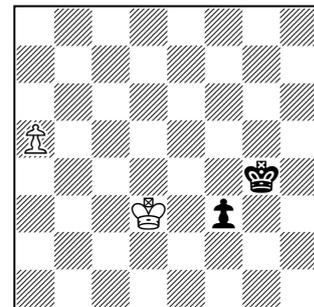
So White must cut Black off by **6 Kc6**, but has this not wasted a tempo on a king move? Indeed it has and after **6...f5 7-10 b8Q f1Q** both sides have promoted, but White can pick up Black's new queen by **11 Qe8+** and **12 Qf8+**. So Black persists by **6...Ke7**, and if White plays **7 Kc7** to head him off a second time Black's promotion will indeed draw since White will be unable to pick up the new queen. Hence **7 b5**, but **7...Kd8** prepares to meet **8 b6** with **8...Kc8** drawing, see **3b**, and does this not force White's king to block its own pawn just as **6...Kd7** did in the line from **6 b5**? Yes, it does, but it also exposes Black's king to a check from b8, and after **8 Kb7** (or **Kb6**) **f5 9 Ka7 f4 10-11 b7 f2 12 b8Q+** White has his win. In addition to **2 Ke7**, there have been minor duals from move 8 onwards, but in a strategic ending like this they are unimportant.



4 - White to play and win



4a – after 5 Kc5



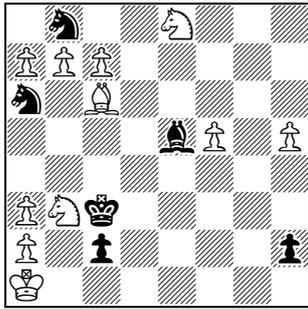
4b –after 10...Kg4

In **3**, the pawns were already fixed. In **4** (*British Chess Magazine* 1944) White will have to play **g5** to fix them.

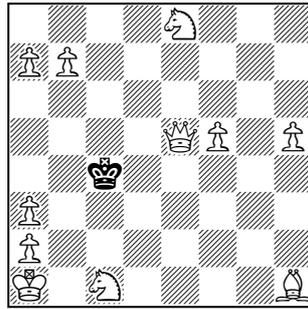
Let's try it straight away: **1 g5**. Black replies **1...Kb7**, and although White can claim the distant opposition by **2 Kb3** it isn't enough; lines such as **2...Kc7 3 Kc3 Kd7 4 Kd3** (**4 Kb4 Kd6**) **Ke6 5 Ke4** (**5 Kc4 f6**) **f6 6 g6 f5+ 7 K—Kf6** are all drawn. Instead, White must play **1-2 Kc4** forcing **2...Kc6** to prevent **3 Kd5**, and now **3 g5** claims the close opposition. Play continues **3...Kd6 4 Kd4 Ke6** hoping for **5 Ke4 f6** as before, but White has **5 Kc5** giving **4a**. The sequel **5...Kf5 6 Kb6 Kxg5 7 Kxa6** is obvious, and again we have a race.

Black is five moves from promotion, White is only four, but it's Black's move, and after **7...f5 8 Kb5 f4** a simple advance by **9 a6** will lead to promotion by both sides. So White must try to get his king back to f1, and play continues **9 Kc4 f3 10 Kd3 Kg4** giving **4b**. Now is the moment for **11 a6** (**11 Ke3 Kg3** is drawn), and after **11...Kg3 12 a7 f2 13 Ke2 Kg2** Black finds that he has kept White's king out of f1 only by exposing his own king to check: **14 a8Q+**.

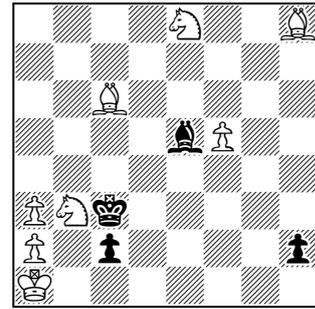
This time, White's play has had to be completely accurate all the way through.



5 - White to play and win



5a – 1 bxa8Q, after 5 Nxc1



5b – main line, after 6 h8B

Richard's other great love was the ending of Q+N v Q, but here he was working in a field already very well tilled, and I fear he expended a great deal of time and analytical effort rediscovering what was already known (the example which I had provisionally selected for quotation proved after a few introductory moves to have been exactly anticipated over forty years before). Instead, let me finish with **5** (*Chess* 1944), a study in a totally different style which appears to have been an unsung record holder for nearly forty years.

Black threatens 1...Kc4+ or 1...Kd3+ followed by mate, and if 1 cxb8Q to cover e5 then 1 ..Nc7 2 QxcT Kc4+ 3 Qxe5 hQ+ 4 Bxhl c1Q+ 5 Nxc1 and he has stalemated himself (see **0a**). So we take a bishop, **1 cxb8B**, and after **1...Nxb8** we take a second, **2 axb8B**, and then a third, **2...Bxb8 3 h6 Be5 4 b8B**, and even a fourth, **4...Bxb8 5 h7 Be5 6 h8B** (see **0b**). Now, after **6...Bxb8**, Black's bishop can be shut out of play by **7 f6**, and White will mop up.

Why do I talk about a possibly unsung record holder? Harold Lommer had previously attempted the task of four promotions to bishop (*Le Temps* 1933, 69218 in Harold van der Heijden's "Endgame study database V"), but there is a dual in the play whereas Richard's setting is clean. Lommer tried again with all four promotions on the sans square (*British Chess Magazine* 1945, HHdbV 62450), but again my computer thinks there are duals. Richter subsequently equalled the task (Special Prize *Schach* 1977, HHdbV 37738) and Zinar increased the number of promotions to five (1 Special HM *Friendship-200 AT Achalgazdra Kommunisti* 1983, HHdbV 30515), but Richard would seem to have been sole holder of the record for over thirty years and joint holder for another six.

Richard did not achieve the same renown in our field as he has in the field of recreational mathematics, but his studies are neat and many are also instructive, a point which he considered important. We have been the richer for his presence.