British Endgame Study News
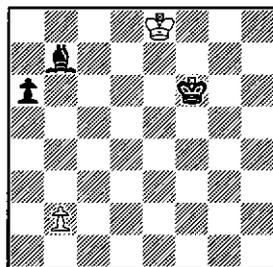
Contents of this issue

by Jarl Ulrichsen
White to play and draw

This issue. This month's special number is devoted to studies by the Moravian composer and analyst František Dedrle, and our middle pages address an ending which has recently been attracting attention. I had hardly finished drafting them when I received *EG* 144, where John Roycroft briefly addresses the same issue. They were in no sense conceived as a deliberate response to John's remarks, but perhaps they throw a little light on the question which he raises.

The previous issue of *EG* was unusually rich in instructive lightweights, and one that particularly took my fancy was Jarl Ulrichsen's little drawing study above. Spend a few minutes on it before looking inside.

BESN in electronic form? A couple of readers have asked if I have any plans to issue *BESN* in e-form. The short answer is No, because the computer files are designed to be sent to a printer and I would have to spend a lot of time reformatting them for effective e-perusal, though if anyone else wishes to make material from *BESN* available on the web I have no objection. But *BESN* itself will remain a printed journal, conveniently portable and readable by the human eye without the need for intermediary equipment. During the last hundred years, we have seen the advent of cinema newsreels, radio news, television news, and the Internet, and the printed newspaper has been written off many times; but in practice it still has a role to play.

Spotlight. "Shouldn't Mike Bent's **13** in special number 28 have a Black knight on h1?" asks Harold van der Heijden, citing various sources. Yes, it was originally published in this form, it has been widely quoted thus, and my omission of the knight was a mistake; but my computer reported nothing wrong while I was writing the special number and a repeat test confirms the verdict, so we have yet another case where the extra confidence given by computer testing has allowed a constructional economy which the composer would not have risked unaided. But it doesn't usually happen quite so fortuitously!

And Zakodyakin's study **6** in special number 30 was from *Thèmes-64* and not from *La Tribune de Genève*: I had misread the codes in the database.
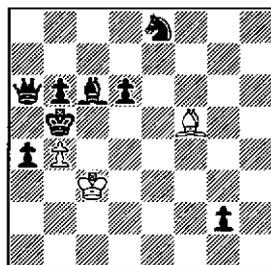
Recently published British originals
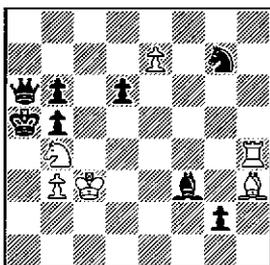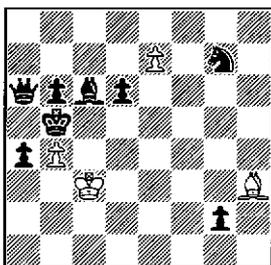
1 - draw   1a - 1 Nc6+, after 3...Kb5   1b - 1 e8Q, after 5 Bf5

An unfortunate omission from March's list of outlets for original composition was the column in *Correspondence Chess*, now in the hands of Ian Watson. Mike Bent's **1** appeared in it last year.

We can hardly set up a stalemate here; what else can we do to draw? Let's play a few moves and see what happens. 1 Nc6+ forces 1...Bxc6, 2 Ra4+ forces bxa4, 3 b4+ forces 3...Kb5 (see **1a**): no, there is no way forward, White has only 4 Bg4 to continue the attack and Black has several ways of meeting it. But if we start by diverting the knight, **1 e8Q Nxe8**, and then continue **2 Nc6+ Bxc6 3 Ra4+ bxa4 4 b4+ Kb5** as before, White can play **5 Bf5** (see **1b**), and at least it will be out of range of a promoted knight on g1. Now what can Black do? He is threatened with mate, the knight prevents 5...Be8, and if the bishop tries another square the check **6 Bd7+** drags him straight back and **7 Bf5** repeats the position. Alternatively, he can create a flight square on a4 by playing **5...a3**, but now **6 Bd3+ Ka4 7 Bc2+ Kb5 8 Bd3+** gives White a perpetual check on another diagonal.
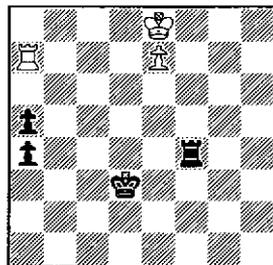
Ian is at Crismill Manor, Crismill Lane, Bearsted, Kent ME14 4NT, e-mail address ian@irwatson.demon.co.uk . His column is primarily devoted to problems, but he is very willing to print original studies if he is offered them.
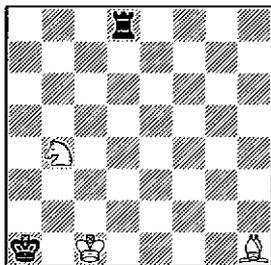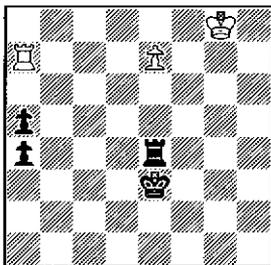

2 - win   3 - win   3a - 2 Ke8, after 2...Kd3

Guy Haworth (sorry, not "Howarth" as on page 191 of our December issue) has been looking at various computer-generated positions with five men. **2** is the start of

the longest win with K+B+N v K+R, and it occurred to me that my readers in *diagrammes* might enjoy gently solving it. White would like to mate by Nc2+ and Bd5, but the rook's guard of d5 prevents this. He has to start instead with the quiet move **1 Bc6**, and only **1...Rd6** continues to keep the mate at bay (1...Rd4 allows a fork, and the pin 1...Rc8 is useless because 2 Nc2+ releases it). Now a second quiet move **2 Bb5** switches the point of attack to c4, and Black is helpless. He can try **2...Rb6**, to meet **3 Nc2+ Ka2 4 Bc4+** by **4...Rb3**, but **5 Nd4** finishes him off.
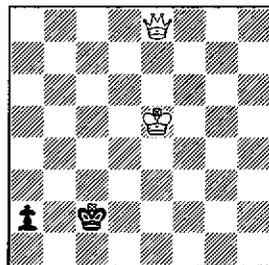
Computers first attracted attention by cracking positions which had proved too deep for human attack, and nobody would set such a thing for solution. But they also help by working quickly through large amounts of data and highlighting positions of particular interest, and discoveries of this kind may be surprisingly light and elegant.
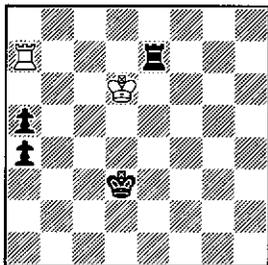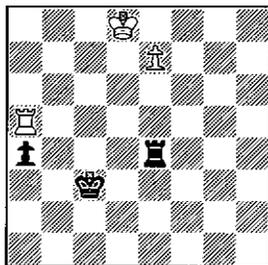
3b - 3 Kd7, after 5...Rxe7   3c - 3 Kd8, after 4...Kc3   3d - 3 Rxa5, after 8...a2

I set **3**, based on a study by Artur Mandler, in *diagrammes* last year, and it gave a lot of trouble. The wK must hide on e8, but if it goes straight there by 1 Kf8 Rf4+ 2 Ke8 Black will play 2...Kd3 and we have **3a**. White now has three options. If he tries 3 Kd7, Black has 3...Rd4+ 4 Ke6 Re4+ 5 Kd6 Rxe7 (see **3b**) 6 Kxe7 (6 Rxe7 is no better) Kc3 7 Rxa5 Kb3, when his king has linked up with his remaining pawn and he will draw. If 3 Kd8 then 3...Re4 4 Rxa5 Kc3 (see **3c**) 5 Rxa4 (this would win with wK on d7, because 5...Rxa4 would be met by 6 e8Q) Rxa4 (but with wK on d8, Black can afford to capture) 6 e8Q Ra8+. And if 3 Rxa5 then 3...Kc2 4 Kd7 Rd4+ 5 Ke6 Re4+ 6 Re5 Rxe5+ 7 Kxe5 a3 8 e8Q a2 (see **3d**) and draws. Note that 3...Kc3 won't do; if bK stood on c3 in **3d**, 9 Kd5 Kb2 10 Kc4 would lead to a Q v Qa1 win.

So bK can get near enough to his pawns to draw, and White must think of something else. The answer is **1 Kf7 Rf4+ 2 Ke6! Re4+ 3 Kd7 Rd4+ 4 Ke8**. Now **4...Kd3** gives **3a** with bR on d4 instead of f4, and White has the pin **5 Rd7** (5...a3 6 Rxd4+ Kxd4 7 Kd7 a2 8 e8Q a1Q 9 Qh8+); by going to e8 via f7-e6-d7 instead of directly, White has lured bR to the bad square d4. Other lines are 4...Ke2 5 Rxa5 Kd3 6 Kf7 etc, 4...Re4 5 Rxa5 Kd3 6 Kf7, and 4...Rd5 5 Kf7.

When I printed this in *diagrammes*, several solvers sent answers based on 2 Ke8, doubtless led astray by the quite accidental fact that each of the three moves Kd7, Kd8, and Rxa5 demands a different refutation. I published it as by "JDB after Mandler", but while I think this is technically correct it does somewhat overstate my contribution; all the individual lines appeared in a study by Mandler published in *Thèmes-64* in 1958, and I merely added the little king-walk to tie them together.

Safe defensive positions with K+2N v K+Q

Ken Thompson's definitive analysis of K+Q v K+2N has been available for many years, and the positions that have come my way since have borne out the verdict of John Nunn in *Secrets of pawnless endings*: "The general result is undoubtedly a draw, but there are many losing positions, some of them very lengthy" (page 298). It was therefore a surprise to read a somewhat contrary statement by Noam Elkies in the June 2001 issue of the *ICGA Journal*: "But some 5-man endings remain mysterious. No human can reliably tell whether a given KQKNN position is won or drawn with best play or estimate how many moves a given won position requires [...]" (page 96). These apparently conflicting opinions caused me to examine the data in greater detail, and perhaps some of the results will be of interest.

The first step was to run through the data and count or list the winning White configurations for each setup of the Black men. This showed at once that there was no unconditional fortress position for Black; wherever the Black men might be, White's K+Q could be placed so that he could win. Numerically, the best setups for Black were Nb8/Na7/Kb7 and Nc5/Nd6/Kc6, but even these allowed 23 different winning configurations for White: for example, against Nc5/Nd6/Kc6, Kb4 plus Qc1/c2/c3, Kd4 plus Qa8/f6/g6/h6/d5/f3/c2/g2/c1/h1, and Kc3/e3 plus Qg6/h6/f3/g2/h1 all win.

So there can be no question of a static defence by Black, and he must keep mobile and be prepared to respond flexibly to White's attack. But a successful attack involves bringing up the White king, and if we subclassify by White king position a more helpful picture emerges. **1** shows Nb6/Nc6/Kd6, where Black to play has a draw unless the White king is already attacking a knight (checks don't matter, attacks by the queen don't matter), and the same is true if the men are moved one or two files to the right (Nc6/Nd6/Ke6, Nd6/Ne6/Kf6), or one row down (Nb5/Nc5/Kd5), or one row down and one file to the right (Nc5/Nd5/Ke5). It is also true of **2**, of the same position one file to the right (Ne7/Ng6/Kf5), and of the similar position **3**.
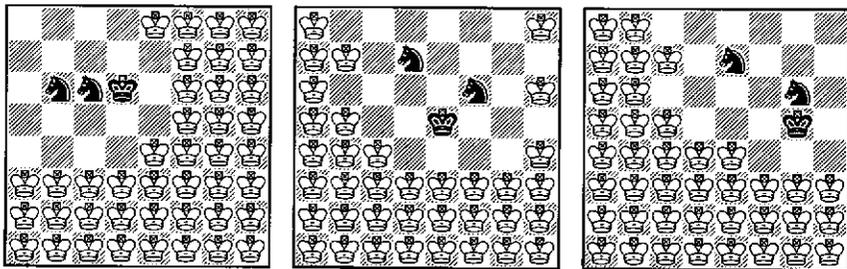

1, 2, 3: BTM draws against K+Q unless wK is attacking a knight
(see text for further such positions)

If wK is more distant (specifically, if it is at least two squares diagonally or three squares laterally from the nearest knight), there are many more drawn configurations. In particular, all configurations given by **4** are drawn BTM if the knights are within
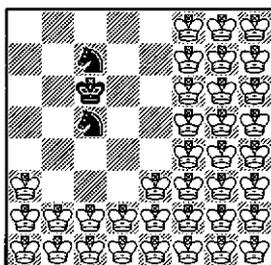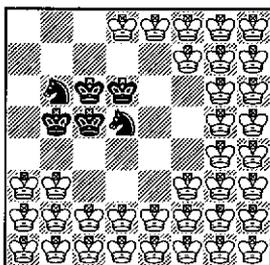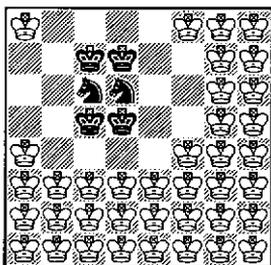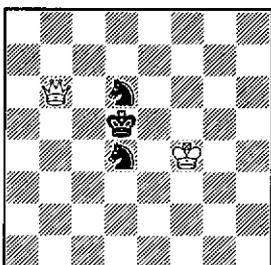
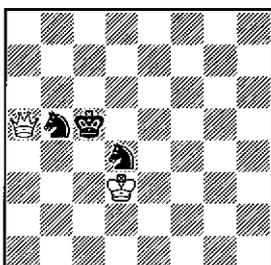**4, 5, 6:** further configurations where BTM draws wherever wQ may be (see text)

the sixteen central squares, as are configurations given by **5** if they are on rows 3-6 and not on the edge, and by **6** if they are on any of the columns c-f.
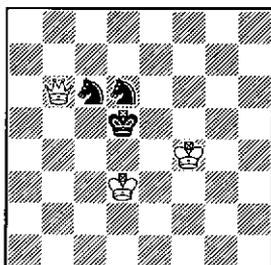
**7** - Black to move (2 cases)   **7a** - wKf4, after 1...Nd4   **7b** - after 4 Kd3

This has merely identified some simple classes of drawn position (there are many others); it hasn't spelt out how to hold the draw when one has been reached. To do this in full would take more than two pages and would have little point anyway (anybody needing to analyse a particular position will consult the database directly), but an example may be of interest. Black is in zugzwang in **7** to the extent that he must move a knight, but if wK is on d3 (or any similar square within a knight's reach) he can give check and then move the knight straight back again. If wK is on f4, Black has no check and so must abandon his side-by-side position, but he can play **1...Nd4** and we have **7a**. A nondescript White move now will allow Black to regain a safe side-by-side position (2 Kg5 Nc4 and wQ must move, 2 Q-- Nc6), so he gives check, **2 Qa5+**, and **2...N6b5** keeps a knight in the centre though 2...N4b5 also draws. White presses by **3 Ke3**, and after **3...Kc5** he presses again by **4 Kd3** (see **7b**). He seems to be making progress, but it is illusory; **4...Nc6** chases wQ away, and Black will regain a safe side-by-side position next move.

So while there are certainly areas which are obscure and may well remain so, there are also large groups of drawn positions which can be characterized fairly easily.

My thanks to Ken Thompson for compiling the data, and for supplying a flexible access routine which enables analyses of this kind to be performed; and if anyone with suitable access to Ken's six-man data cares to analyse Q+N v 2R and R+N v 2N similarly, I shall be most interested to see the results.
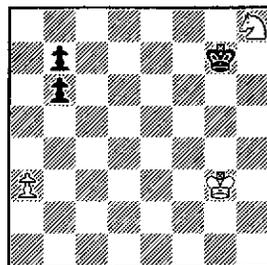
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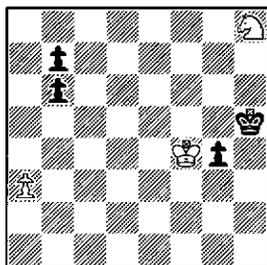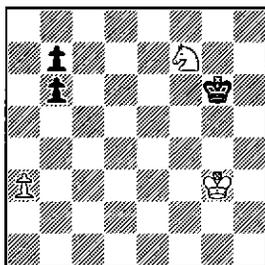

1 - win   1a - after 2...Kg6   1b - after 3...Kg7

Gleb Zakhodyakin's **8** in special number 30 reminded Alain Pallier of Noam Elkies's **1**, which took 5th Prize in the 1988 Assiac Memorial Tourney. I base my notes on those in the book *Endgame virtuosity*, of which Noam was a co-author.

Black must lose bPg4, but he can use it to distract White while bK goes for wPa4; for example, 1 a4 g3 2 Kxg3 Kg5 3 Kf3 Kf5 and wP will be captured or exchanged. Hence **1 Nf7** threatening 2 Ne5, and 1...Kg6 2 Ne5+ and 1...Kh4 2 Nh6 g3 3 Nf5+ are easy. But Black can play **1...g3 2 Kxg3** and only now **2...Kg6** (see **1a**), when 3 Ne5+ can be met by 3...Kf5 and 4...Ke4. Nor is 3 Nd6 any better (3...Kf6 4 Kf4 Ke6 and 5...Kd5), nor even 3 Nd8 (3...Kf6 4 Kf4 Ke7 5 Nxb7 Kd7 6 Ke5 Kc6 7 Nd6 Kc5).
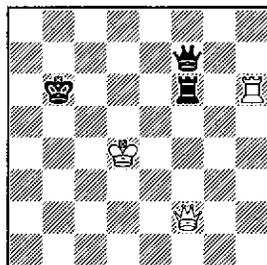
This leaves only **3 Nh8+**, and Black must play **3...Kg7** else White will play wK to b3 and then bring wN over to mop up. We now have **1b**, and subtlety is still needed: 4 Kf4 allows 4...b5! and White will be a tempo short (5 Ke5 Kxh8 6-8 Kxb5 Ke6 9-10 Kxb7 Kc4, or 6-8 Kxb7 Ke6 9-10 Kxb5 Kc8). Correct is **4 a4!** and now wK can keep bK at bay: **4...Kxh8 5-7 Kd6 Ke8 8 Kc7 Ke7 9 Kxb6!** and **10 Kxb7**.
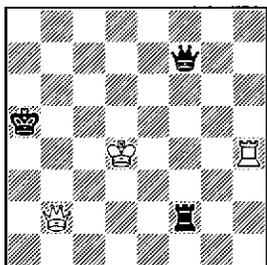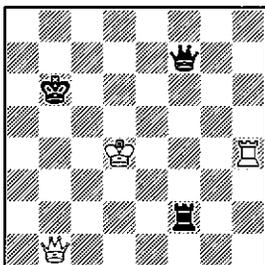

2 - win   2a - after 2 Qb1+   2b - 2...Ka5, after 5 Qf2
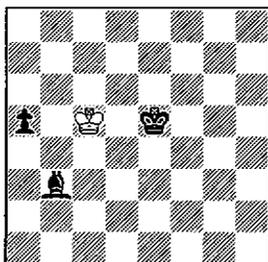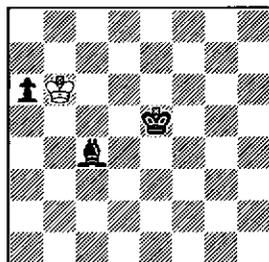
Pal Benko's extraordinary **2** (1 HM *StrataGems* 1998-99) is quoted in *EG* 144. **1 Qa1+ Kb6** (1...Ra2/Qa2 2 Qc3+ etc) **2 Qb1+** gives **2a**, and we have **2...Ka5 3 Qe1+ Kb6 4 Rh6+ Rf6 5 Qf2** with the remarkable position **2b**, or **2...Ka6 3 Rh6+ Rf6 4 Qf1+** with an echo. Also given is 2...Kc6 3 Rh6+ Rf6 4 Qe4+ Kb6 5 Qf5 and the same a third time, but 3 Qe4+ also seems to work; is my computer blind, or is theirs?
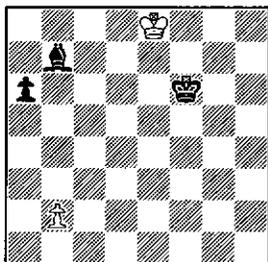
**3** - draw   **3a** - 2...a5, after 4...Ke5   **3b** - 2...Ke5, after 4...Bc4

Well, how did you get on with Jarl Ulrichsen's **3** (1 HM *Springaren* 1997)? This is drawn only by playing **1 Kd7 Bd5** and now **2 b3!** The point is that Black threatened 2...Bb3 with a win known since the mid-19th century (2 Kd6 Bb3 3 Kc5 a5 4 Kd4 a4 5 Kc3 Ke5 6 Kd2 Kd5 7 Kc1 Ba2 and if 8 b3 then 8...a3), so wP must advance while it can, and if 2 b4 then 2...Ke5 3 Kc7 Kd4 4 Kb6 Bc4 and Black will keep wK from the corner. So 2 b3 to guard c4, and now White can just draw: **2...a5 3 Kd6 Bxb3 4 Kc5 Ke5** (see **3a**) **5 Kb5 a4 6 Kb4 Kd4 7 Ka3** and 8 Kb2 can be stopped only by **7...Kc3 stalemate**, or **2...Ke5 3 Kc7 Bxb3 4 Kb6 Bc4** (see **3b**) **5 Kc5** (5 Ka5 allows 5...Kd4 and again Black will keep wK from the corner) **Be6 6 Kb6 Bc8 7 Kc5** and a draw by repetition.
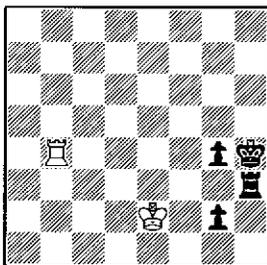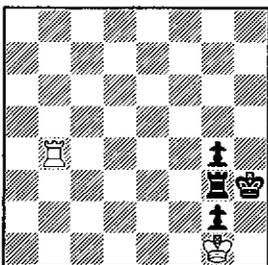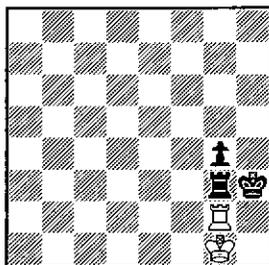
**4** - draw   **4a** - after 2...Kh3   **4b** - after 9...Rg3

The setting of Velimir Kalandadze's **4** (1 Pr "Gaprindashvili-60" 2001, section for draws) may recall Alessandro Salvio's famous 1604 rook opposition study, wKg1, Rg7 (2), bKh3, Re8, Pg4/g2 (4), draw by 1 Rh7+ Kg3 2 Re7! Rf8 3 Rf7!, and it will be seen that there are indeed similarities.

The opening **1 Kf2 Rg3 2 Kg1 Kh3** gives **4a**, but if 3 Rb8 Rc3 4 Rh8+ Kg3 5 Rc8 hoping for an immediate Salvio draw then Black has 5...Rf3 (6 Rc3 Kh3 and wins). White must first bring wR to the second rank by **3 Rb2**. Black can save bPg2 by playing a move such as **3...Re3** (4 Rxg2 Re1+ etc), but now we do have a Salvio opposition: **4 Re2!** Play continues **4...Rd3 5 Rd2** and so on across to **7...Ra3 8 Ra2**, and Black's only remaining chance is **8...Rf3**. Now a further opposition fails (9 Rf2 Rxf2), but White has **9 Rxg2**. Yes, but **9...Rg3** pins wR (see **4b**), and is not 10 Rxg3+ Kxg3 a win? Indeed it is, but White has **10 Kh1!** and **10...Rxg2** will be stalemate.
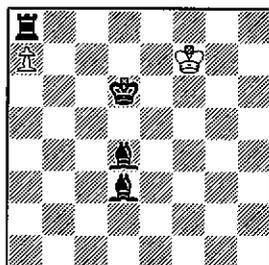
News and notices

Meetings. The next *EG* readers' meeting will be at 17 New Way Road, London NW9 6PL, on **Friday July 5** at 6.00 pm; non-subscribers welcome, but please bring £5 towards the buffet (except on a first visit). Bring the latest *EG* with you!
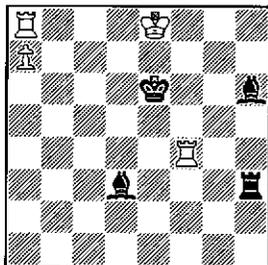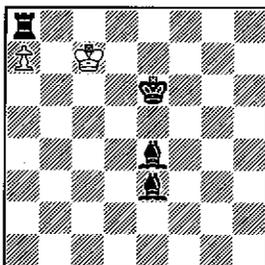
1 - draw   1a - 2...Rh8+, after 4...Bxe4   1b - 2...Kd6, after 5...Bxd4

Tourneys. I don't always have space to announce forthcoming tourneys here (readers wanting properly comprehensive coverage will find it in *EG*), but for once I have room to spare and I can give notice of an ARVES tourney in memory of the famous Mark Liburkin (1910-53). The theme is "Echo-Chameleon" (echo on squares of opposite colour), to be shown "in variations, try, twins, or along the main line", and the thematic example is shown as **1** above (Liburkin, 1 Pr *Shakhmaty v SSSR* 1946): **1 Rb4 Be3 2 Kd8** and either **2...Rh8+ 3 Kc7 Rxa8 4 Re4+ Bxe4 stalemate** (see **1a**) or **2...Kd6 3 Ke8 Rh8+ 4 Kf7 Rxa8 5 Rd4+ Bxd4 stalemate** (see **1b**). Send entries marked "Liburkin-MT" to Harold van der Heijden, Michel de Klerkstraat 28, NL-7425 DG Deventer, The Netherlands, e-mail harold_van_der_heijden@wxs.nl, to arrive not later than **31 March 2003**. Judge: Yochanan Afek.

World Chess Composition Tournament (see March, page 200). I was right to assume that my lack of enthusiasm would not be universally shared. The British entry for the study section is being co-ordinated by David Sedgwick, 23 Tierney Court, Canning Road, Croydon, Surrey CR0 6QA, and "now that the problem of apparent home town judging has been resolved" David hopes to be able to forward the full quota of three entries. To facilitate discussion at *EG* readers' meetings, he would like to receive contributions by June 20 if ready, September 20 if possible, and December 20 at the latest. I understand that one has already been received.

Anybody wishing to give notice in BESN of any event, product, or service should contact the Editor. There is no charge and no account is taken of whether the activity is being pursued for commercial profit, but notices are printed only if they seem likely to be of particular interest to study enthusiasts. Readers are asked to note that the Editor relies wholly on the representations of the notice giver (except where he makes a personal endorsement) and that no personal liability is accepted either by him or by any other person involved in the production and distribution of this magazine.