## Chess Games

July 30, 1983


Initial Position



 15 कh4 气d2 16 \&gb \&f1 17 tg5 कf3 18

 Qd1 Eg2 25 कd4 Bel 26 be3 Eg2t 27
 Qb3+ कd 631 요 12 Ef4t 32 be3 Ee6 33 Qg3t tbe7 34 Q $e 5$ Ec5 35 Qd5 气e6 36









 요e6t कbh8 69 Qff

## A PROPHECY FULFILLED

II on EG's front page is the evidence that the computer can change endgame theory. The diagram, with its date, caption "Chess Games" and accompanying figurine notation moves are precisely as produced by the World Champion Computer BELLE programmed by Ken Thompson of Bell Laboratories, Murray Hill, New Jersey, USA. Ken also designed the special purpose chess hardware. In computer software circles Ken is well known as the original designer of the UNIX operating system.


It was in April 1981, in London, that Ken showed interest in using his unique creation for endgame research, but it was not until two years later that he wrote to me enquiring which 5 -man ending 1 recommended for examination. There was nu doubt in my mind: the GBR (see back page) class $\mathbf{0 0 2 3}$. Since 1851 every authority has agreed with Kling and Horwitz' verdict that the stronger force in $\mathbf{T 2}$ cannot win if the weaker side can obtain a position like it, ''but they win in most cases'. In 1972 (in TTC) I showed that $\mathbf{T} 2$ is not a fortress, since B1 can be prised out of the corner, but 1 was forced to add that it 'leaves the question open whether BI can take up a comparable position in another corner, though 'it looks as if he can'."

Now Ken Thompson's BELLE has shown convinsingly: that the Kling and Horwitz position is a win (see the solution to T1 after Bl's 21st move); that the whole ending (except for exceptional short draws) is also a win; and that the win can take as many as 66 (pawnless, of course) moves without captures, thus qualifying as another endgame requiring amendment to the " 50 -move rule" in the FIDE Laws of Chess. (But the correct maximum may be 67 - see EG75.) $E G$ readers will recollect that the GBR class 0103 has 2 positions of maximum length win ( 27 moves). According to BELLE T1 is the only comparable position in the class 0023. In order to learn more, 1 asked Ken to supply 'annotated' output, where each move, of W and of Bl , is preceded by a list, in parentheses, of all the moves that lead to a solution of the same length. Where there is no alternative move the solution proceeds with continuous moves. From the 10 differing output listings (of which T3, no diagram, is a good example) it is possible to see the following 5-phase pattern to the play.

1 After 11 or 12 moves wK arrives at fl or h3 to secure release of wBh1 and wB (g1 or h2). There was almost no variation in this phase.
2 After a further 14 or 15 moves BI seeks refuge in the Kling and Horwitz position. This may be in any corner.
3 A manoeuvre similar to that in TTC (diagram 298) forces Bl out into the open. There is some variety here in the actual squares occupied by wBB to achieve this.
4 The next stage is complex, fluid, lengthy and difficult. BI strives for maximum freedom, and frequently seems on the verge of achieving it. It takes W some 23 moves, not to be found in any book and characterised at times by excruciating slowness and mystery, before bK,
having failed time and again to repeat the Kling and Horwitz position, ends up on the board's edge near a corner and accompanied by S.

5 The remaining 12 or so moves shows bS being lost, whether he stays close to bK or runs away.

Computers working in relatively unexplored territory should not be trusted blindly. But 1 find the demonstration convincing, and I think that EGreaders will also.

Ken Thompson has agreed to provide tabulated statistical data listing, for instance, the numbers of distinct positions at each 'optimal play' solution length (see EG56), and we shall give these results as soon as available. As regards computer programming techniques and innovations, these will have to appear in the International Computer Chess Journal, if and when Ken chooses to disclose them. (See back page for address).

Footnote. If the complete set of positions and moves, best moves, are stored on some medium readily accessible by computer, it is generally agreed in artificial intelligence circles that this can be considered as a data base of 'knowledge' amounting to 'skill' in some sense. Efforts are being exerted to derive 'expert systems' from such stored knowledge, not only in chess. Such an expert system would ultimately exercise skill to the same effect as the data base, but without that data base. If a chess expert system can be developed it may then be possible to use similar methods on other computer-stored knowledge that is less readily defined but of more 'practical value' than the attributes of bishops and knights, queens and rooks, kings and pawns. The prophecy? See p. 222 of TTC.

AJR

Obituaries
Dr. J.N. Baxter, who worked in the Chemistry Department of the University of Tasmania, died xi.79. He won 1st Prize in an early New Statesman composing tourney with a complex Bending study that has entered the textbooks (eg, Averbakh).

Dr. E.I.O. Slater (29.viii. 04 - 15.v. 83), sometime editor of the British Journal of Psychiatry, was an early EG supporter and enthusiast, though not, I think, a composer.

Kjell Runquist (1898/ii/83): From TfS (v.83) we learn of the passing of this tine Swedish study composer. Tis reproduces 9 of his studies, 4 of them with 1st Prizes in TfS itself, of his total of around 50. If more of his output had been sent abroad he would better known internationally.

## EG notes:

No. 4854. Kjell Widlert, brilliant Swedish problemist, told me at Bat Yam that there are several 'anticipations' of father-son joint composing, though none, apparently, in the studies world.
No. 4955: wK should be in bl, and wR on b2 (not a2).
In some countries certain issues (eg 65/71/72) may not have generally been received, due, apparently, to 'local customs'.

1984: your EG subscription -- $£ 4$ or $\$ 10.00$-- may be due. Please pay now, to receive the first issue of 1984, EC75, due out at the end of February.

## ＊C＊

T3（for diagram，see T1）
$(\Omega g 7 \Omega 8)$
1 소f8
（dg3 dit2）

（
3 요 $b 8$ 家f 4 요h2

4 ．．．克f3
（ $\$ 6.67$ tb b）
5 thb7 ర్రీf2

6 chc7
（ ${ }^{6}$ f3
6 ．．．ํำ1
（

（宫f3 क्षీf1）
8 ．．．©f1 9 dif5 gif2 10 git
Ele ${ }^{r}$
（ 5
11 colh
（ $\Omega 45$ Se4 $\Omega \mathrm{bl}$ ）
13 S 67
（4） 4
13 ．．．छこ2 14 全g1
（4） 4 © b 3 ）
14．．．Acs

15 ©g 2

15 ．．．كூd3
（Sa6 气aty）

## 16 Bf3


15 ．．．Ec5： 17 象甜 日c 4
（Sa6 Se4i）
18 上eit Gicc
（ $\Omega \mathrm{g} 6 \mathrm{~s} \mathrm{\rho} \mathrm{~h}$ ）
19 Qh7
（4）d6 © ${ }^{2}$ ）

cod d
（Ab2 dabl
21 ．．．bb3
（ $\Omega \mathrm{g} 6$ d be4 tid $4 \mathrm{ff} 2 \Omega \mathrm{~d} 4$ ）
22 die4 もb2 23 요 4

23 ．．．ठすく2
（ $\Omega \mathrm{g} 6$ 象 $\mathrm{e} 3+$ ）
24 ©్రీe3t tob 25 凡g6
（ 8 c $4+8$ a 4 ）
25 ．．．母c4t 26 कe2
（ⓑ2 ©a5）
26 ．．．\＆b2 27 요f7t ble2 28 Qe5

（ $\Omega f 7+\Omega g 3 \Omega h 2$ ）
31 요g3 Ebb 32 요7t bib5 33
 Ed7 36 ㅇg3t \＄bd8 37 \＆f7 be7 38 人ct bff 39 be4 be7
（ $\Omega \mathrm{a} 2 \Omega \mathrm{e} 1$ ）
40 요a2 EC5t 41 कోD5 Ec6 42


## Eg5．


45 足 2 をf 3
（ 1052 d 3 ）
46 〇a5 Eg5
（쇼1 2d3）
47 §d3 Əf7 48 ＠e1
（ah8 ©h6）
48 ．．．Eh8 49 Qh4t Ebf7 50


52 §f2 象e8
（ $\mathrm{Nb} 3 \mathrm{~S} \mathrm{e} 3 \Omega \mathrm{~d} 4 \Omega \mathrm{C} 5 \mathrm{\Omega} 6$ ）
53 见d4 Ef4 54 \＆b3 Eg6 55
§d1 Giz

56 옹
（a） 4 （D） 7


（
$60 \ldots$ ．．．
©f2
（ $1 . \mathrm{d} 4 \mathrm{Q}$ e1）


$55 \ldots$－．． 566 2xf3

Theoretical articles on the endgame are not common in chess magazines, but they are not as rare as they were 10 years ago. They are now indeed sufficiently frequent that it is not possible for EG to report them all, let alone summarise them. But the trend is one that EG heartily endorses. We have great pleasure in publishing in our pages a significant original contribution of this kind from the pen of FIDE International Master of Composition Aleksey Grigoryevich KOPNIN, of Chelyabinsk in the USSR.

THE EXPLOITATION OF SPECIAL POSITIONAL FEATURES IN ENDINGS WITH THE MATERIAL: ROOK AND KNIGHT AGAINST BISHOP AND KNIGHT - GBR Class 0134
by A.G. Kopnin

## Part I

The distribution of force which we shall examine belongs to the general type: R and minor piece against 2 minor pieces, without pawns.
As indicated in a previous article (see EG70) on the GBR class 0107 the advantage of the exchange does not offer a superiority that is decisive. Therefore for purposes of winning there must be in addition specific peculiarities of a positional nature to be exploited by the stronger side. For winning purposes in the GBR class 0134 (as indeed in the GBR class $0107,0161,0116,0143,0170$ ) we may list the following special features or motifs.

1 Dislocation of the forces of the weaker side.
2 The possibility of pinning one of the weaker side's pieces.

3 The binding of one of the weaker side's pieces to the defence of the other piece or of squares or lines.
4 The possibility of a double attack or fork.
5 The possibility of initiating a mating attack.
6 Blockade (ie, domination) of one or other or both pieces of the weaker side.

Studies composed with the GBR class 0134 force reflect not only the motifs of the struggle, and the methods of exploitation of these motifs, but in contrast to theoretical endgames, studies have great potential for expressiveness, because in one and the same composition we may find several different motifs, or the repetition of a motif, or both the one and the other - studies, in a phrase, may show a complex amalgam of repeated motifs.
To illustrate multiple repetition of the double attack, or forking motif, let us looks at K1. (No. 4670 in EG, but with no analysis).


1. Ke4. The primary motif of the struggle is, here as in the majority of studies of this type, the dislocation (isolation, separation) of the B1 forces. W threatens 2. Kf3. The attempt to carry out the motif of double attack immediately, by 1. Rd7+? Kc6 2. Rh7, fails to 2. ..., Sf2. There now arise 2 variations: 1 . ..., Sg3 + and 1. ..., Sf2+ . 1. ...,
$\mathrm{Sg} 3+$. If 1. ..., Kc6 2. Se7 +Kb 63. Kf3 Bf8 4. Re5. 2. Kf3 Sf1 3. Rh5. The try 3. Kf2? allows a demonstration of drawing motifs for the weaker side: 3. ..., Sd2 4. Rh5 Bg5 5. Ke2 Se4 6. Kf3 Sd2 + 7. Ke2 Se4, with a positional draw. 3. ..., Bc1. If 3. ..., Bd2 4. Rh7 + K- 5. Ke2, a double attack. 4. Rh1. Also a double attack, but B1 can survive it. 4. ..., Sd2 +5. Ke2 Sb3 6. Kd1. Not 6. Kd3? Sc5 + (B-?; Rb1) 7. Kc4 Be3, drawn. 6. ..., Bg5. B1 avoids the double attacks 6. ..., Bd2(b2) 7. Kc2, and 6. Be3(a3) 7. Rh3, but... 7. Rh5 B- 8. $\mathbf{R b 5}+$, and a fork after all!
2. ..., Sf2 + 2. Kf3 Sh3 3. Rh5. A double attack, but B1 slips out... 3. $\ldots, \mathrm{Sg} 5+$. Or 3. ..., $\mathrm{Sg} 1+4$. Kf2 4. $\mathbf{K g} 2[\mathrm{~g} 4] \mathrm{Sf7}$ 5. Sh8. One of the typical recipes for conducting these endings -- the profitable exchange of pieces. 5. ..., Sxh8 6. Rxh6 Sf7 7. $\mathbf{R h} 7$, and once again the motif of the pin.


As an illustration of complex and multiple exploitation of assorted motifs for winning purposes, K2 may serve. In it we find other motifs successively incorporated into Motif No. 1 -- Namely the separation or dislocation of the B1 force, with particular emphasis on the isolation of bK.

1. Rb4 + Ka5 2. Rf4. Setting up a threat of double attack (Rf5 +) and using the motif of tying up, or binding, bS to the defence of bB .2. ..., Be6. In the event of 2. ..., Bg6; a
second double attack occurs with 3. Kg 4 , while on 2. ..., Ka6(b6); the binding motif wins (3. Rf5). 3. Rf6. Threatening another binding expedient - Rg6. 3. ..., Bd7. The only reply, since bB is tied to defend the f5 square, and other retreats along the c8-h3 diagonal lose quickly: 3. .... Bc8 4. Rc6 B-5. Rc5 + , or 3. ..., Bh3 4. Rh6, when after 4. ..., B- wR pins bS (5. Rh5), and a double attack defeats 4. ..., Bg4 (ie, 5. Rg6). 4. Rd6 Be6. Again there is but one defence against the threatened check on d5. 5. Rc6. An error would be 5. Sd4? Bc4 6. Rc6 Kb4 7. Sc2 + Kb5. But now W intends a double attack for the 3rd time on the 5th rank, by dint of the binding motif. 5. ..., Ka4. There is the $6 . \mathrm{Sd} 4+$ fork after 5. ..., Kb5. 6. Sd4 Bf7. Now bB is tied to cover the c4 square, as shown by 6. ..., Bd7 7. $\mathrm{Rc} 4+\mathrm{Ka} 5$ 8. Rc5 +, and 6. ..., Bg 8 is met by the fork 7. Rg6. 7. Rb6. For mate, via 8. Sc6 and 9. Rb4 mate -- our first mating position. 7. Rf6? Be8 would be an artificial prolongation of the solution (loss of time) after 8. Rf8 Bd7 9. Rd8 Be6 10. Rb8 (the line 7. ..., Bc4 8. Rf4 Sh3 9. Rh4 Bf1 10. Sc2 +K - 11. Se3 loses quickly) and $w R$ has reached the b 8 square in 4 moves, while with 7. Rb6 the aim is achieved immediately. 7. ..., Be8. Worse is 7. ..., Bc4 8. Rb8 Se4 (Ka5; Rc8, Kb4; Sc2 +, Kb5; $\mathrm{Sa} 3+$ ) 9. Sc6 Bb5 10. Ra8 + Ba6 11. Rxa6+ Kb5 12. Sb8. 8. Rb8 Bd7 9. Rb7. W achieves nothing with 9. Rd8? Be6 10. Rd6 Bf7 and we have to come back to 11. Rb6. Or here 10. ..., Bc4 11. Rc6 Kb4 12. Sc2 + Kb5 draws. 9. ..., Bc8. It becomes clear that bB cannot return to the square e8: 9. ..., Be8 10. Re7 Bf7 11. Re5 Sh3(h7) 12. Sc6 and 13. Ra5 mate, our 2nd mating position. 10. Rc7. Threat: 11. Rc4 + Ka5 12. Rc5 +. 10. .., Ba6. If 10. ..., Be6 11. Rc5 Se4 12. Re5, or 11. ..., Sf7 12. Sc6 and 13. Ra5 mate. 11. Rc6. bB is now tied down to the c4 square. 11. ..., Bd3
2. Rc3 Bf1. bB cannot return to a6 on account of 13. Ra3+. 13. Re1. A systematic assault on bB up the c-file. 13. ..., Bd3. Still not 13. ..., Ba6 14. $\mathrm{Ra} 1+$. 14. Kc3, and W wins, because along with the attack on bB wK has set up a 3rd position of mate (14. ..., B-15. Ral mate).
Adducing examples in sufficient quantity will show not only the diversity (as regards the given distribution of force) of positional special features but also the character of the play exploiting these features.
We may observe that these positional features, or motifs, display varying significance in the course of the struggle: one will be subsidiary, while others will be principal, or even decisive. In particular, in K1 it is the double attack that is the decisive motif, while in K2 is it the threat of mate. However, whether a motif be decisive or subsidiary, it may at a particular moment of the struggle change its value, the subsidiary turning into principal and the principal into subsidiary, as in the solution of K2.

## Part II

In the present article we draw attention to specific motifs that may arise in the ending with GBR class 0134.
Specific motifs we shall define as those principal or decisive motifs which are characteristic for the outcome in the distribution of force to be found in this type of ending ( $R$ and minor piece vs. 2 minor pieces), the method for the exploitation of which is distinct.
In the GBR class $0107(\mathrm{R}+\mathrm{S}$ vs. $S+S$ ) a specific motif of the struggle to win is to be found in the possibility of wK tying down (paralysing) bSS that protect each other, but the method of exploiting this has the specific characteristic of driving bK to the edge of the board and stalemating him. (See EG70).

In the GBR class 0134 ending the specific winning motif lies in the blockade of bS.
In the simplest example of blockade of $S$ of the weaker side, that $S$ is stationed either in the corner or on the board's edge, where the number of his escape squares is small. We shall examine those positions where bS has just 3 exit squares, in other words when bS occupies a2, a7, b1, b8, g1, g8, h2, h7.


Let us turn to K3. It is the position after W's move 6 of EG66. 4403. The blockade of bSg 1 is carried out here by wK, which covers the squares h3 and f3, and wR, covering e2. We shall call this type of blockade Type 1.

The winning method here seems simple: wS will cut off the line of defence of bB to bring about an advantageous exchange (...BxS;), upon which the isolated bS will perish. We can remark that the disposition of W's pieces is optimal for the purpose of carrying out this plan, since wSg4 can interpose on either e3 or f2. But this presumed "simple" method of applying the specific motif of blockade of bS (our 'type 1") proves not to be so simple, if we take into account the placing of bK and bB! In the given situation the B1 pieces are likewise effectively placed, so that in the event of 7. Sf2? Bxf2 8 .

Kxf2 Sh3 + and bS gleefully runs to his K, with a draw! No good either is 7. Se3? Se2, while after 7. Re1 (an "'anticritical" move over the square e3) 7. ..., Kd5 8. Se3 + ? Ke4 it is again a draw.

But in our K3 diagram it is B1 to move, due to W's 5. Kf2!, and under pressure of zugzwang B1 has to loosen the solid placing of bK and bB , for instance:
6. ..., Kd5 7. Se3 + Bxe3 (K-; Kxg1) 8. Rxe3, or
6. ..., Kb5 7. Sf2 8. Kxf2 Sh3+ 9. Kg 3 Sg 5 (Sg1; Re1) 10. Re5 + or 6. ..., Kd7 (Kd6; Rd8 + ) 7. Re1 Kd6 (Kc6; Se3) 8. Rd1 + (Se3? Ke5; Kxg1, Ke4;) 8. ..., Ke6 9. Rd2 Kf5 11. Sf2 Bxf2 12. Rxf2 + , or
6. ..., Bd4 7. Re1 Kd5 8. Se3 + Ke4 9. $\mathrm{Sc} 2+\mathrm{K}-10 . \mathrm{Sxd4}$, or
6. ..., Ba7 ( Bb 6 ; is worse) 7. Rc8 + (Re1? Kd5; Se3 + , Ke4) 7. ..., Kb5 (Kd5; Rc2, Ke4; Sf2 +, Bxf2; Rxf2) 8. Rc2 Kb4 (with bBb6 W has now $\mathrm{Rb} 2+$ ) 9. Sf2 Kb3 10. Rd2 Kc3 (Be3; Rd3 +) 11. Ra2 Bxf2 12. Rxf2 wins. It is clear from these lines that to exploit the "type 1" blockade of bS the required method relies on transferring wR from e-file to 2nd rank (see the 6. ..., Kd7 and 6. ..., Ba7 variations above).
Let us now give an answer to the question hinted at already: can W win the K3 position with the move?
We can answer the question in the following three-fold way:
1 It is only the diagrammed configuration of W pieces that will win
$2 \mathrm{K3}$ is a position of zugzwang for B1, and
3 With the move W wins only by repeating the position of his pieces and transferring the move to B1*, achieved by this manoeuvre:
7. Re1 Kd5 8. Sf6 + Kc6. This is the best move. W has a very subtle win after 8. ..., Kc4 9. Rc1 + and 2 lines

## Footnote:

* Alert EG-acolytes will recall EG66. 4403, where the original of the present K3 was first published. There AJR commented that the study had been entered for the "Roycroft Jubilee" tourney, but eliminated due to refutation (by IGM John Nunn) of the composer's claim of a reciprocal zugzwang. The composer no longer makes this claim, but makes another, on which John Nunn comments:
"W certainly repeats the position of his pieces, but Bl does not, so I see no justification for the statement that W wins 'by transferring the move to Bl '. In fact the position after 11. Sg 4 is quite different from the initial position, not only in the location of Bl's pieces, but also in the content. For example, the initial position is one of zugzwang when Bl is to move (ie, W has no threat), while after 11. Sg4 W has the threat of 12. Ra8 B- 13. Ra2 and 14. Sf 2 winning at once. The Bl moves 11. ..., Kc6 and 11. ..., Bc5 (each after 11. Sg 4 ) are not weakening moves from a zugzwang position, but simply defences against the threat of Ra8. There are, of course, many positions in which the winning method with W to move consists in repeating the whole position with loss of tempo. For instance: wKe7 wRa7 wPe6; bKg7 bRb8. 1. Kd6 $+\mathrm{Kf6} 2 . \mathrm{Kd7} \mathrm{Kg7} 3$. Ke7 is the only way to win." Several of the K3 variations in the present article are lines supplied by John Nunn to AJR and forwarded to Mr. Kopnin, while still other lines have beek omitted. In the analysis supplied by the composer in support of his AJR Jubilee entry the central move 8. Sf6 + was not mentioned.

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\because
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7. Sf7. Not 7. Sg4 Bd4 8. Sf2? Bxf2 10. Kxf2 Se2 and draws. But now bB cannot hold onto both d 6 and g 5 squares. 7. ..., Kd3. B1 tries his last chance, as on 7. ..., $\mathrm{Bc} 58 . \mathrm{Sg} 5$ and 9. Se4 and 10. Sf2. 8. Se5 + Ke4 9. Sg4 9. Sc4? Bc5. 9. ..., Sf3. Despair. 9. $\ldots$, Bc5 10. Sf $2+$, or 9. ..., Kf4 10. Rxe3. 10. Sxe3 Kxe3 11. Kg2. The solution to K4 shows that a "'type 2" blockade implies different winning methods from 'type 1 ".

## Part III

There are some positions of blockade of bS that require a combination of methods to secure a win, namely the conversion of a "type 1 " blockade into a "type 2". In one of the variations in K 5 the method of achieving this can be demonstrated. In the initial position bS finds itself in a "type 1" blockade, but compared with K3 the position of wS is less promising, so the winning method is different too. From K5, then:


1. Rd4. bK must be stopped from approaching bS. 1. RdI! Kf4 2. Sd3 + Ke3. 1. Sd3? Sd2. Now, after 1. Rd4, B1 has 2 replies:
2. ..., Kf6 and 1. ..., Bh7. For after 1. ..., Kg6 (h5, h6) there already follows 2. Rd1 and 3. Sd3. The move 1. ..., Bg6 is weak, allowing W no fewer than 3 winning devices: $2 . \mathrm{Sg} 4$ or 2 . Sh $3+$ or 2 . Sd1, among which the most effective is $2 . \mathrm{Sg} 4 \mathrm{Sd} 23$. Se 5 Sf1 4. Rd1 Sg3 5. Sxg6 Kxg6 6. Rg1.
3. ..., Kf6 2. Sg4 + . 2. Rd1? Ke5 3. Sd3 +Kd 4 draws, while after 2 . Rd8 (d5)(?) bK simply returns to g 5 and W has to play 3. Rd4 again.
4. ..., Ket.

There is a quick loss after 2. ..., Bxg4 3. Rxg4 Sd2 4. Rd4 Sf3(f1) 5. Rf4+. Bad too is 2. ..., Kg 5 3. Se3 $\mathrm{B}-4 . \mathrm{Sc} 2$ (simplest) $\mathrm{Bxc} 25 . \mathrm{Kxc} 2 \mathrm{Sa} 3+6 . \mathrm{Kb} 2$ Sb5 7. Rd5 + . 3. Se3 Bh7 (g6) 4. Rh4 [g4] Bd3 5. Rh2 [g2] Ke5 6. Sc2 Bxc2 7. Rxc2 wins. The winning method in this line is characteristic of a "type 1" blockade.

1. ..., Bh7 2. Sd1. 2. Sg4? does not win, 2. ..., Sd2. Nor does 2. Sh3+? Kf6 3. Rd5 Bf5 4. Sf4 (Sf2 gives us K8 with reversed colours!) 4. ..., Bh7 5. Rd8 Bf5 drawing, with the same after 5. Rh5 Be4 6. Rh2 Ke5 7. Sh3 Kd 4 or 5 . Rd1 Ke5 6. Sd3 $+\mathrm{Kd4}$. After 2. Sd1 B1 has 2 possibilities, 2. ..., Kf5 and 2. ..., Kf6, for if 2. ..., Kh5 (h6) 3. Se3 and 4. Sc2, while no better is 2. ..., Bg6 3. Se3 Kf6 4. Rd6 + Kf7 (g5) 5. Sc2.
2. ..., Kf5 3. Rh4. No good is 3. Kxb 1 ? $\mathrm{Ke} 5+$, nor is $3 . \mathrm{Se} 3+$ ? Ke 54. Rh4 Be4 5. Rh2 Kf4 6. Sc2 Kg3 7. $\operatorname{Re} 2$ Bf3. 3. ..., Bg6 4. Se3 +. 4. Kxb1? Kg5 draws. 4. Rh2? Kf4 draws. 4. ..., Ke5 [g5] 5. Rh2 Kf4 6. Sc2 Kg3 7. Rh6 Bxc2 8. Kxc2 Sa3+ 9. Kd3 Sb5 10. Rb6. Transposition into a famous Réti position by 10. Rc6 would be a loss of time, leading to win of bS on the 23rd move. 10. ..., Sc7. Or 10. ..., Sa7 11. Kd4 Sc8 12. Re6 and 13. Kc5. 11. Ke4 Se8 12. Ke5 Kg4. Or 12. ..., Sc7 13. ..., Rb7 Sa6 14. Kd6. 13. Rb7 Kg5 14. Re7 Sf6 15. Rg7+. Here we have the successful exchange of pieces and subsequent capture of bS. Back to B1's 2nd move: 2. ..., Kf6 3. Rh4. 3. Se3? Ke5 will draw.
3. ..., Bd3. 3. ..., Bg6 4. Rh2, see the previous variation. 3. ..., Bf5 4. Rh2 Ke5 5. Se3 B- 6. Sc2. 4. Rh3. 4. Rh2? Ke5 5. Se3 Kf4 6. Sc2 Kg3 draws. 4. ..., Be4. 4. ..., Bf5 (g6) 5. Rh2 as we have already seen.
4. Re3. W commences a metamorphosis of the blockade of bS, for otherwise there is no win. 5. Rh2? Ke5. 5. ..., Bh7. 5. ..., Sd2 6. Kcl. Or 5. ..., Ke5 (f5) 6. Sf2 Sd2 7. Kc1. 6. Kc1. 6. Re2? may be craving attention, but it does not win: 6 .
Kg 5 7. Rf2 (Se3, Kf4; Sc2, Bd3; Rg2 Be4; Rh2, Kg3, Rd2, Bf3; draws, and it is the same after Rh2, $\mathrm{Be} 4, \mathrm{Se} 3$, Kf4;) 7. ..., Kg 4 8. $\mathrm{Se} 3+\mathrm{Kg} 3$ 8. Rf7 Be4 10. Rd7 Kf4 11. Sc2, and how B1 manages to draw will be shown in K8. After 6. Kc1 W has achieved the '"type-1-into-type-2"' change, and the decisive manoeuvre follows. 6. ..., Bg6. B1 really has no useful move. 7. Rb3. This is the necessary position of wR for winning a 'type 2 "' blockade set-up. 7. ..., Ke5 8. Se3 Kd4 9. $\mathbf{S c} 2+$. All with gain of tempo. 9. ..., Bxc2. The only alternative: 9. ..., Kc4 10. Rxb1 Kc3 11. Rb2 (b8). 10. Kxc2, and bS finally succumbs to the blockade. All that remains to add is that after 4. ..., Be2 W easily wins by changing the blockade: 5. Kc1 Bg4 6. Rb3 Bf5 7. Se3 B- 8. Sc2.
The examples we have seen exhibit the methods of taking advantage of positional features (both general and special) for winning purposes in the GBR class 0134 endings.
Examination of the methods of exploiting positional features (both general and special) for drawing purposes also has its interest. (Naturally, the GBR code for these endings may change, for instance 0134 becomes 0314, but the relationship of the forces is constant.)
A draw in the ending 0314 (as in the endings 0305, 0332, 0341, 0323, 0350) is the inevitable result in any of these circumstances:
1 After the exchanging of a minor piece and the appearance of a drawn position of the type $S$ vs. $R$ or B vs. R.
2 After the exchange of both minor pieces for the R .
3 Stalemate.

4 As a consequence of a positional draw due to pinning, binding, perpetual attack, perpetual check, perpetual threat of mate or of stalemate, and so on, with, as a normal case, the maintenance of all the material, or, an abnormal one, a sacrifice of a minor piece.

From the viewpoint of studies cases 3 and 4 are of the greatest interest. But in this article we wish to examine only the sub-category of 4 where material balance is preserved: the other sub-category involving a sacrifice deserves an article to itself.
The drawing possibility by means of alternating checking with defence of an attacked piece was seen in a rudimentary form in $\mathbf{K 1}$ in the try $(3$. Kf2? Sd2 4. Rh5 Bg5 5. Ke2 Se4 6. $\mathrm{Kf} 3 \mathrm{Sd} 2+7 . \mathrm{Ke} 2 \mathrm{Se} 4$, a positional draw), but it occurs in K6 in a developed form. The initial position:

wKe2 wBa1, e8 wSc8 wPf6 - bKc6 $\mathrm{bRg} 3 \mathrm{bBd} 7 \mathrm{bSg} 8, \mathrm{~h} 7$ : draw. K6 is the position after 1. f7 Sh6 2. Be5 Rg4 3. $\mathrm{Se} 7+\mathrm{Kc5}$ 4. Bxd7 Re4 + 5. Kf2 Rxe5 6. Sg6 Rg5 (Re4; f8Q + , Sxf8; Kf3, Rel; Kf2, Re4; Kf3, with a positional draw) 7. f8Q + Sxf8 8. Sxf8 Rg8 9. Se6 + Kd6 10. Ba4. Play now proceeds with B1 to move. 10. ..., Ra8. 10. ..., Rg4 11. Bd1, but not 11. Bb 3 ? Rb 4 11. $\mathrm{Ba} 2 \mathrm{Rb} 2+$. 11. Bb3 Rb8. 11. ..., Ra3 12. Sd4 draws. 12. Sd4 Kc5 13. Sd6 + . 13. Ke3?
$\mathrm{Sg} 4+\mathrm{Sg} 4+$ 14. Kd3 (e4) Rd8 (b4). 13. ..., Kd6 14. Sd4 Kc5 (Ke5; Sc6 +) 15. Se6 + Kd6 16. Sd4 Rb4. B1's last fling. 17. Ke3. Now this move is not only possible, but necessary. 17. ..., Kc5. Again if 17. ..., Ke5 18. Sc6+. 18. Se6+ Kd6 19. Sd4, a positional draw. B1 achieves nothing by trying 19. ..., $\mathrm{Sg} 4+20 . \mathrm{Kd} 3$. On the other hand W would lose by playing 19. Ba 2 ? $\mathrm{Sg} 4+$ 20. Kd3 Rb2 21. Bc4 Se5 + 22. Kc3 Sxc4 23. Sf4 Rh2.
Now, what drawing possibilities does the weaker side have, with respect to specific positional features, namely where the "defending" $S$ is blockaded?


Let us revert to $\mathbf{K} 7$, which can arise from K4 after 5. Se8.
5. ..., Kc2. Now it emerges that it is not only bS that is blockaded, but wS also. 6. Sd6 (c7) Be5 7. Rg2 + Kd3 8. Sf7 Bd4 9. $\mathrm{Rg} 3+(\mathrm{Sg} 5, \mathrm{Be} 3 ; \mathrm{Rg} 3$, Se 2 ; is a draw) 9. .... Ke 4 10. $\mathrm{Rg} 4+$ (or $\mathrm{Sg} 5+$, Kf4;) 10. ..., Kd3 11. $\mathrm{Rg} 3+\mathrm{Ke} 4$, with a positional draw. After 5. ..., Kc2 we have a position of reciprocal zugzwang. 6. Ra3 Bc5 7. Ra5 Bd4 8. Ra3 Bc5 9. Rg3 Bd4 10. Ke1. W counts on a triangulation to give B1 the move. 10. ..., Bc3 + 11. Kf2 Be5. W counted on 11. ..., $\mathrm{Bd} 4+$ ? 12. Kf1 and B1 is in zugzwang: 12. ..., Kd2 (Kd1; Rd3+, or Bc5; Sf6 for Se4 and Sf2) 13. Sd6 Be5 14. $\mathrm{Sc} 4+$. 12. Ra3. 12. Rg 4 Sh3 + 13. Kf3 Sf4 14. Ke4 Sd3. 12. ..., Bd4 + 13. Kf1 Bc5 14. Ra5 Bd4
15. Ra3 Bc5 16. Rg3 Bd4, and it is a positional draw.
Thus in K7 there is a straightforward case of the specific motif (blockade of bS as motif for a W win) and its antiform (blockade of wS as a motif for B1 obtaining a draw).


K8 shows a different aspect of the positional draw. B1 threatens to win the blockaded wS, so $W$ has to guarantee its safety. $1 . \mathrm{Bb} 3$ ? is a try that loses like this: 1. ..., Kg7 2. Kd4 (or Kb4, Sf7; Bxf7, Kxf7; Sh6+, Kg 6 ; or Kd3 (c3), Re8; and Se6;) 2. ..., Sf3 + 3. Kd3 (best) 3. ..., Rel and W is in zugzwang: 4. Ba 2 Sg 5 (see K3), or 4. Kc3 Re3 + 5. K- Sg5. There is only one road to draw.

1. Kd4 Re4 + . B1 wins a tempo with this move in order to attack wS. Bad is 1 . ..., Re8 2. Bh5 + . 2. Kc5. Every other move loses. 2. ..., Re3. B1 is in no hurry to play..., Kg 7 ; for he has the possibility simply not to permit wB to play to the square b3, so every B1 move tests W's alertness! 3. Kd4 Re4 + . W does not fall for the coarse trap (3. Kd6? Rd3 +) so B1 once more wins a tempo with a check. 4. Kc5 Kg7 5. Bb3 Sf7. B1 at once sets about taking advantage of the poor position of wK. 6. Bd5. Pointless is 6 . Bxf7? Kxf7 7. Sh6 + Ke6 (g6), or 7. Kd5 Rh5. 6. ..., Re2. 6. ..., R-7. Bxf7 draws, or 6. ..., Re5 7. Kd4 and 8. Bxf7. 7. Bc4 Re4. bR returns to this strong square because if 7. ...,

Re8 (e1) there follows 8. Bxf7. 8. Bd5 Re2.
9. Be4, with a positional draw by perpetual attack by wB on bR, taking away its best squares of retreat. We may observe that after 9. ..., Re3?! W cannot immediately bring about the exchange of minor pieces (10. Bxf7? Kxf7 11. Sh6 + Ke6 12. Sg4 Rf3, and after the best reply, 13. Kc6 we have Réti's position with colours reversed, in which B1 wins by transferring the zugzwang to $\mathrm{W}: 13$.
, Kf5 14. Sh6 + Kf6 15. Sg4 + Ke6). This is why, after 9. ..., Re3?! W must first play $10 . \mathrm{Kd} 4 \mathrm{Re}$ - and only now 11. Bxf7 Kxf7 14. Sh6+, transposing into a drawn S vs. R endgame.
Our final example shows the drawing possibilities of the weaker side in specific positions (ie blockade of S) in 2 variations ending in positional draw.


K9 is from the following set-up: wKf5 wBg4 wSe5 - bKb2 bRa6 bSh3 bPd2: draw. After 1. Sc4 + Kc3 2. Sxd2 we have the diagram. 2. ..., Ra5 + . B1 has nothing from 2. ..., Sf2 3. Se4+. 3. Kf6. 3. Ke6 (g6)? $\mathrm{Sf} 4+4$. K-Kxd2. Or 3. Ke4 Sf2 +4 . Kf3 Sxg4 5. Se4 + Kd4. 3. ..., Sf2. W has 2 pieces en prise, so his next move is the only one. 4. Sb1 + . Now B1 has 2 possible moves: 4. ..., Kc2 and 4. ..., Kb2. 4. ..., Kc2 5. Bf5 + Sd3. B1 relied on this move when
playing 4. ..., Kc2. wS is now blockaded and B1 threatens 6.
Ra1 and 7. ..., Rxb1. 6. Ke6 Ra1 7. Kd5 Ra5 + . It is clear that on 7. ..., Rxb1 there follows 8. Kd4 Rb3 9. Ke 3 and we have a known positional draw where bS is pinned solid and W has enough squares from h 7 to e4. This positional draw is one of the special sacrificial cases under 4.
8. Ke6 Re5 + 9. Kf6 Ra5 10. Ke6 Ra6+ 11. Kd5 Ra5 + 12. Ke6 Ra1 13. Kd5, and that is the first positional draw.
4. ..., Kb2 5. Bi5. Not 5. Sd2? Sxg4 + . 5. ..., Rd5. wS is held by a "type 1 " blockade. 6. Ke6. Unique move to draw. 6. Kg5? Rd4 and B1 will win, see K5. 6. Bg6? Rd6 + 7. Kf7 (or $\mathrm{Kg} 5, \mathrm{Sh} 3+$; and Sf 4 ;) 7. ..., Sd3 (simplest) 8. Sd2 Sf4. 6. Bh7? Sg4+ 7. Ke6 Rh5 8. Bg6 (Bf5, Se3; B-, Rh2; or Be4, Rh5 + ; or Bd3, Se3; Sd2, Rh6; Ke5, Kc3;) 8. ..., Rh2 9. Kf5 Se3 + 10. Kf4 Sc2 11. Kg3 Rh6, see K5. 6. ..., Rd8. If 6. ..., Rd1 (d4) 7. Ke5. 7. Kf6. Once again the only move. 7. Ke5? Sd3 + . 7. Ke7? Rd4 8. Kf6 (Ke6, Sd3; Sd2, Sc5+;) 8. $\mathrm{Sg} 4+$, as in K5. 7. Bg6? Sd3 8. Ke7 Rd4 9. Sd2 Sf4. 7. Bh7? Sd3 8. Ke7 Rd4 9. Sd2 Sc5 10. Sf3 Rd7 + and 11. ..., Rxh7. 7. ..., Rd5. The answer to 7. ..., Rd1 is the same as to 7. ..., Sd1, namely 8. Ke5. 8. Ke6 Rd8 9. Kf6, with a positional draw by virtue of alternating attack by wK on bR and departure of same for the "'outpost of empire" f6!

## Tourney

'’Walter Korn Jubilee', to celebrate the 75th birthday of the Czech-born American player-author-composer. Entries invited from: USA, Canada, Central America, South America only. Send to: George Koltanowski, 'End Game Competition', 1200 Gough Street, Apt. 3-D, San Francisco, California 94109, U.S.A.
Judges: Walter Korn + another. Closing date: 31.xii.83.

## XXVI CONGRESS OF THE PERMANENT COMMISSION OF F.I.D.E. FOR CHESS COMPOSITIONS -- 29.viii. 83 to 5.ix.83.

The venue was Bal Yam, a few miles south of Tel Aviv on the coast of the Mediterranean. AJR attended, for the first time since Canterbury (1978), but Barry Barnes, Vice-President, was delegate for Great Britain. Roland Baier of Switzerland won the individual solving title (World Champion), and Finland, led by Pauli Perkonoja, won the Team title. Jan Rusinek (Poland) was awarded the title of Judge (studies). On the private and personal side 1 met many old friends and made many new ones (with computer associations, especially: Ufer Comay* and Mika Korhonen). The meeting was a considerable success, with great hospitality and great weather, but more countries may be expected to attend in Sarajevo in Yugoslavia in August 1984. In Bat Yam countries represented by deligates were: Austria, Great Britain, Finland, France, West Germany, Israel, Netherlands, Komania, Spain, Sweden, Switzerland, USA, Yugoslavia -and Belgium (new).

* Ofer Comay will figure in EG 75 in a sequal to the 0023 story.


## REVIEWS

'’Dr. Robert Hübner - 60 seiner schönsten Partien', by Manfred von Fondern and Peter Kleine, 2nd ed., 1982, West Germany (Beyer Verlag). ''Die besten Partien deutscher Schach-Grossmeister", edited by Helmut Pfleger, 1983, West Germany (Falken Verlag).

It is salutary for studies enthusiasts to be reminded of the connection with the game, and that ideas which we applaud in studies occur quite often
in games of the leading players. There are no studies in these books, but some fine endings, and many a composer would be delighted to have discovered Pfleger's winning move against Larsen - $61 . \mathrm{Sg} 2$.

" Ihe Art of Israeli Chess Composition', edited by Yoel Aloni and Uri Avner, 1983, 152 pages, 635 diagrams, photographs. There are 8 sections to this fine book, which appeared dramatically on time at the XXVI HIDE Commission meeting, and the studies section contains 130 compositions, second in quantity only to the 2-ers. In inventiveness and in accurracy the studies impress greatly. The book may obtained by sending \$ 16.00 to Uri Avner, 16 Hazamir Street, Ramat-Gan, 52-596 Israel. Uri was also the organiser of the Congress, and rightly received an ovation from all attendees. Since he had also spent some time in hospital, even during the Congress, his achievement and courage are beyund praise. (I he $\$ 16.00$ includes postage. The book is not available from AJR ).

## DIAGRAMS AND SOLUTIONS

No. 4973: N. Kralin.

1. h4 (Kxh2? Ke2;) 1. ..., d3 2. h5 gh 3. $\mathrm{g} 5 / \mathrm{i} \mathrm{Kg} 3$ 4. g6 Kh3 5. g7 h4 6. g8S/ii Kg3 7. Sf6 Kf3 8. Kxh2 Ke2 9. Se4 wins.

i) The thematic try here is $\mathbf{3}$. gh? Ke 2 4. h6 Kxd2 5. h7 Kel 6. h8Q d2, with a known Troitzky draw. But in our Bl tries another approach to stalemate.
ii) 6. g 8 Q ? is stalemate. 6. g 8 B ? Kg 3 7. Bh7 Kf2 8. Bxd3 Kel and 9. ..., Kxd2.


No. 4974: G. Slepyan.

1. b8Q Rh4 + 2. e4 Rxe4 + . This removes W's defence of the b3 square. 3. Sxe4 Bc2 + . What now? 4. Kb 4 ? $\mathrm{Rb} 3+5$. Kc4 d5 + 6. Kd4 Rxb8 7. Sc5 + Kb5 8. Kxd5 Rc8 9. Se6 Bb3 + . So... 4. Qb3 Bxb3+ 5. Ka3 Re3 6. cd. And not 6. Sc5 + ? Kb6 7. cd Bd5 + and 8. ..., Kc7. 6. ..., Ba4 + 7. Kb2. If 7. Kxa4? Rxe4 + and 8. ..., Rd4. 7. ..., Rxe2 + 7. ..., $\mathrm{Rb} 3+8 . \mathrm{Ka} 2 \mathrm{Rb} 8$ 9. $\mathrm{Sc} 5+\mathrm{Ka} 510$. $\mathrm{Sb} 7+$ and 11. d 8 Q .8 . Kc3 Bxd7 9. Sc5 + . A fork, in spite of everything. 9. ..., Kb5 10. Sxd7 Re6. An attempt
to trap wS, but... 11. Sf8 Rd6 12. Sh7, and wS eludes encirclement.
''A study with a new and effective sacrifice of wQ. Unfortunately the sharpness of the struggle thereafter drops off..."


No. 4975: V.I. Kalandadze.

1. Rb7+ Kc8. Or $1 . \ldots$, Ka8 2. $\mathrm{Ra} 7+\mathrm{Kb} 7$ 3. $\mathrm{c} 7+$. 2. Kg1. The start of a 'yomp"' along the first rank. 2. ..., Rc2 3. Rc7 + Kb8 3. ..., Kd8 4. Rd7+ Kc8 5. b7+. 4. Kf1 Rb2 5. $\mathbf{R b 7}+$. wR gives remote support by harassing the enemy HQ. 5. ..., Kc8 6. Ke1 Rc2 7. Rc7 + Kb8 8. Kd1 Rb2 9. Rb7 + Kc8 10. Kc1 Rb5. The most obstinate. The yomping continues up and over. 11. Kd2 Rc5 12. Rc7 + Kb8 13. Kd3. From this point on there is more than one winning move (13. Ke3 also), but they all lead to Port Stanley! 13. ..., Rb5 14. Rb7 + Kc8 15. Kd4 Rb1 16. Kd5 Rd1 + 17. Ke6 Re1 + 18. Kf7 Rc1 19. Rc7 + Kb8 20. Ke8 Rb1 21. Kd8. Casualties cannot be avoided. This one is instantly decisive. 21. ..., Rxb6 22. Rc8 + wins. The topical "Falklands Islands'" notes are, of course, AJR's. Our apologies to non-British readers. "Yomp"' is not in the dictionary...
"'An attractive 6-man R-ending miniature, organically marred by duals in the march of $w K$. I think that this discovery will find a place in the books."


No. 4976: N. Rezvov.

1. Sd5 Rd6. Bl loses one of his hanging pieces after 1. ..., Rb7 2. Sg6. 2. Sxe7 Rf6 + 3. Sf5. The first fine move. Not 3. Kg3? Se5 4. Sh7 Rf7 5. Sc8 +Kb 8 6. Sg5 Rg7 7. Kf4 Kxc8 8. Se6 Re7 9. Kxe5 Kd7. Now the play divides. Either: 3. ..., Sd4 4. Se6. Very effective. Weak is 4. Sd7? Rxf5 + 5. Ke4 Rf1 6. Kxd4 Rd1 + and 7. ..., Rxd7. 4. ..., Sxe6 + 5. Ke5 Rg6 6. Se7 6. Sh4? Rg4. 6. ..., Rh6 7. Sf5 Rg6 8. Se7. Or: 3. ..., Sh4 4. Sg6 Sxf5. If 4. ..., Sxg6 + 5. Kg5 Rb6 6. a5 Re6 7. Sg 7 Rd6 8. Sf5 Re6 9. Sg 7 Ra6 10. b5, explaining the presence of wPPa4, b4. 5. Kg5 Rf7 6. Se5. But not 6. Sh8? Rh7. 6. ..., Rf8 7. Sg6 Rf7 8. Se5. There is perpetual attack by wS on bR in both echo-variations. ''The 2 echo-variations with symmetrical wS sacrifices are, true, not new individually. The initial positions is somewhat uncomfortable and cluttered, with wPP not fully justified."

No. 4977: V. Razumenko.

1. Rf2. The only way. 1. Ra2? Kb1 2. Rxa3 h2. Or 1. Rh2? Kb1 2. Kd2 a2 3. $\mathrm{Kc} 3 \mathrm{a} 1 \mathrm{Q}+$ 4. Kb3 Qa8. 1. ..., Kb1 2. Kd2. And not to the d 3 square... If now 2. ..., a2 3. Kc3 a1Q + 4. Kb3 and bQ has no move to cover the f1 square. But Bl has his own counterplay. 2. ..., h2. Decoy of wR to the inferior square h2. 3. Rxh2 a2 4.


Rh1 + Kb2 5. Ra1. W too finds another resource. 5. ..., e5 6. Sc6 e4. Without check. See wK's choice on move 2. 7. Sd4 e3 + . To be sure, with check, but too late. 8. Kd3 Kxa1. Else 9. Sc2. 9. Kc2 and 10. Sb3 mate. ''Still another harmonious synthesis of known ideas, chief among which takes us back to the Arab mansuba, this time executed with a series of subtle, deep moves."


No. 4978: M. Bordenuyk and the late Al.P. Kuznetsov.

1. Se5 + Kc5 2. Rd8 Sc8 3. Bb8 Qxb8 4. Sd7 + Kc6 5. Sxb8 Kc7. It looks as if the Bl extra piece will be decisive. 6. Rd5 Kxb8 7. Rb5 + Ka8. There is a sudden stalemate after 7. ..., Kc7 8.

Rc5 + Rxc5. 8. Re5 Sd6. Aha! Has W overlooked this? 9. Rc7 Kb8. No, it is stalemate again afer 9. ..., Rxc7. 10. Re5. And it is a zugzwang position. Bl must be satisfied with repeating moves. 10. ..., Ka8 11. Rc7 Kb8 12. Rc5, positional draw.
"A so-called 'romantic' study with a remarkable finale, all Bl men paralysed."


No. 4979: S. Rumyantsev.

1. Rc8 Rc2 + 2. Kxd5 Sx3 + 3. Sxc3 Kxa7 4. Sb5 + Bxb5 5. Bb8 +Ka 86. Rxc2 ab 7. Rb2 Bd3 8. Kd6 Bc2 9. Kc7. Zugzwang.
'The play is effective, but the star-ting-out position is overloaded with material that harmonises ill with the pleasant and homely finale...''.


No. 4980: Karen Sumbatyan. 1. a6. And the play now splits into 2
complex lines:
I: 1. ..., Sd3. There is clever play after 1. ..., Rd7 2. Ra3 + Rd3 3. Ra1 $\mathrm{Sg} 4 / \mathrm{i} 4 . \mathrm{Sg} 1+\mathrm{Bxg} 15 . \mathrm{Kxg} 1$ c3 6. $\mathrm{Kf} 1 \mathrm{Sh} 2+$ 7. Ke2 $\mathrm{Rd} 2+$ 8. Ke3 $\mathrm{Sg} 4+$ 9. Ke4 Sf6 + 10. Kf3 Rd3 + 11. Kf4 Sd5 + 12. Ke4. 2. Sg1 + Bxg1 3. a7. Not 3. Kxg1? c3 4. a7 c2 5. Rxc2 Rxc2 6. a8Q Rc1 mate. 3. ..., Rxa7 4. Rxa7 Bxf2 5. Ra4. But not 5. Rc7? Bc5 6. Rh7 + Kg3 7. Rh3 + Kg4. 5. ..., Bb6. Better than 5. ..., c3 6. Rd4 S- 7. Rd3 + Sxd3 stalemate. 6. Rb4 Ba7 7. Ra4 Be3. And only when $b B$ is on the e3 square... 8. Rxc4 Sf2 + 9. Kg1 Se4 + 10. Kf1. An improvement on 10. Kh1? Sg3 mate. 10. ..., Sd2 + 11. Ke2 Sxc4 12. Kd3
II: 1. ..., Sg4 2. Sg1+. Not 2. Ra3 + ? c3 3. Sg1 + Bxg1 4. Kxg1 Sh2 5. $\mathrm{f} 4 \mathrm{Sf} 3+6$. Kf2 c2 7. a7 clQ 8. a 8 Q Qc2 + 9. Kxf3 Rc3 + 10. Rxc3 $\mathrm{Qg} 2+$. 2. ..., Bxg1 3. a7 Rxa7 4. Rxa7 Bxf2 5. Rc7. In this line 4. Ra4? is wrong, due to 4. ..., c3 6. Rc4 Be1. 5. ..., Bb6 6. Rc6 Ba7 7. $\mathbf{R c} 7 \mathrm{Be} 3$, and the rest is as before (8. Rxc4 Sf2 + 9. Kg1 Se4 + 10. Kf1 Sd2 + 11. Ke2 Sxc4 12. Kd3). i) 3. ..., Sc6 4. Rc1 Sa7 5. f4 Re3 6. Rc2 Rf3 7. Rc1 Rf2 8. Rc3 + Kg4 9. Sd4.
'"Two echo-pursuits of bB by wR, but supporting analysis is irrelevant to the central idea."


No. 4981: V.S. Kovalenko and S. Makhno.

1. $\mathbf{e} 7+$, with 2 lines. 1. ..., Kc7 2. Bf4 Qxf4 3. Qc8 + Kxc8 4. e8Q + Kc7 5. Qb8 + and 6. Qxf4. 1. ..., Sf5 2. Qc3 + . And not, definitely not, the tempting 2. Qxf5 + ? Qxf5 3. e8Q + Kc7 4. Bf4 + Kb6, and no win. 2. ..., Qxc3 3. e8Q + Kc7 4. Qd8 + Kc6 5. Qc8 + and 6. Qxc3.
''Miniature on the small scale, with 2 wQ sacrifices -- excellent, even if not deep."


No. 4982: A. Belyavsky.

1. de Ke3. Or 1. ..., Kxe2 2. Kg1. 2. Kg1 h2 + 3. Kh1 Kxe4 4. d5. This $P$, for if 4. f5? ef 5. d5 Ke3 6. d6 Kf2 7. e3 Kf1 8. e4 f4 9. e5 f3. 4. ..., ed 5. f5 Ke5. 5. ..., Kxf5 6. e4 + and 7. ed. 6. f6 Ke6. 6. ..., Kxf6 7. e4 d4 8. e5 + and 9. e6. 7. f7 Ke7. 7. ..., Kxf7 8. e4 d4 9. e5 d3 10. e6 + and 11. ed. 8. e3. What is wrong with 8. e4? Answer: 8. $\ldots$, d4 9. e5 d3 10. e6 d2 11. f8Q + Kxf8 12. e7 + Kg7. After 8. e3! Bl finds himself in zugzwang. 8. ..., Kf8 9. e4 d4 10. e5 d3 11. e6 d2 12. e7 + , or 8. ..., d6 9. e4 d4 10. e5 d3 11. ed + Kxf7 12. d7, and the play concludes with the expected stalemate.
"'Yet another P-study, with parallel movement of bK and wP on the way to promote, and a sudden zugzwang in the tail-piece, at the price of some artificiality and a clumsy first move."


No. 4983: M. Matous (Czechoslovakia).

1. Ke6 + , with branching lines. 1. ..., Ke3 2. Re5 + Kf4 3. Rf8 + Kg4 4. Re1 a1Q 5. Rg1 + Kh5 6. Rh8 mate, or 5. ..., Qxg1 6. Rg8 + and 7. Rxg1. 1. ..., Kc3 2. Rc5 + . Avoiding 2. Rf7? b1Q and bK escapes into the al square. 2. ..., Kb4 3. Rc7 Kb5. Mate by $\mathrm{Rb} 8+$ was threatened. 4. Rb7 + Kc5 5. Rc8 + Kd4 6. Rb4 + Kd3 7. Rb3 + Kd4 8. bRc3 b1Q 9. R8c4 mate.
''The study has branching play from the first move, with mating attacks, but they are of a forcing nature, and with similarities to earlier studies."


No. 4984: I. Garayazly.

1. b7 Bg3 2. f7 Rf5 3. e4. For future purposes the long diagonal must be closed off. 3. ..., Rf6. As one would expect, 3. ..., Rf1 is answered by 4.

Bf4. 4. Be3 h2 5. Bd4. Target: bR. 5. ..., Ra6 + 6. Ba7 Rf6 7. Bd4 Rf1 8. Be3. A difficult move, threatening the Novotny move Bf4. 8. ..., Bc7 9. Bb6. Target: bB. 9. ..., Bd6 10. Bc5 Be5 11. Bd4 Bg3 12. Be3. Repeating the threat of Bf4, and making it plain that we are faced with a positional draw.
"'Perpetual attacks plus perpetual threats of a Novotny interference. Certainly a hard nut for the beginner."


No. 4985: N. Ryabinin.

1. $\mathrm{h} 7+$ Kh8 2. Rf6. 2. Rh4? has the drastic drawback of 2. ..., Bf1 mate. 2. ..., Bc8 3. Rh6. All the Bl pieces are comically tied down. 3. ..., Bb7 4. Rf6. Neat, taking advantage of bBb 7 to maintain the freeze on bK . But not 4. d5? Bc8 and $W$ is in zugzwang. 4. ..., Re6 5. Rh6 Ba8. What about this for a zugzwang, though? 6. Re6 Kxh7 7. d5. This is the right moment, with bB in the corner. 7. ..., Rc5 + 8. Kb6 Rxd5 9. Re8 Bc5 + 10. Kc7 Bd6 + 11. Kb6, and it's a draw. A note points out that an inversion of moves by 6 . d5? fails 6. ..., Rc5 + 7. Kb6 Rxd5 8. Re6 Bc5 + 9. Kc7 Rf5! 10. Re8 + Rf8.
''Technically an excellent piece of work from a young composer, in spite of the particular relationship of forces being well known through the studies of Kasparyan, Nadareishvili and others."


No. 4986: Y. Bazlov.

1. Kd3 Ba6 2. Sb5. Not, however, 2. Sxd4 + ? Kd5 3. dSb5 Ra4 (though Bl wins also after 3. ..., Kc5;) 4. Kc3 Kc5; and wSS are paralysed and lost. 2. ..., Kd5 3. Sc3 + Ke5 4. f4 + Kxf4 5. Sxd4 Rb4 + 6. dSb5 Bxb5 + 7. Kc2 $\mathrm{Ba} 4+8 \mathrm{Kd} 3$, and another parting of the ways: 8. ..., Rh3 9. Kc4 Rxa3 10. Kb4 Rb3 + 11. Kc4 Ra3 12. Kb4, or 8. ..., Bb5 + 9. Kc2 Rc4 10. Kb3 Rc5 11. Kb4 Rc4+ 12. Kb3 and either 12. ..., Rc5 13. Kb4, or 12. ..., Ba6 13. Sd5 + K- 14. Sb4 Bb5 15. a4.
'Technically irreproachable, but have we not seen similar echo-productions, even by the same composer?"


No. 4987: L. Topko.

1. Sg6 + Bxg6 2. Qxg6 Sf5 + 3. Kg1. Bad is 3. Kg 2 ? $\mathrm{Sh} 4+$. 3. ..., Rg 74. Rf6 + . Not 4. Rd8? Qh4. 4. ..., Kg8 5. $\mathbf{Q x g} 7+\mathbf{S x g} 7$ 6. $\mathbf{B f} 7+\mathbf{K h 8}$. Or 6.
, Kf8 7. Bg6. 7. Bg6 Qg8. Rather than permit Rf8 mate. 8. Bf7 Qh7. Rather than permit Rh6 mate. 9. Bg6. Postional draw agreed?
"The positional draw is new and sharp, but the introduction is clumsy."


No. 4988: V. Vlasenko.

1. Be1 Kg3 2. Bh1 f4. The beginning of stalemate counterplay. 3. d6. Not 3. Bxf2 +? Kxf2 4. d6 Kg1 5. d7 Bxh1 6. d8Q Kg2 7. Qg5 + Kf2 8. $\mathrm{Qh} 4+\mathrm{Kg} 2$ and a draw, because of the presence of bPf4. 3. ..., Kh3 4. d7. Stalemate is the consequence of 4. Bxf2. 4. ..., Rc2 + 5. Kd1 Rc5 6. Ke2. If 6. d8Q? Rd5 + 7. Ke2 Rxd8 8. Kf1 Rg8. 6. ..., Rd5 7. Kf1. The play for stalemate has led to... mate! 7. ...., Rxd7 8. Bg2 mate.
"All in all, not a bad study on the theme of 'stalemate defence leads to mate', but the play lacks freshness."


No. 4989: M. Zinar.
This Special Prize was awarded for a 'P-ending malyutka'. I have found no good word in English for 'malyutka ', which seems to have been accepted as the word for a 5 -man study. We have used 'baby' previously, but personally I prefer 'malyutka'. (AJR) 1. Kg7. Why not 1. Kf7? Let us see: 1. ..., Kd5 puts W in zugzwang, as 2. Kf6 blocks the d8-g5 diagonal, as is shown by the continuation 2. ..., Kc4 3. e4 kxc3 4. e5 c5 5. e6 c4 6. e7 Kd2 7. e8Q c3 8. Qd8 +Kcl and the winning check on the g 5 square is prevented. We can see more easily why 1. Ke7? fails, as it blocks the e-file: 1. ..., Kc4 and neither 2. e4 Kxc3 3. e5 c5 (drawn on account of bPc2) nor 2. Ke6 Kxc3 3. Kd5 Kb4 4. Kc6 Kc4 has any success. 1. ..., Kd5 2. Kf7. Now it is Bl's move. 2. ..., Ke5. Or 2. ..., c6 3. Ke7 Kc4 4. Kd6 Kxc3 5. Kc5. 3. Ke7(e8) Kd5 4. Kd7. The square d8 is no good. 4. ..., Kc4 5. Kc6 Kxc3 6. Kc5 and 7. e4, winning. The solution comment observes that none of the Shakhmaty solvers plumbed the depths of this study. "A P-ending pearl with a paradoxical first move, complex and subtle motivations, destined for the study and endgame anthologies."


No. 4990: V.N. Dolgov.
1.Bf4 = Kf5.1. ..., Kg4 2. Ra4 at once. 2. Be6 + Kf6 3. Bg5 $+\mathbf{K g 6}$ decides
4. $\mathbf{B f 7}+\mathrm{Kg} 7$ 5. Bh6 + Kh7 6. Bg8 + Kh8. What might be called the "ornamental" phase is over, though in passing we may note that systematic movements of BB vs. K are not new, and there now comes the "battle" phase. 7. Ra8. A battery is finally set up. 7. ..., Rf2 8. Be3 Rh2 9. Bf4 Rf2 10. Bg 3 Rd 2 11. $\mathbf{B b} 3+\mathrm{Kg} 7$ 12. Ra 2 Rd3. And now the mopping-up operation, clarifying what has gone before. 13. Ra7 + Kf8 14. Ra8 + Kg7 15. Kxb2 Rxg3 16. Rg8 + and 17. Rxg3. 'Once again we are reminded of the meticulous technique of the master from Krasnodar in systematic movements in miniature settings." This prize was for a known idea in mini-form.


No. 4991: Em. Dobrescu.

1. $\mathbf{e 7 Q b 1}+2$ 2. Kc8 Qf + 3. Kc7 Qf4 + . In the manner of the 'Roman'" (ie, decoy) theme, bQ is lured to the 4th rank. 4. Kb7 Qb4 + 5. Kc8 Kd6. There is no check on g4. 6. e8Q. Yes, but the struggle is not over just yet. 6. ..., Qc5 + 7. Kb7 $\mathbf{Q b 5}+8$. Ka 7 . It's stalemate if bQ is taken. 8. ..., Qc5 + 9. Ka6 Qc4 + 10. Ka5. Another stalemate avoided. 10. ..., $\mathbf{Q c 3}+$ 11. Ka4 Qc4 + 12. Ka3 Qc3 + 13. Ka2 Qc4 + 14. Kb2 Qb4 +15. Kc2 Qc4+ 16. Kd1 and wins. ',The sprint by wK, combined with stalemates and sacrifices, leaves its impression. Another boon position."


No. 4992: A. Akerblom (Sweden). Judge: A. Dunder of Finland, who gave only 3 prizes.

1. $\mathrm{Kbl} / \mathrm{i} \mathrm{Qh} 7$ 2. $\mathrm{Sg} 4+\mathrm{Kh} 13$. $\mathrm{Sf} 2+/ \mathrm{ii} \mathrm{kh} 2$ 4. Kal $\mathrm{Qh} 8+5 \mathrm{Ka} 2$ $\mathrm{Qa} 8+6 . \mathrm{Kb1} \mathrm{Qf8} 7 . \mathrm{Sg} 4+\mathrm{Kh} 18$. eSf2 + Qxf2 9. Sxf2 wins, with just a little care, as does W also after earlier bQ sacrificial attempts.
i) 1. Kd1? Qd6 + 2. Sxd6 Kxg3, but not $1 . \ldots, \mathrm{Qh} 5+$ ? 2. Sg4 + wins.
ii) The optimum square for the second wS, as it protects wSe4, so that it can if need be recapture there, retaining guard of wR.

$$
\begin{array}{cr}
\text { No. } 4993 & \text { V. Nestorescu } \\
\text { (iii.79) } \\
\text { 2nd Prize, Suomen Shakki, } 1979 \\
\hline
\end{array}
$$



No. 4993: V. Nestorescu (Romania).

1. c6 b1Q 2. Se4 + Kd4 3. c7 Qb5 + 4. Kd8 Qa5 5. Kd7 Qf5 + 6. Kd8 Qf8 + 7. Kd7 Qf7 +8 . Kd8 Bf8 9. $\mathrm{Kc} 8 \mathrm{Qe} 8+10$. Kb7 $\mathrm{Qb} 5+11$. Ka7 $\mathrm{Q} 5+12$. Kb7 Qb5 + 13. Ka7 Qd7 14. Kb 8 Bg 7 15. Sd 2 , and if $15 . . .$, Ke3 16. Sc4+, or if 15 . ..., Be5 16. Sf3 .


No. 4994: Y.M. Makletsov.

1. Kb7 Rc7 + 2. Kb8 Rxa7 3. Kxa7 Kc7 4. Ka8 Bf3 + 5. Sd5 + Kc8 6. Bb6 Bxb6 stalemate.

The provisional result of the XIV Composition Championship of the USSR for studies was published in issue No. 5 of 1982 of Bulletin of the Central Chess Club of the USSR. It covered compositions published in the two-year period 1977-78. 121 studies were entered, by 26 composers. Presumably lesser composers did not enter if they thought they had no chance. The studies judge was Leopold Mitrofanov, with A. Grin the principal judge. The leading study was awarded 15 points, and other studies fewer points according to the judge's comparisons. In fact the Bulletin published 43 studies, taking the list down from the top to those awarded 7 points. Totalling the points gave the championship title to N. Kralin of Moscow (48), closely chased by the Georgians Gurgenidze (47), Nadareishvili (42) and Kalandadze (41). Thereafter: Kasparyan (40), Katsnelson (39), Bazlov (38), Pogosyants (37), Kozyrev (36), Neidze (35), Khortov (35), Belokon (34), G.A. Umnov (33), and G. Slepyan (22).

These intermittent soviet championship contests provide an interesting opportunity to comment on the coverage offered by EG (how many events have escaped our radar?), and on the quality of judging (what studies are included in the championship award, but excluded from the award of the tourney, if any, for which they were entered?). It turns out that 6 tourneys eluded us, and that 4 studies were originally unhonoured. In all, 16 of 43 have not previously appeared in EG's pages. They are now included, along with the complete reference list.

The 43: 1: EG56.3720 (Kozyrev GBR 0014.12). 2: No. 4995. 3: No. 4996. 4: EG56.3722 (Kralin - GBR 0334.30). 5: EG48.3023 (Kalandadze - GBR 0500.13). 6: EG66.4390 (Bazlov - GBR 0317.10). 7: No. 4997. 8: No. 4998. No. 9: EG48.3021 (Khortov - GBR 0406.31). 10: EG56.3646 (Gurgenidze - GBR 0530.01). 11: EG55.3571 (Kasparyan - GBR 4361. 20). 12: No. 4999. 13: EG63.4123 (Slepyan - GBR 0013.45). 14: No. 5000. 15: EG56.3726 (Kalandadze GBR 0800.22). 16: EG55.3573 (Kralin - GBR 3041.40). 17: No. 5001. 18: No. 5002. 19: EG51.3265 (Pogosyants - GBR 0243.02). 20: EG56 3645 (G. Umnov - GBR 0423.01). 21: EG55.3585 (Neidze - GBR 0435.22). 22. No. 5003. 23: EG66.4387 (Bazlov - GBR 0420.01). 24: EG61.4080 (Nadareishvili - GBR 0700.10). 25: EG56. 3744 (Katsnelson - GBR 0332.42). 26: EG60.3984 (Kasparyan - GBR 0433. 10). 27: EG69.4616 (Kralin and Makletsov - GBR 0010.76). 28: No. 5004. 29: EG56.3686 (Kasparyan - GBR 0016.01). 30: EG59.3947 (Kasparyan - GBR 0326.00). 31: EG58.3876 (Nadareishvili - GBR 3102.03). 32: EG62. 4163 (Katsnelson - GBR 0.33). 33: No. 5005. 34: EG56.3673 (Pogosyants - GBR 0053.10). 35: No. 5006.

36: No. 5007. 37: EG60.3971 (G. Umnov - GBR 0700.34). 38: EG56. 3683 (Bazlov - GBR 0323.01). 39: No. 5008. 40: EG56.3671 (Katsnelson - GBR 0410.11). 41: No. 5009. 42: No. 5010. 43: No. 5011.

For readers not already overwhelmed by digits, here are the awarded points values:1-15 points. 2 to $5-14$ points each. 6 to $9-13$ points each. 10 to 13 - 12 points each. 14 to $20-11$ points each. 21 to $28-10$ points each. 29 to $34-9$ points each. 35 to $38-8$ points each. 39 to 43-7 points each. Four other studies also received 7 points, and one study received 6 points.


No. 4995: S. Belokon.
The exchange of wR against bPg 2 is unavoidable, so W's only possible salvation lies in forcing Bl to capture wPf2. 1. Rh7 + Kd8 2. Rg7 dSf3 + $\mathbf{3}$. Kd1. A magnificent move, with moves 5 , accomplishing not only the "'book draw" requirement of the "'Troitzky" ending 0002.01. namely advancing fP beyond 5th rank (or winning a knight!), but the artistic requirement of doing it in echo... Consider: 3. ..., Sh4 4. Rxg2 Sxg2 5. f4 Sxd7 6. Ke2 Sf6 7. Kf2 Sh4 8. f5 and 9. Kg3. Or: 3. ..., g1Q + 4. Rxg1 Sxg1 5. f3. Not 5. f4? Sxd7 6. Kd2 $\mathrm{Sf} 3+7$. Ke3 Sh2 and wins. 5. ..., Sxd7 6. Ke1 Sf6 7. Kf1 Sh3 8. f4, and the Kg 2 threat (echo of Kg 3 ) draws.


No. 4996: D. Gurgenidze. Which wP to push?

1. f 7 ? $\mathrm{Ra} 8+2$. $\mathrm{Ra} 7 / \mathrm{i} \mathrm{c} 2$ 3. Kb 2 Rb8 + 4. Rb7 Rc8 5. Rc7 Rb8+ 6. Rb7 Rc8, with a positional draw. Correct is: 1. g7 Ra8+ 2. Ra7 c2 3. Kb2 Rb8+ 4. Rb7 Rc8. After 4. ..., $\mathrm{clQ}+5$. Kxcl Rc8+ 6. Rc7, the struggle's outcome is clear. . $\mathbf{g 8 Q}+$ Rxg8 6. Rg7 + Rxg7 7. fg Kh6 8. g8R -- the final subtlety.
i) 2. $\mathrm{Kb} 1 ? \mathrm{c} 2+3 . \mathrm{Kxc} 2 \mathrm{Kxg} 64 . \mathrm{Re} 8$ $\mathrm{Ra} 2+5 . \mathrm{Kb} 3 \mathrm{Kxf} 7$.


No. 4997: L. Katsnelson and A. Sochniev.
Both sides' Ps promote at the same time, but bQh1 will give mate. W could play 1. a3? with the threat of 2. c 4 and 3. Ka2, but the reply 1. ..., Kb5 holds back wPP. Nevertheless: 1. e6 h3 2. a3 de 3. de h2 4. Ka2 h1Q 5. c4. Threatening b3 mate and also


No. 5001: G.A. Nadareishvili. 1. Qh8 + Kg5 2. Qe5 + Kh4 3. Qf6 + . But not 3. Qe7 + ? Kh3 4. Qe1 gRf3. 3. ..., Kh3 4. Qf1 + Kh4 5. Qf6 + . This forces: 5. ..., g5. Now a new phase of the struggle begins. 6. Qf2 Rd1 + 7. Kh2 Rg1 8. Qe1 Rg2 + 9. Kh1 Ra2 10. Qf2 Ra1 + 11. Kh2 Rg1 12. Qe1 Rg2 + 13. Kh1, with a new-look positional draw.


No. 5002: V. Neidze.

1. $\mathbf{S b 3}+\mathbf{K b 5} 2 . \mathbf{Q b 4}+$ Ka6 3. Qxe4. Bl cannot afford to accept this sacrifice: 3. ..., Qxe4 4. Sc5+ and 5. Sxe4, but on the other hand he can win wS. 3. ..., Qf7 + 4. Ke2 Qxb3. And now we have an elegant finale. 5. Qa8 + Kb5 6. Qb7 + Kc4 7. Qc6 mate, or 6. ..., Ka4 7. Qa6 mate. Peter Kings coolly indicates the prosaic alternative to the mates, namely the exchange of Qq , with a winning $K+P$ vs. $K$ ending.


No. 5003: D. Gurgenidze.

1. Rf3 $+\mathbf{S f} 4+$ 2. Rxf4 + Ke5 3. fRxd4 Rg5 + 4. Kh4 Rg8 5. R8d5 + Ke6 6. Rd6 + Kf7 7. Rd7 + Kg6 8. R7d6 + Kh7 9. Rd7 $+\mathbf{R g} 7$ 10. Rd8 Rg8 11. R8d7 + , positional draw. The other main variation runs: 4. ..., Qg7 5. R8d5 + Ke6 6. Rd6 + Kf5 7. R6d5 + Kg6 8. Rd6 + Kh7 9. Rd7 Rg4 + 10. Kh5 Rxd4 11. Rxg7+ Kxg7 stalemate.


No. 5004: G. Slepyan (Minsk).

1. Kb8 h1Q 2. Be3 + Ka 3. a8S $\mathbf{Q h 8}+$ 4. Kb7 Qxa8 + 5. Kc7 Qb8 + 6. Kxb8 a1Q 7. Kc7 Qd4 8. f4, and Bl loses to zugzwang.


No. 5005: E.L. Pogosyants. 1. Bg3? d6 + 2. Kc6 e1Q 3. Bxe1 f2. Correct is: 1. b7 $+\mathrm{Ka7}$ 2. Bg3 d6 + 3. Kc6 h1S 4. Bh4 e1Q 5. Bxe1 f2 6. Bd2 f1S 7. Bg5 a2 8. Bd8 a1Q 9. Bd6+ Kxa6 10. b8S mate.


No. 5006: V.I. Kalandadze.

1. b7 Rxd3+ 2. Ke8. But not 2. Ke7? because of 2. ..., Rb3 3. b8Q Rxb8 4. Rxb8 + Kc3 5. h7 Rg7 + . 2. ..., Rb3 3. b8Q Rxb8 4. Rxb8 + Ka3 5. h7 Rxg2 6. h8R Rh2 7. Rf8 Rf2 8. Rf7 Rxf7 9. Kxf7 Ka2 10. Ke6 a3 11. Kd5 Ka1 12. Kc4 a2 13. Kb3 Kb1 14. Ka3 + .

No.5007: V.L. Kalandadze.
"'Study Ideas"' is the English translation of the title of the composer's small book of his own studies.

1. Rg4 Rf5 + 2. Ke8 Re5 + 3. Kd8 Rd5 + 4. Kc8 Rc5 + 5. Kb8 g1Q 6. Rxg1 Rxg1 7. a8R. A mistake would

be 7. a8Q? on account of 7. ..., Ral 8. $\mathrm{Ra} 7 \mathrm{Rb} 1+9$. Rb7 Ral 10. Qxal $\mathrm{Rc} 8+$ 11. Ka7 Ra8 + 12. Kxa8 stalemate. 7. ..., Ra1 8. Rxa1 c2 9. Rc1 Re8 + 10. Ka7 Ra8 + 11. Kb6 Ra6 + 12. Kc5 Rc6 + 13. Kb4.


No. 5008: S. Belokon.

1. Rb8 + Sd8 2. Rxd8 + Kh7 3. Rg8 Rh1 + 4. Kg5 Rg1 + 5. Kf6 Rxg8 6. $\mathbf{d 8 S}+$ Kh6 7. Sf7 + Kh7 8. $\mathbf{S g} 5+$ Kh6 9. Rh7 + Bxh7 10. Sf7 mate.


No. 5009: V. Neidze.

1. ..., Rg4 + 2. Kh3 Rh4 + 3. Kxh4 $\mathrm{g} 5+\mathrm{4} . \mathrm{Kg} 3 \mathrm{~h} 4+$ 5. Kf3 Qxe6 6. $\mathbf{R g} 2+\mathbf{K h} 1$ 7. Rg1 + , and either 7.
..., Kxg1 stalemate, or 7. ..., Kh2 8. Rg2 + Kh3 9. Rg3 + hg stalemate.


No. 5010: V. Kozyrev (Gorky Region).

1. Qc4 + Ka7 2. Be4 Sd5. 2. ..., Qd8 3. Qf7 + Kb6 4. Qb7+. Or 2. ..., Qe7 3. Qc6 Kb8 4. Qb6+. 3. Bxd5 Qd8 4. Qc6 Qb8 5. Be4 b3 6. Qd5 Qc8 7. Qd4 + Ka6 8. Qd6 + Ka7 9. Ka5 Qc3 + 10. Kb5.


No. 5011: V. Kozyrev.

1. ..., Sh7 + 2. Bxh7 Bg7 + 3. Kxg7 g2 4. Rc8 + Kb3 5. Bg8 + Kb2 6. $\mathbf{R b 8}+\mathrm{Kc1}$ 7. Rc8 + Kb2 8. Rb8 + Ka1 9. Ra8 g1Q + 10. Kf6 Qd4 + 11.

Kf5 Qf2 + 12. Ke5 Qe3 + 13. Kd6 Qb6 + 14. Ke5 Qe3 + 15. Kd6, or 13. ..., Qf4 + 14. Kc5 Qc7 + 15. Kd4 Qf4+ 16. Kc5, draw.


No. 5012: G.M. Kasparyan. Judge: Jan Rusinek, Szachy's studies editor, who had 25 entries to consider, published in the 9 issues that appeared in 1981.

1. Re2 + Kb3. 1. ..., Bd2 2. Sc4 b1Q 3. $\mathrm{Sa} 3+$. 1. ..., Kc3 2. Rel Bcl 3. Ba3 b1Q (Kc2; Bxb2, for instance) 4. Rxc1+. 2. Re1 Ka2 3. Sf3. Not 3. Sd3? Bd2, followed by ..., b1Q; but avoiding 3. ..., b1Q? 4. Sb4 + Kb2 5. $\mathrm{Bg} 7+$. 3. ..., Bc1 4. Re2 Kb3 5. Sd4 + Kc3. Or 5. ..., Ka4 6. Re8. 6. Rc2 + Kd3 7. Bb4 b1Q 8. Rc3 + Kd2. Setting the stalemate snare 9. Rb3+? Kd1 10. Rxb1. 9. Kc5. And not 9. Kc4? Kd1 10. Rf3 Qa2 + . 9. ..., Kd1 10. Rf3 and $W$ wins.


No. 5013: A. Koranyi (Hungary). 1. g4 Kf3 2. g5 Kg4 3. Bf6. 3. Bh6? Bd2 4. Sf2 + Kf5 5. Se4 Be3, with Positional Draw No. 1. 3. ..., Kh5 4. Ke4 Bd2 5. Se3 Kg6 6. Kf4 Bc1 7. Bd4 Bd2 8. Kg4 Bc1 9. Sc4 Bxg5 10. Se5 + Kf6 11. Sf3 + .
There is a second "main line", after 2. ..., Kf4 3. Bh6. And, this time, not 3. Bf6? Bh4 4. Sf2 Bxg5 5. Sh3 + Kf5 6. Bxg5 Kg4. 3. ..., Kf5 4. Se3 + Kg6 5. Sc4. A mistake would be 5 . Ke 4 ? Bd2 6. Kf4 Bc1, with Positional Draw No. 2, while 5. Sg4? Bd2 6. Se5 + Kf5 7.Sf3 Be3 8. Sd4 + Kg6 9. Se6 Kf5 10.Kd6 Bc1 11. Ke7 Kg6 Positional Draw No. 3. 5. ..., Kf5 6. Sd6 + Kg6 7. Se4 Kf5 8. Kd4, winning (eg by wK jaunt to g4).


No. 5014: A. Melnikov.

1. Kd2 Kd4 2. Bc6 Bg4 3. Bb7 Bh5 4. Bc8. 4. Bc6? f2 5. Bg2 Bg4 6. Bf1 Bf5 and Bl wins. 4. ..., f2 5. Bh3 Bg4 6. Bg2 Bf3 7. Bf1 drawn.

No. 5015: M. Halski, a regular member of the Polish WCSC solving team.


1. f7 Rf4 2. fgR. 2. fgQ? Rg4+ 3 . Qxg4 stalemate. 2. ..., Kxd1 3. Rc8 Rf7 4. Rc1 + Ke2 5. Rb1. 5. Kg3? Rb7 6. Rb1 Rxb3. 5. ..., Rc7 6. Kg3 Rc2 7. Rh1 (g1) Rb2 8. Rh2(g2) + Kd1 9. Sxd4 Rxd2 10. R mates.


No. 5016: E. Melnichenko (New Zealand).

1. Rf6. 1 . Qf6? $0-0-0+2$. Qf8 hg wins. 1. ..., 0-0-0 + 2. Rf8 eRe8 3. Rxe8 Rxe8 + 4. Kf7. And not 4. Kg7? Rxh8 5. g3 Re8 6. Kf7 Kd8 and W finds himself in zugzwang. 4. ..., Rxh8 5. g3 Kd8 6. Kg7 Re8 7. Kf7. Now Bl is in the grip of zugzwang. 7. ..., Re7 + 8. Kf8 Rh7 9. Kg8 drawn.

This study was also published in Schakend Nederland (x.81).


No. 5017: M. Kacewicz (Poland). 1. a7 Sb5 2. a8B. 2. a8Q? Sb4; followed by ..., Sc6+ and ..., Sc7 mate. 2. a8S + ? Kc6 3. Sc7 Sd6. 2. ..., Bc6 3. Kc8 Sd6 + 4. Kb8 Sxb7 5. Bxb7 Bxb7 stalemate. Also valuable is 1. ..., Sb4 2. a8S + .


No. 5018: G.M. Kasparyan.

1. Ra2 + Kc1 2. Ra1 + Bb1 3. Rxb1 + Kxb1 4. Ra1 + Kxa1 5. g8Q Qh2 + 6. Ka8 Rc7 7. Sd6 Qxd6 8. $\mathrm{Qg} 7+\mathrm{Ka} 2.8$. ..., Qxg 7 is stalemate. 9. Qxc7 Qxc7 stalemate.


No. 5019: Y. Makletsov.

1. Be2 + Ka5 2. Bxf1 Rd1 3. Bg2 Rxb1 + 4. Kc2 Sd2 5. Bf3. Not 5. Bh3? Rh1 6. Bg2 Rh2. 5. ..., Rf1 6. Be2 Rf2 7. Kxd2.


Award: Magyar Sakkelet, iii. 83


No. 5020: IGM Pal Benko (New York and Budapest). Judge: Laszlo Navarovsky. Note that B1 cannot castle, having moved bK or bR on his previous move. 1. Bg4 Kf8. If 1. ..., Rf8 2. Bh5 + Kd8 3. Bf7 wins. 2. Bh5 Rg8 3. Rf7 + Ke8 4. Kc5 Kd8 5. Kd6 Kc8 6. Kc6 Kd8 7. Rd7 + Kc8 8. Ra7 Kb8 9. Rb7 + Ka8. If 9. ..., Kc8 10. Bf7 Rg2 11. Be6 + Kd8 12. Kd6 Rd2 + 13. Bd5 Kc8 14. Ra7 Rb2 15.

Rf7 Kb8 16. Rf8 +Ka 7 17. Ra8 + Kb6 18. Rb8 + wins. 10. Bf3 Rg6 + . Or 10. ..., Rc8 + 11. Kd6 h5 12. Bc6 h4 13. Kc5 (or Rbl + first). Or 10. Rg3 11. Be4 Rc3 + 12. Kd6 Re3 13. Bd5 wins, but onot here 13. Rb4+? Ka7 14. Kc7 Ka6 15. Bc6 Re5, with a drawn position due to the same Joseph Szen. 11. Kc5. Not 11. Kb5? Rg3 12. Rf7 $+(\operatorname{Bd5}, \operatorname{Rb} 3+;)$ 12. ..., Kb8 13. Kb6 Kc8 14. Bc6 Rd3, and a Szen draw again. 11. ..., Ra6 12. Bc6 h5 13. Kd6 (also $\mathrm{Re} / \mathrm{f} / \mathrm{g} / \mathrm{h} 7$ +) h4 14. Re7 + Kb8 15. Re8 + Ka7 16. Kc7.


No. 5021: L. Katsnelson (Leningrad) and A. Koranyi (Budapest). 1. Sg3? Kg 5 2. Se 2 Kf 6 3. Kg3 Kf5 4. Sf4 Kg5 draws. 1. Sf2 Kg5 2. Kg3 Kf5 3. Sd3 Ke4 4. Sf4 Kf5 5. Se6 Ke5 6. Sc7 Kf5 7. Sa8 Ke5 8. Sb6 Kf5 9. Sc8 Ke5 10. Se7 Kf6 11. Kxg4 Kxe7 12. Kg5 wins.


No. 5022: J. Vandiest (Belgium). 1. Sd6 + Ka5 2. Qd8 + Kb4 3. Qb6 + Kc3 4. Qc5 + Kd2 5. Se + Kd1 6. $\mathbf{Q x d} 4+\mathbf{K e 2}$ 7. $\mathbf{S g} 3+$ Ke1 8. $\mathbf{Q g} 1+$ Kd2 9. Se4 + Kc2 10. Qc5 + Kd1 11. $\mathbf{S c} 3+\mathbf{K e 1}$ 12. $\mathbf{Q g} 1+\mathbf{K d 2}$ 13. Sb1 + Kc2 14. Sxa3 + Kd2 15. Sb1 + Kc2 16. Qc5 + Kd1 17. Sc3 + Ke1 18. Qg1 + Kd2 19. Se4 + Kc2 20. Qc5 + Kd1 21. Sf2 + Kd2 22. Qg5 + Kc2 23. Qf5 + Kc3 24. Qe5 + Kc2 25. Qc7 + Kd2 26. Qf4 + Kc2 27. Qb4 d6 28. Qc4 + Kd2 29. Qf4 + Kc2 30. Qb4 d5 31. Qb8 Kc3 32. Qc7+ Kd2 33. Qf4 + Kc2 34. Qb4 d4 35. Qc4 + Kd2 36. Se $4+$ Kd1 37. Qxd4 + Ke2 38. Sg3 + Ke1 39. Qg1 + Kd2 40. Se4 + Kc2 41. Qc5 + Kd1 42. Sf2 + Kd2 43. $\mathbf{Q g} 5+\mathrm{Kc} 2$ 44. Qf5 + Kc3 45. Qe5 + Kc2 46. Qc7 + Kd2 47. Qf4 + Kc2 48. Qb4 and wins.


No. 5023: J. Vandiest. 1. e6 Kb7 2. e7 Kc6 3. e8Q + Sxe8 4. Bxe8 + Kc5 5. Bxb5 f3 6. Ba6 h5 7. Bb7 f2 8. Ba6 h4 9. Bf1 Kd4 10. Kb4 Ke3 11. Kc3 drawn.

Tourney announcement TIPOGRAFIA 25th Anniversary. Closing date: $31 . i i i .84$. Send (max. 3 per composer) to: T. Kardos, Janiscar utca 5.1.1, Budapest, H-1134 HUNGARY. Judge: E. Janosi (Romania).

## Reviews

'’Putyami Shakhmatnovo Tvorchestva" ('The Many Ways to Chess Creativity', translating the intention rather than the words), by Evgeny Umnov, Moscow, 1983, 320 pages, 569 diagrams, hard cover.
Suppose that apart from K and P's the only chess pieces were $R$ and $S$, and that neither side was allowed two R's or two S's, would it be possible to convey the complete spectrum of chess with this restricted material? Well, this is what the author has attempted. An original idea, for sure, though whether it requires the bulk of the supplied examples may be arguable. Some of the material has appeared before, including in EG, but there is no shortage of research and care. An advanced knowledge of Russian is needed to appreciate the argument, but much can be gained from the juxtaposition of diagrams alone. The readership aimed at is described as 'chessplayers of high standard', and the size of the edition is 100,000 . Oh yes, the majority of the diagrams are studies.
"'Capablanca's Best Chess Endings", by the late Irving Chernev, a 'Dover'" reprint of a 1978 original, 288 pages, 60 games. Although almost one-third of the games selected were against inferior opposition, and although one of my personal favourites (Capa's win as B1 against Mieses after the latter had "won" the exchange) is missing, I could not fail to enjoy this popular-style book.
''Meine Neuen Ideen zur Schachprogrammierung", by M. Botvinnik, Julius Springer Verlag, Heidelberg, 1982, 177 pages. This is a computer book, a German translation (with an update postscript) of a Russian 1979
book (title unclear). Botvinnik has long held the minority view (which I share) among computer chess researchers, namely the opinion that topclass computer chess should be possible using "low branching factor" techniques instead of "high", the latter requiring more and more computer power (''brute force') to gain just a little more depth of analysis of the move "tree". As regards the endgame there is here a 31-page appendix by A.D. Yudin describing how the "library" of endgame positions is used, not only when a position is identical with one in the library, but when it is "similar". In the latter case the program attempts to bring about the position (if it is advantageous) by means of the principle fundamental to Botvinnik's theory, that is the "trajectory" of each piece. As a "trajectory" is a potential move or series of moves of a piece, the principle can be applied to reduce the number of candidate moves quite drastically. However, we are still awaiting the emergence of PIONEER as a fighting force from the Botvinnik stable.
"'De Strijd tussen Loper en Toren', by F.A. Spinhoven and F.S. Bondarenko, Venlo (van Spijk), 1983, 126 pages, 383 diagrams, hard cover, in Dutch. The wR vs. bB struggle is illustrated by studies and game positions, with and without pawns, but chiefly by studies. Beautifully produced. Considered as a compendium of tactics with this force the book could well be useful to practical players, especially as nearly all the positions are natural. Are we, one wonders, entering an era where specialist-material books on the endgame will be published to parallel books on specialist opening variations? Let us hope so.

## GBR

Guy-Blandford-Roycroft (GBR) code for completely representing chessboard force. Class 1032 is the code for $w Q$, no rooks, bB and $2 w S .4870$ is the code for $w Q, b Q, 2 w R, 2 b R, w B, 2 b B$, no knights. 0005 is the code for $2 w S, b S$. In other words, the digit position denotes, from left to right, Q, R, B, S; the digit value is the sum of ' 1 ' for each W piece and ' 3 ' for each B1 piece. ' 9 ' is reserved for additional (promoted) force, in the appropriate position. Pawns are denoted by uncoded decimal place digits: $\mathbf{0 0 0 0 . 3 5}$ would denote no pieces of any kind, 3 wP and 5 bP . It is often useful to call the force so coded a 'class', especially when discussing endgame theory. The GBR code is convenient for indexed retrieval of chess positions and for representation in computer systems.
${ }^{*} \mathrm{C}^{*}$ denotes either a position generated by computer, or an article on computers.

ICCJ = International Computer Chess Journal, H. Jaap van den Herik, Delft University of Technology, Dept. of Mathematics and Informatics, Julianalaan 132, Room 2.126, 2683 BL Delft, Netherlands.

TTC $=$ Test Tube Chess, 1972.

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[^0]:    The Chess Endgame Study Circle and EG 4 issues p.a. EG 71-74 for 1983 EG 75-78 for $1984 £ 4.00$ or $\$ 10.00$. Calendar year.

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