British Endgame Study News
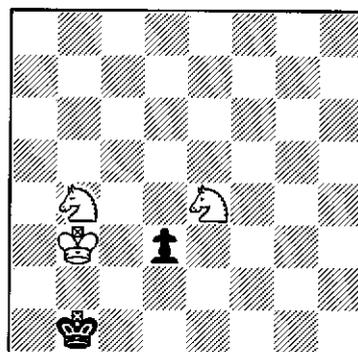
Contents of this issue

by Wallace Ellison
after "Anon", 1894
White to play and win

Editorial. A year or so ago, Wallace Ellison extended an anonymous 1894 study from the *Philadelphia Times* which Dawson quoted in *The Chess Amateur* in 1914. I printed his new version the *BCM* in July 1996, and it makes an excellent study to try and solve before looking inside. The accompanying special number contains material from mainland Europe: a joint composition story from Holland, together with a selection of studies by the excellent German composer Paul Heuäcker.

Spotlight. Timothy Whitworth points out that although the splendid Tarasyuk study which I quoted in June is sound enough, my suggested answer to 2 Nd2 is not; after 2...Kxd2 3 Be4 R2b4, White can play 4 Rc2+ and 5 d8Q. When quoting this study in the *BCM* in 1994, he gave 2...R2b4 3 Be4+ Ke2 as given in *Shakhmatnaya kompozitsiya*, and this does work.

Timothy also points out, more sadly, that I picked one of the few unsound studies from *The Best of Bent* to illustrate this book in special number 6: in study **2**, 6 Kf2 works just as well as Kf1. This really is a shame.

World Chess Composition Tournament. Foreign readers please ignore this paragraph! The theme of the study section of the present WCCT is: "In order to gain or lose a tempo, White refuses to capture a piece (not a pawn). Win or draw." Three entries per country are allowed. The British entry is being co-ordinated by Colin Crouch, 98 Elms Road, Harrow Weald, Middlesex HA3 6BT, and he would like to receive candidate compositions by the end of the year so that a provisional selection can be made at the January *EG* readers' meeting. Joint entries are permitted, so if you have a promising idea but cannot set it to your satisfaction, do please let him know. Additionally, Colin is an IM over the board, and will be able to help with analytical questions. In principle, any study showing the theme will be a candidate for selection, but experience has shown that WCCT judges tend to play safe and award the highest placings to works that show the required theme in multiple.

Large print copies. Readers are reminded that I can supply *BESN* in large print, and any reader who would prefer to receive it in this form is asked to tell me.
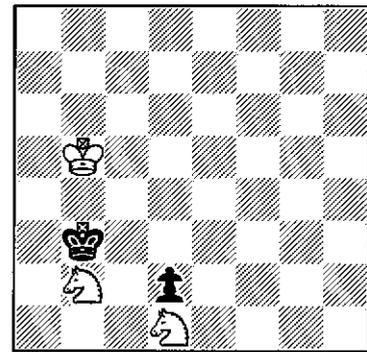
Recently published British originals
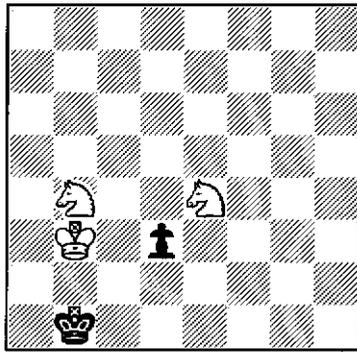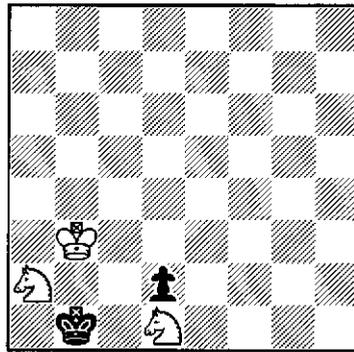

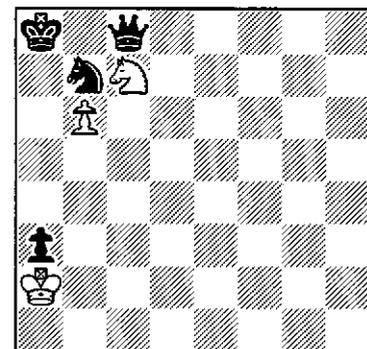| 1 - win	1a - after 3...Kb1	1b - after 10...Kb3

Did you blockade bP on d3 in Wallace Ellison's **1**? It seems the natural thing to do, but in fact we shall need it on d2! The solution runs **1 Na2 d2** (or 1...Ka1 2 Ndc3 d2) **2 Ndc3+ Ka1 3 Nd1 Kb1** and now we have the position which Dawson quoted in *The Chess Amateur* (see **1a**). According to Dawson, the author supposed mate in 11, but the only solver, F. A. Huxmann, gave a solution in 16. In fact the definitive solution according to the database takes 17 moves: **4 Nac3+ Kc1 5 Kc4! Kc2 6 Ne3+ Kb2 7 Ncd1+ Ka3 8 Kb5** (or Kc5) **Kb3 9 Nc4 Kc2 10 Ncb2 Kb3** (see **1b**) **11 Kc5** (Huxmann played 11 Ka5 Kc2 12 Ka4 Kb1 13 Ka3, giving the position after 14 Ka3 below, but 11...Ka3 would have been better) **Ka3 12 Kc4 Ka2 13 Kb4 Kb1** (see **1c**) **14 Ka3!** (Kb3 is slower) **Kc2 15 Ka2 Kc1 16 Kb3 Kb1 17-18 Nb4 Kb1 19 Nc3+** and mate next move. There are alternatives at moves 8, 9, and 11 onwards, but all except 8 Kc5 are slower. Wallace may have added only three moves, but the unexpected forced advance of the bP makes the extension well worth having.
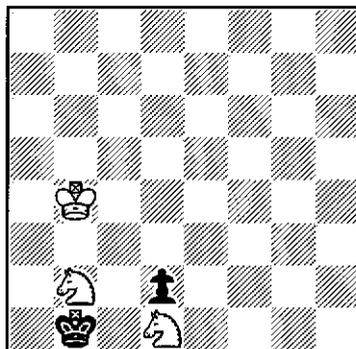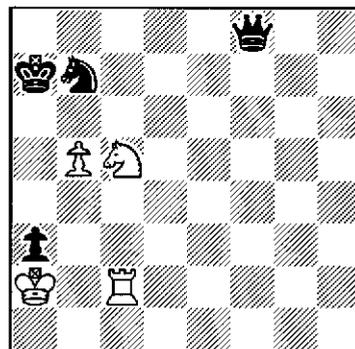
1c - after 13...Kb1	2 - draw	2a - after 4 Nc7+

Paul Michelet's **2** (*The Problemist Supplement*, March 1996) was also well received. 1 Nxb7 Kxb7 loses, hence **1 b6+ Ka8**, but **2 Ne6** is not quite so obvious. However, it allows Black no check, and after say **2...Qg8** (bQ must guard c8) **3 Rc8+** (anyway!) **Qxc8 4 Nc7+** we have perpetual check on a6 and c7 (see **2a**). "Sweet little ending; charming as it is unpretentious" was a typical comment. The composer regretted the need for bPa3, but without it White could draw by 2 Nxb7 Kxb7 3 Rb2.
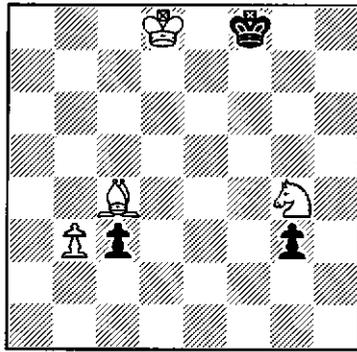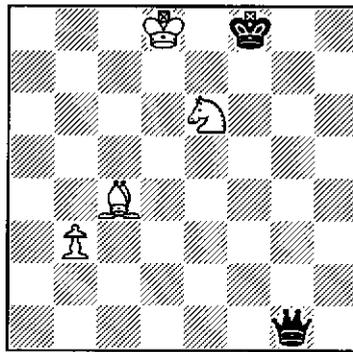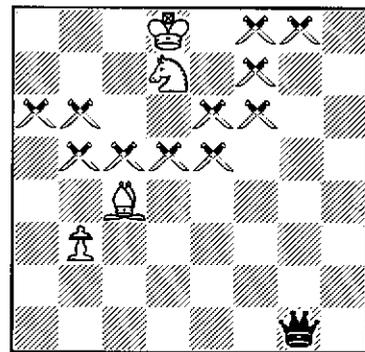
3 - draw	3a - after 4 Ne6+	3b - a barrier against bK

One of Paul Byway's interests is the construction of fortress positions with B+N+P against Q. An ending with B+N alone against Q is normally lost unless White can reach a fortress discovered by Max Karstedt (wN on d5, wB on b7 or a8 guarding wN, wK in the same corner preventing the infiltration of bQ) and an extra pawn far from promotion does not usually help. Thus in **3** (*The Problemist*, January 1997) we have **1 Ne3 c2** (1...g2 2 Nxg2 c2 3 Nf4 c1Q 4 Ne6+ leads to the same position) **2 Nxc2 g2**, and Paul gives 3 Ne3 g1Q 4 Nd5 Qc5 5 Kd7 Qa7+ 6 Kd8 Qb7 as a win for Black; material loss is inevitable once bQ and bK are working together, and the Karstedt fortress position is far out of White's reach. White can however draw by **3 Nd4 g1Q 4 Ne6+** (see **3a**) **K-- 5 Nc5+ K-- 6 Kd7**, after which he has constructed an impenetrable barrier against bK (see **3b**). All White has to do to draw is to keep wK next to wN; bQ can neither win material on its own nor put wK in zugzwang.
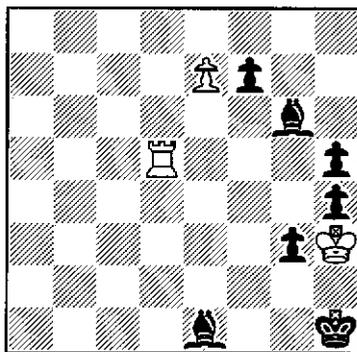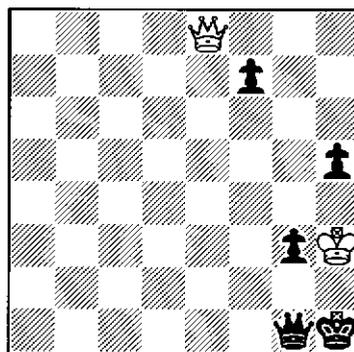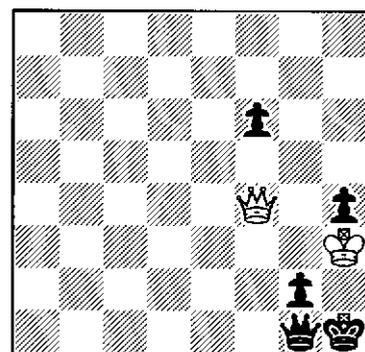
4 - win	4a - after 5...g1Q	4b - reciprocal zugzwang

The natural move 1 e8Q in David Blundell's **4** (*diagrammes*, 1996) is met by 1...g2 threatening 2...g1N mate, after which 2 Rg5 and 2 Rxh5 both lose and 2 Qxe1+ allows a simple draw (2...g1Q 3 Rd1/Qd1 Bf5+). 1 Rd1 Bf5+ 2 Kxh4 Bd7 3 Rxe1+ Kh2 is no better, and 1 Rg5 definitely loses (1...g2 2 Rxg2 Bf5+ etc). The right line is **1 Re5 Bf5+ 2 Rxf5** (2 Kxh4? Bd7) **g2** (again threatening mate by 3...g1N) **3 Rg5 Bg3 4 Rxg3 hxg3 5 e8Q g1Q** and we have **4a**. The careless moves 6 Qa8+/Qc6+ lose (6...g2 7 Qd6/Qc7/Qb8 Qe3+), and White must play **6 Qe4+** to control e3. Black plays **6...g2**, and now White must reach **4b** with Black to move. 7 Qe5 h4 8 Qf4 f6 loses, but **7 Qf4** wins (**7...f6 8 Qg3 h4 9 Qf4** or **7...h4 8 Qe5 f6 9 Qf4**). "Un problème d'excellente qualité qui m'a fait beaucoup souffrir," wrote a solver.

Testing studies by computer

by John Beasley

My first action on becoming study editor of *diagrammes* in 1993 was to get myself a program to help with the testing of originals. It has long been the practice of problem editors to use computers for testing, but study editors have been more circumspect; the techniques for positional assessment on which computers rely when they have to stop calculating are not always reliable when there are only a few men on the board, and strong players have usually preferred to back their own judgement. However, my playing strength is modest and my capacity for oversight is considerable, and I would have been in great difficulty on my own. I therefore bought myself a copy of version 2.0 of Genius, which was recommended to me as the best program available for my computer at the time. Neither it nor my modest 486/25 represents the state of the art today, but they have proved an effective combination.

My experience using this armoury has been as follows.

- 70 per cent of the originals I receive for publication are unsound, and the computer finds the flaw. Left to myself, I would probably find no more than a quarter of these flaws.
- 3 per cent are unsound and the computer does not find the flaw, but a solver or other analyst does.
- An unknown but I hope small proportion are unsound and the flaw escapes computer, solvers, judge, and everyone else.
- In 1 or 2 per cent of cases, the computer claims a flaw that does not exist. My technique is to say to the composer, "My computer wants to play such-and-such and I can see no good reply," and every now and then he sends me a refutation and I have to write back and apologize. It happens about once a year.
- The rest are correctly reported as being all right.

Additionally, there are occasions when the computer wants to play a Black move other than that which is given by the composer as the "main line", and if it seems to me that this is indeed Black's strongest and most natural move I may reject the composition even though some would argue that it is not technically "unsound".

One important point must be made about these figures: they relate to a particular program, a particular computer, *and a particular operator.* A computer calculates variations and simultaneously makes positional assessments, but sooner or later it has to stop calculating and rely on its latest assessment *and the point at which this happens is decided by the operator.* Suppose White is trying to win a piece by domination. The computer calculates away, showing an assessment of around 0.00 (zero pawns ahead), and then suddenly realizes that a piece will be won in all lines and changes its assessment to around 3.00. This may take seconds, it may take hours, but if I stop the computer too soon I get the wrong answer.

When else does the computer go wrong? It doesn't detect "fortress" positions (one side has a material advantage that would normally win, but the other can set up a barricade and keep him at a distance) but this is rarely a problem; such positions may well occur as the theme of a study, but they don't turn up as busts. It misjudges pawn

races and endings with advanced pawns against pieces, and this is one of the areas where I have to examine its judgements with care and perhaps tell it to try some particular moves and then look again. (A computer's searching time is basically exponential: if to look ahead six moves on each side takes a minute, to look seven moves ahead may well take an hour. It follows that if I tell it the first two moves to play, it can look eight moves ahead in the time it would otherwise have needed for six, and this may make all the difference.) It also misjudges elementary endings such as queen against pawn or rook against knight (it doesn't have a database giving the winning and drawing positions and the crucial capture is usually too far ahead to be reached by searching, so it judges them on material alone and fails to distinguish the good positions from the bad) and my two most serious misjudgements to date have arisen from this cause. If I *know* such a position is going to arise, I can examine it using a separate database as described below, but if it occurs in a sideline I may remain unaware that there is a problem until it is too late.

How much would I gain by upgrading my system? It would be pleasant to reduce the $3 + x$ per cent of cases where the computer misses a flaw and the 1 or 2 per cent where it falsely claims one, and the incorporation of a complete four-man endgame database would be a significant step in this direction. If a program including such a database were to become available, I would buy it at any reasonable price. This apart, there is not a great deal of scope for improvement. The accident rate is already small, and even Very Deep Blue Indeed is not going to reduce it to zero.

So far, I have been talking about the use of ordinary chess-playing programs. There are two other possibilities: (a) using the Thompson five-man databases, and (b) writing an ad-hoc program to analyse a particular position.

The Thompson databases give complete information within their field. They are of greatest use to composers, but I have also found them useful as an editor. Once a database position has been reached, the result is definitively known.

The writing of an ad-hoc program to analyse a particular position might seem outside the realms of practicality, but in one common and important case, where White is to win and we need to verify a draw by perpetual check after a wrong move, it is actually quite easy. A perpetual check with only three moving men (say bQ against wK and wQ) can be analyzed on a normal PC, and one with four moving men on a university machine. I described the writing of one such program last year in *EG* (*EG* 119 pp 784-6) but in practice I would expect a competent programmer to work out the details from first principles without difficulty. Again, one has the advantage (assuming that there is no error in the program) that the result is definitively known.

It is of course a major step to assume that there is no error in a program, and philosophers have been arguing about the matter ever since the publication of the first important mathematical proof that depended on the analysis of specific cases by computer (that of the "four-colour theorem" in 1976). My personal view is that no proof by computer should be regarded as established until identical results have been produced by two programs written independently, but in practice this rarely happens. However, most people who undertake this sort of work get it right, and in any case the errors are likely to be fewer than if a corresponding analysis is performed by hand.
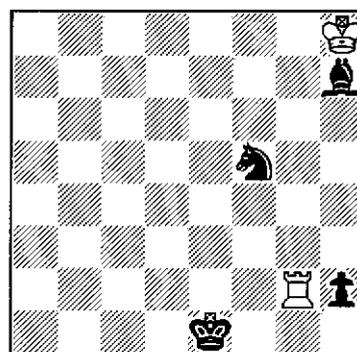
From the world at large

The most prominent event in recent weeks has been the announcement of the results of the fifth World Chess Composition Tournament, but the complete study award will be published in *EG* and I am sure that the leading compositions will be reprinted *ad nauseam* in other magazines. Let's devote our own space to something else.
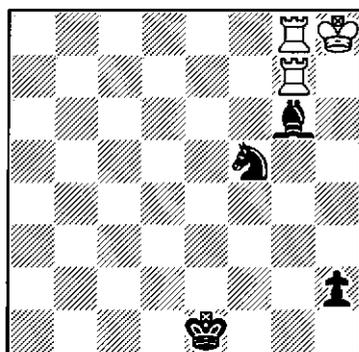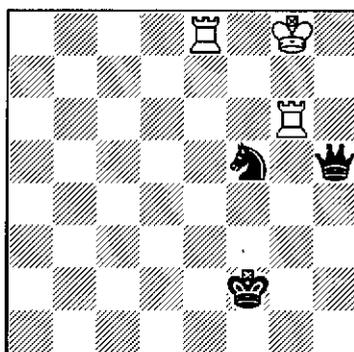

| 1 - draw | 1a - 1 Re8+, after 3...Qh5 | 1b - main line, after 2 Rg2 |

The St Petersburg enthusiasts have restarted *Zadachy i etyudy* ("Problems and studies"), the famous little magazine which ran to eight issues between 1927 and 1930. Issue 10 included some recent compositions by Alexandr Grin, among which 1 (*hors concours*, van Reek Jubilee Tourney, 1995) took my eye. The natural try is 1 Re8+ hoping for 1...Bxe8 2 Rh7, but 1...Kf2 leaves White nothing better than 2 Rxg6 and now 2...h1Q+ 3 Kg8 Qh5 gives the remarkable position **1a**. The rooks are skewered; 4 Kf7 allows 4...Nd6+ exploiting the pin; 4 R8e6 allows the second fork 4...Ne7+; and 4 R6e6 is met by 4...Qg5+ with mate to follow.
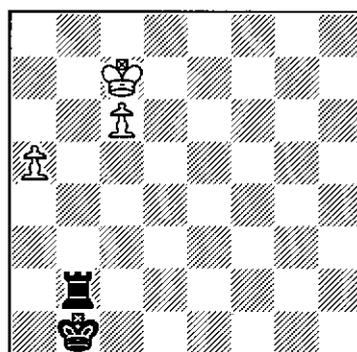
Instead, White must play **1 Rh7** at once, and after **1...Bxh7 2 Rg2!** there are stalemate possibilities (see **1b**). Black might as well play **2...h1Q** (2...h1R is no better, and promotions to bN and bB merely waste material), and after **3 Re2+** we see that stalemate or repetition is unavoidable: **3...Kxe2** with immediate stalemate, or **3...Kf1 4 Re1+ Kxe1**, or **3...Kd1 4 Rd2+ Kc1 5 Rc2+** and so on.
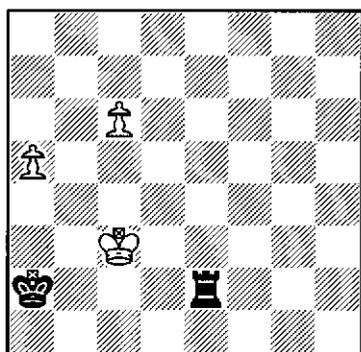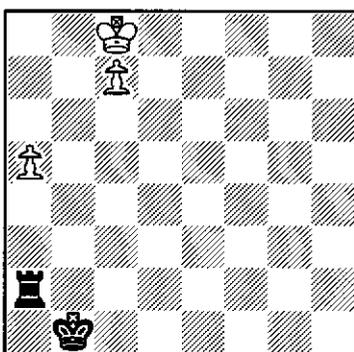

| 2 - win | 2a - 3 Ka6, after 6...Ra2 | 2b - main line, after 6...Kb1 |

The same issue of *Zadachy i etyudy* quoted some studies which had been

composed jointly by St Petersburg or Leningrad composers, among which was **2** (V. A. Korolkov and L. I. Katsnelson, 1st-5th Prize, Kazantsev Jubilee 1987). Vladimir Korolkov is normally regarded as a composer in the romantic style and the play in **2** certainly has romantic elements, but the setting is strictly classical. Black threatens 1...Re6 and wP moves are clearly not going to win (1 a6 Re6, 1 c7 Re8), so wK must come and help. The simple advance 1 Kc4 allows Black to play 1...Ka3 after which bK will be able to make a nuisance of itself, and the correct move is **1 Kb4**. The reply **1...Rc2** forces **2 Kb5**, and now **2...Rb2+** gives White a problem. The tempting move 3 Ka6 is insufficient: 3...Kb1! 4 c7 (bR is ideally placed to check and to attack the pawns, and this immediate advance is White's only hope) Rc2 5 Kb7 Rb2+ 6 Kc8 (the only hiding place - if 6 Ka7 then 6...Rc2 forces him back into the open) Ra2 (now the a-pawn goes, see **2a**, but White's advance to c7 seems to have won the day) 7 a6! Rxa6 8 Kb7 (surely forcing promotion) Ra2! (yes, but to no avail) 9 c8Q Rb2+ and Black has perpetual check. The correct move is **3 Kc5**, and after **3...Rc2+** White must play **4 Kb6** to reach safety on c7 (4 Kd6 Kb1 leads back into the previous line). Black's best is **4...Rb2+** duly forcing **5 Kc7**, and now **5...Kb1** again clears the second rank (see **2b**).

If anything, this looks worse for White than **2a**, because the c-pawn is less far advanced, but it is the a-pawn that is crucial. Play continues **6 a6 Ra2 7 Kb7 Rb2+**, and now the winning move is **8 Ka8!** Black has nothing better than **8...Rb6** (8...Rc2 leads to the same finish) and White's move 8 Ka8 has left **9 a7!** available. There follows **9...Rxc6 10 Kb7**, and this time White will win even after 10...Rc2; with wQ on a8 instead of c8 there is no perpetual check.
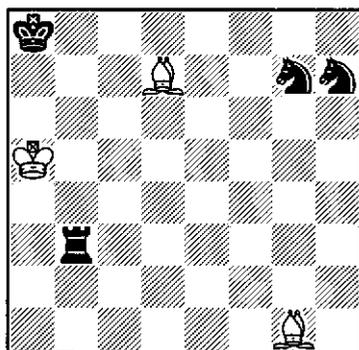
3 - draw
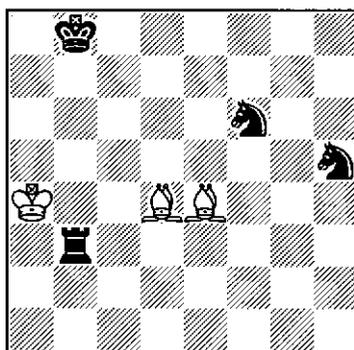
3a - after 4 Ka3
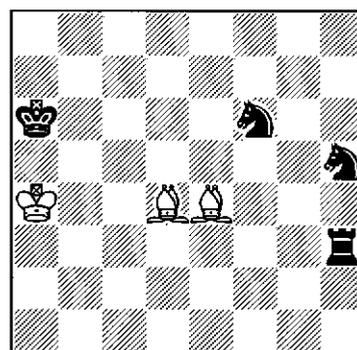
3b - after 6...Ka6

Another excellent Russian publication is *The Ural Problemist* from Ekaterinburg. Its latest issue includes an article to celebrate the 60th birthday of B. G. Olympiev, from which I quote **3** (3rd Prize, *Shakhmaty v SSSR* 1973). White needs to win back a piece, and **1 Bd4** forces **1...Nh5** (if 1...Rg3 instead then 2 Bc6+ and 3 Be5+). Now comes **2 Bc6+ Kb8 3 Be4** attacking bNh7, and the given line is **3...N7f6**; Black has alternatives, 3...Nf8/Ng5/N5f6, but I don't think any is better. White continues **4 Ka4** (see **3a**), and not for the first time we see the power of two bishops on an open board. Black's only safe move is **4...Rh3**, and **5 Be5+ Ka7 6 Bd4+ Ka6** is almost automatic. But has not Black found safety (see **3b**)? No, he hasn't; **7 Bf5!** threatens mate on c8, and bR is lost after all.

News and notices

Tourneys. I omitted this item from recent issues in order not to distract composers from offering their wares to Brian Stephenson for the WCSC, but that is now done for better or worse and I can resume normal service. In the latest issues of Frank Fiedler's invaluable *Infoblatt* I find the following: Yehuda Hoch 50th birthday, any theme, entries to Paz Einat, 1/27 Neveh Nir St., IL-74042 Nes Ziona, Israel, by 1 October; Vasha Neidze 60th birthday, any theme, to Gruzia (Georgia), 380009 Tbilisi, ul. Kostava, 37, Dvorec šachmat, by 31 October (put "V. Neidze - 60" on the envelope); Calvi Memorial, studies featuring promotion to bishop or rook, to L'Italia Scacchistica, via Lamarmora 40, I-20122 Milano, Italy, by 30 November ("Memorial Calvi" on the envelope); Royal Antwerp Sports Federation (KSFAH), studies with not more than 8 men, to Julien Vandiest, Arthur Matthyslaan 30, B-2140 Borgerhout - Antwerpen, Belgium, by 31 December ("KSFAH Tourney" on the envelope); Vladimír Kos 70th birthday, any theme, to Zdeněk Libiš, Sychotín 44, CZ-67972 pošta Kunštát, Czech Republic, by 20 June 1998. My apologies for any omissions.

Meetings. The next *EG* readers' meeting will be at 17 New Way Road, London NW9 6PL, on **Friday October 3** at 6.00 pm. Non-subscribers will be welcome, but will be asked to pay £5 towards the cost of the buffet (except on a first visit). Bring the latest *EG* with you!

The complete studies of Genrikh Kasparyan. I have just received an advance notice of this book, edited by John Roycroft and due for publication later in the year, and I am told that it will be available from Chess Direct, P.O. Box 18, Mexborough, South Yorkshire S64 9AR. I do not know the price at the time of writing, but I expect to review the book in the December *BESN*.

Books for sale. Brian Stephenson, 9 Roydfield Drive, Waterthorpe, Sheffield S20 7ND (please note new postcode), has taken over the bookselling operation formerly run for the British Chess Problem Society by the late Bob McWilliam. I haven't yet seen his list, but the last list issued by Bob included over 90 new and second-hand study books. Write to Brian for details. An important difference is that whereas Bob provided a society service and sold only to society members, Brian is running an ordinary commercial operation and is able to sell to anyone.

"Esq". I was brought up to regard "Esq" as correct usage when writing to a man, at least within Britain, but I have noticed that it has become very much a minority usage and readers will see from their latest *BESN* address labels that I have abandoned it. Anyone who would like me to revert to it, or who is entitled to an honorific title which does not appear on his or her label at present, is asked to tell me.

Anybody wishing to give notice here 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.