Variant Chess

THE MAGAZINE TO BROADEN YOUR CHESS HORIZONS
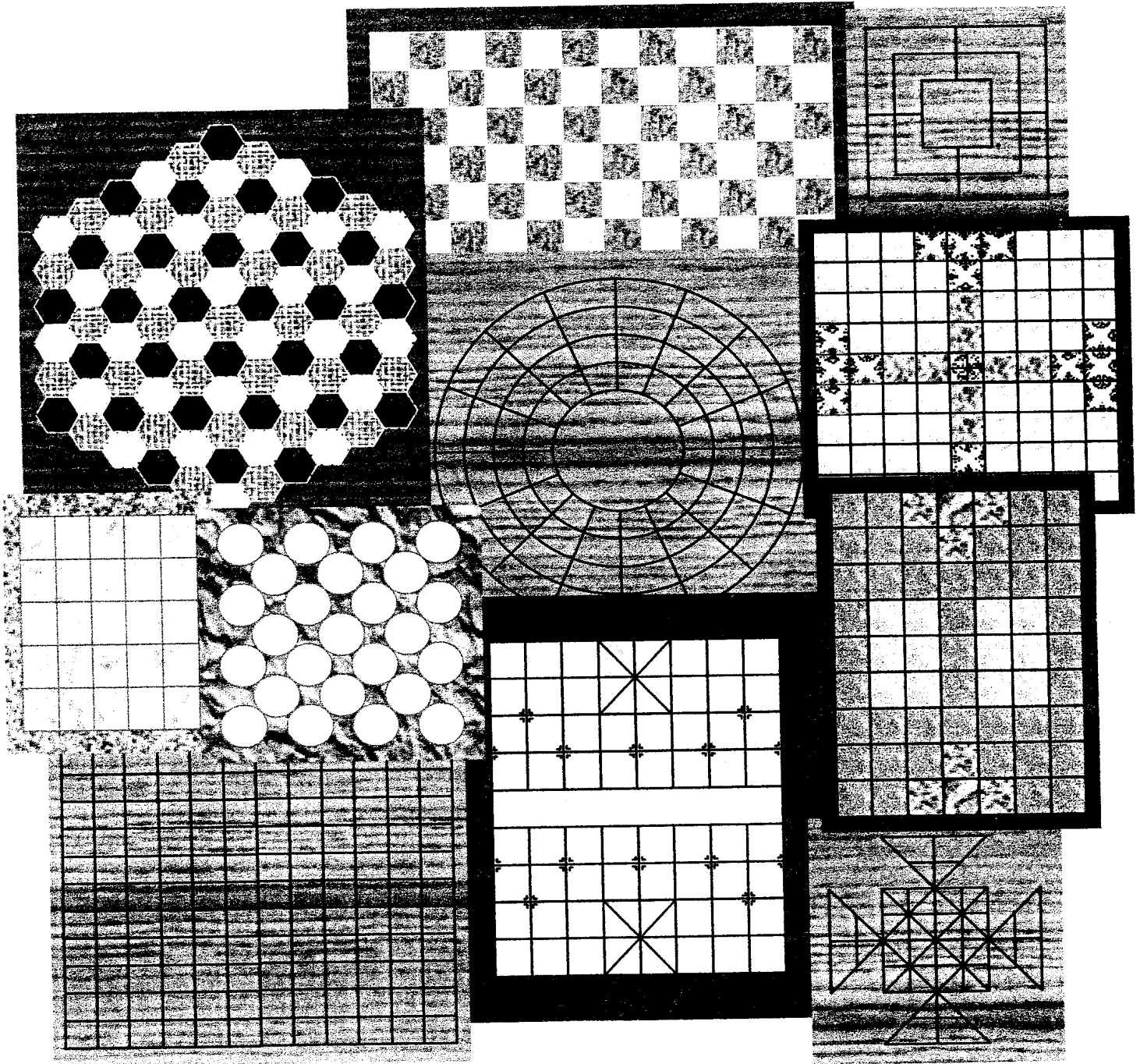
The Armchair Artisan

Master play in Makruk   The Loch Ness Monster

ECV 2 Footnotes

The material which Peter and I collected in August included a copy of Verney's *Chess Eccentricities* of 1885, a source frequently cited by David. Jurgen Stigter, in turn, has kindly checked some of Verney's source material for me, and this has clarified various points.

Van der Linde's Games [1] and [2] (page 72). Given by Verney, but not mentioned in the *Encyclopedia*, is a further game with the pieces reduced to QR, K, KN only (8xP as usual). Verney cites "his book on Chess in Dutch, published in Utrecht in 1876", and Jurgen Stigter confirms: "LN 973 Linde (A. van der). *Leerboek van het schaakspel*. Utrecht 1876. [973 A 29] On p. 265-266, he refers to van Zuylen and gives some diagrams, one of which has indeed QR, K, KN only (8xP as usual). Also, several other variants (pp. 138 and following) originate from Van Zuylen." The latter is "LN560 (Zuylen van Nyevelt, P. J. van). *Het schaakspel*. Campen 1792. [972 D 38]."

It would therefore appear that the variants which David attributed to van der Linde should in truth be called **Van Zuylen's Games**.

As regards the asymmetry of the h-pawns in game [2] (c), this was taken from Verney, and David was right to suspect that it was a mistake. Jurgen tells me that the h3 pawn should be on h2.

The Emperor's Game (page 121). The references "L. Tressau, 1840", here and elsewhere, appear on the evidence of Verney to be to his book *Das Schachspiel, seine Gattungen und Abarten*, published that year in Leipzig. I haven't seen this, but it would appear to have been largely a description of existing games, and here at least it would seem that Tressau should not have been cited as the game's originator. The game appears to have been no more than "Das Kaiserspiel" of c.1815, possibly with a modified baseline. Not having seen the source material, I cannot say whether the slightly different baselines reflect a genuine change or merely an error in one source or the other.

Courier-Spiel (page 131). This entry should not have been included. Verney cites two descriptions of "The Courier-Spiel", one by H. G. Albers (1821) of a game "played by the peasants at Ströphe (province of Halberstadt) from olden time" and the other by Tressau, and these are duly included in the "Courier Game" entry on page 245. The Gollon material behind the entry on page 131 (and the note on pages 78-9 of *VC* 37) appears to have been no more than a slightly incomplete description of the Albers game.

Grande Acedrex (page 244). The "second 12x12 game with unicorns attributed to the Alfonso MS", which was in the first edition as "Great Chess (III)" and which I relegated to an editorial note, can be found on pages 175-6 of Verney with source *"Dr. Van der Linde, Berlin,* 1881". But Verney's source can be identified as "LN 226 Linde (A. van der). *Quellenstudien zur Geschichte des Schachspiels.* Berlin 1881. [972 A 12]", and Jurgen Stigter tells me that the "Grande Ajedrez" on pages 265-266 of this is the "Grande Acedrex" of the second edition of the *Encyclopedia*. This is emphatically not the game as given by Verney.

So it would seem that the "Great Chess (III)" of the first edition was a myth. It may have been faithfully copied from Verney, but Verney's copying from his stated source seems to have gone sadly adrift.

The details given in the second edition were taken from Murray, and this should have been acknowledged.

Game of the Four Seasons (page 342). The date 1031 which I query in my editorial note appears to have come from Verney (page 84), and to be due to a misunderstanding of a note in van der Linde's 1881 book. Jurgen Stigter, citing pages 260-1 of this: "The Game of the Four Seasons [...] is from the Alfonso MS, 1283, a free interpretation of Al-Biruni's Indian four chess (1031)." The latter is "Chaturaji" in the *Encyclopedia*.

On rereading the first edition's note "Van der Linde gives the earlier date of 1031" in the light of this, I see that it was intended to refer to the game and not to the Alfonso manuscript. Even so, I cannot see more than the most superficial resemblance between the games (size of board, number of players, number of men), and to call the Game of the Four Seasons even "a free interpretation" of Chaturaji strikes me as mere speculation. On the evidence reported by Jurgen Stigter, I can see no reason to ascribe any date other than 1283 to the Four Seasons.

The material which Peter and I brought back also turned out to include some sheets of trial masters for the diagrams in the first edition, and one of these, not used in the final book, shows the array for the hex version of **Dragonfly** (second edition, note on page 205). This has the same relationship to the square board array as that between the hex and square versions of Loonybird Chess: baseline RBBKNNR on b4-e1-h4, fronted by 9xP on a5-c7-e5-g7-i5. I was most surprised to see this, because a hex game normally uses three bishops so that cells of all three colours can be covered, but the sheet had apparently been prepared by the game's inventor and it included an explicit claim to copyright in his name. It is true that the ability to reintroduce captured men means that a bishop covering the missing cells can be introduced later, but I would not expect this to be full compensation for the initial imbalance. A similar imbalance is to be found in the hex version of Loonybird Chess.

And an omission which I spotted while preparing "In the Library": I should have recorded that David's principal source for the rules of **Makruk** (page 268), and in particular for the various material-dependent equivalents of the "50-move" rule, appears to have been the letter of 4 June 1992 from the Vice President of the Thailand Chess Federation. So here, at least, we have something more than the mere "travellers' tales" on which writers about foreign games so often have to rely.

NOT IN ECV 2

David Pritchard kept an index sheet for each chess variant known to him, and as part of the preparation for passing his *Encyclopedia* files to the Musée Suisse du Jeu I went through these sheets and noted the section in *ECV 2* where the game was described. This disclosed over 150 games which had not been included. In nearly every case the reason was obvious, but two games were omitted through my error, and four of David's omissions do not seem readily explicable and may have been inadvertent. I reported my omission of the Indian game Radha-Madhara in "*ECV 2* footnotes" in *VC 55*; the others are described below. It cannot be claimed that any except perhaps the last is of particular interest, but I think they should be reported as a matter of completeness.

Quantum Chess [Engel] was in the first edition but was omitted from the text I inherited for the second, and because a new 'Quantum Chess' had appeared in its stead I did not notice the omission. *World Game Review* 10 gives its source as an article by Douglas A. Engel in issue 27 (Spring 1968) of *The Pentagon*, pages 99-103. Board and men at the players' choice; moves of the men determined by mathematical equations, also at the players' choice. Each side has a unit piece which moves like a chess king and whose capture is the object of the game. The game is highly artificial and its omission from David's text for the second edition was entirely understandable, but it appears to be playable - just - and I would have reinstated it had I noticed the omission.

Neu-Schach [Merckenschlager] was invented by Walter of that ilk in 1946. Two boards side by side, normal array on board 1, board 2 empty. Play as if the two boards formed a single 16x8 board, except that a king can be attacked or mated only if the opposing king is on the same board. Stalemate is possible if the kings are on separate boards. When a player is reduced to a single king, it cannot leave the board it is on. (Author's pamphlet *Neu-Schach*, van der Linde #4820)

In **Royal Bishop Chess** and related games, the royal pieces are either agreed beforehand or nominated simultaneously by both players. In **Mysterious Royal Chess** each player writes down the name of his royal piece before the start of play, but does not reveal it until he is mated. A royal piece may not move into check, and must get out of check if threatened. Origins unknown. (Communication from Mike Fox, January 1993)

In **Sniper Chess** (Tony Paletta, 1980) rooks move normally but capture like bishops, bishops move normally but capture like rooks, queens move normally but are limited to two squares and capture like knights, knights move normally but capture like limited queens. David thought that the game had been included under another name, but I cannot find it though some of the ideas are certainly present elsewhere. (*Chess Spectrum Newsletter*)

Taxi Chess [Betza] (Ralph Betza, 1996) takes place during a subway strike, forcing the pieces to take taxi cabs whenever they wish to move. This is expensive, and the players' budgets are limited. Specifically, each player starts with 16 guilders (or dollars, or euros, or whatever), and he receives 2 guilders before the start of each turn. Each move costs 1 guilder per square whether orthogonal or diagonal, knight moves cost 2, 0-0 4, 0-0-0 5; furthermore, when you capture a man you must pay to have it taken away (1 guilder from an edge square, 2 from a square next to the edge, and so on up to 4 from one of the four central squares). Promotion costs an extra 2 guilders, one to take the pawn away and one to bring in the new piece. You can of course be checkmated by bankruptcy.

As regards strategy, the game '... is designed so that you won't have enough money. There will be a period when you are making short moves to build up your treasury; this will look boring to outsiders, but you will find it very tense.' (*Eteroscacco* 75)

MASAZUMI HANAZAWA

George Jelliss reports the death of **Masazumi Hanazawa**, who was the inventor of An-nan or Southern Chess (*ECV 2* page 170, and see also "Proof Games" in the present issue) and contributed several problems to our predecessor *Chessics*. According to the Japanese problemist Tadashi Wakashima, he was a professor of mathematics at Tokai University, and was a keen composer of problems of all kinds: chess, shogi, and go problems, and mathematical puzzles. Here is the eponymous An-nan problem, from *Chessics* 4 :
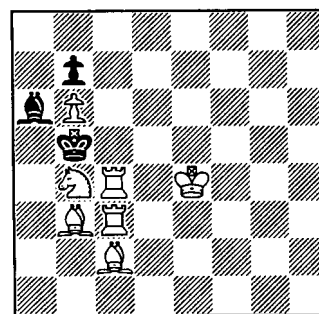
An-nan (Southern) Chess, mate in 2

This is a relay game, where a man immediately in front of another man of the same colour moves as that man and not as its normal self. So here, Nb4 and Rc3 temporarily move as bishops. The key is **1 Rc3-b2**, after which Bb3 moves as a rook and the Black king has additional flight squares at a4 and c4, and there are three variations: **1...Kxc4 2 Bc2-d3** (the knight still moves like a bishop and so guards c5 and c3, while the bishop on b3 uses its rook power to guard b4), **1...Ka4 2 Nb4-c5** (the knight now moves like a rook and guards a5 and b5, while the bishop on b3 still moves like a rook and guards a3), and **1...Kxb6 2 Nb4-c3** (which is double check, from the rook at c4 now moving like a knight and the bishop at b3 still moving like a rook, and the Black king cannot run to a7 because it now moves like a pawn).

Tadashi Wakashima tells me that he often used to sign his letters with a little flower, "Hana" being "flower" in Japanese. Our sympathy to his widow.

CHESS FOR ONE

material from Stéphane Burkhart

The very brief mention given to solo chess in *ECV 2* (pages 90-91) has prompted Stéphane Burhkart to send me details of some games he has been experimenting with. The basic idea is akin to that of card "patience" games ("solitaire" to American readers): the men are laid out essentially at random, and the objective is to get them back to the game array.

Stéphane's latest rules (16 August 2007) are as follows.

1. The pawns are distributed one per file on ranks 2-7 at random, the black pawn always to the black side of the white. The other pieces are distributed completely at random except that no piece may occupy its normal game array square and the bishops must be on opposite colours.

2. The pieces are moved in cyclic order, colours alternating (thus wN, bB, wR, bQ, wK, bN, wB, bR, wQ, bK, and wN again). Check is ignored.

3. The objective is to get the pieces back home in order K, Q, R, R, B, B, N, N. It is not allowed to put a piece on its home square until all earlier pieces of the same side are home (for example, the Q cannot be brought home before the K, nor an N before KQRRBB). Once a piece is back home, it cannot be moved again.

4. When the piece due to move next is already home (both pieces in the cases of R/B/N), you must move one pawn of the same colour one step backward (but not beyond its normal starting rank). If no pawn can move, the turn passes.

5. If a particular piece can never be got home (usually because of pawn blockage), it is allowed to keep on placing lower order pieces.

6. When all pieces that can be got back home are in position, continue moving back pawns until one side is complete (or as far advanced as possible). Then count the number (or the values) of the pieces and pawns left on the board. The goal is to minimize this number (one can also try to complete the arrays within the lowest number of turns).

Stéphane wrote a simple computer program to generate starting positions, and a similar program can be written in any language which offers a pseudo-random number generator. He suggests using dice as a non-computer alternative, but I would expect this to prove very tedious (compare patience games with cards or dominoes, where all you have to do is to turn everything face down and shuffle). His method of setting the pawns (white pawn at random, black at random above white) tends to put them towards Black's end of the board, but an unbiased alternative can easily be substituted. Given such an alternative, the risk that Black is blocked at the outset would be reduced, and I would be inclined to replace rules 5 and 6 by the normal patience rule that if you get stuck you lose. But this is detail, and in the meantime Stéphane offers a selection which I have placed in order of increasing difficulty (measured by the number of pieces starting in the wrong half of the board). He has also tried a "Duo Game" with the same rules, where each player tries to get home first, and he tells me that it plays well.
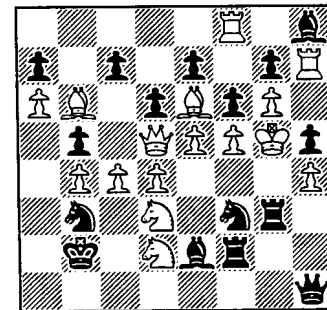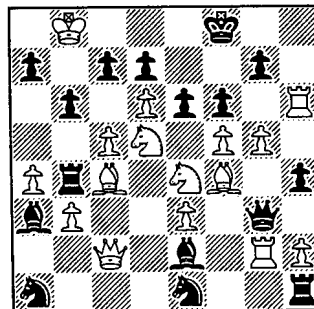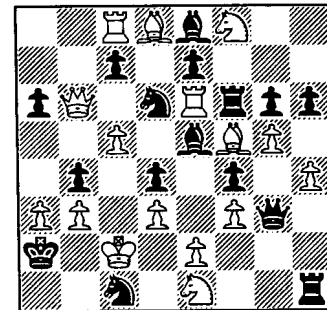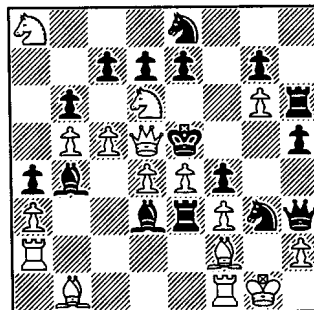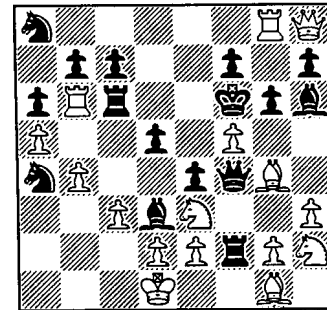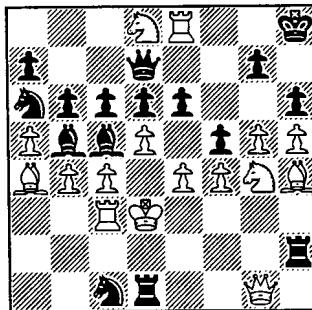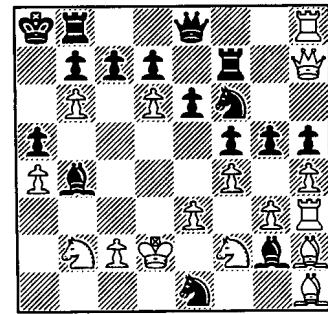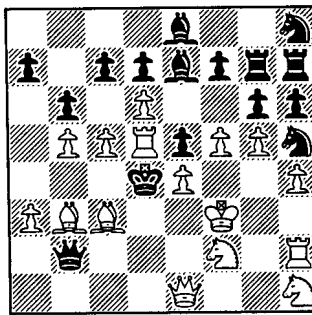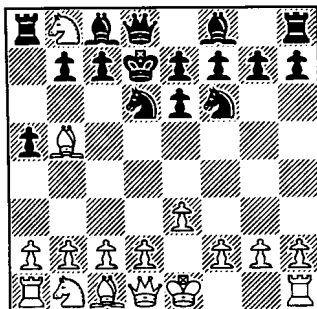
PASSING CHECKS IN REPLACEMENT CHESS

questions from Fred Galvin

Readers will recall last time's back-page quickie, where a game played by Roberto Salvadori at Progressive Put-Back Chess started **1 e3 2 d5 Nc6 3 Qf3 Qxd5** (replace on e6) **Qxd8+ (b8) 4 Kxd8 (d1) Kd7 Nf6 a5** :
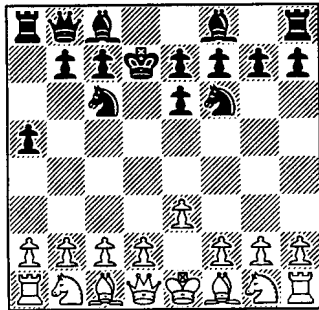
and White allegedly mated by **5 Nf3 Nd4 Nxc6 (d6) Bb5 Nxb8 (d8)** :

But, asks Fred, why cannot Black play Rxb8 and put the knight back on c6, capturing one checking piece and blocking the other? And he points out that the game appears on page 45 of *I Manuali di Eteroscacco* 3 (Fabio Forzoni) with a note to precisely this effect: "non è matto 6.☐:b8/c6 ecc." (It also appears that I mistranscribed the game and that White's actual moves were Nxc6(d8) and Nxb8(d6), but this makes no difference.) So it was a right cock-up. White abjured a simple mate that undoubtedly was (Fred gives 5 Ba6 Bxb7(a7) Bxa8(d8) Qf3 Qxc6(b6)) in favour of a clever mate that wasn't, and Black allowed this non-existent mate instead of playing a simple six-move mate of his own (several were available).

This caused Fred to start wondering. In ordinary Replacement Chess, given on this evidence that a player can use the replacement part of a move to get out of check, can he make a capture which temporarily exposes his king to check, and put the captured man back so as to block this check; and if the game is played in Progressive form, where the giving of check before the end of a series terminates the turn (traditional rules) or is forbidden (Italian rules), can he make a capture which temporarily gives check and again use the replacement to block the check?

Taking the second point first, he looked at the Scovero game on page 254 of the first edition of the *ECV*, which, in his words, "amazingly seems to answer the question both ways". **1 e4 2 d5 dxe4 (e2) 3 Nc3 Nxe4 (d7) e3 4 e6 Qg5 ...** :
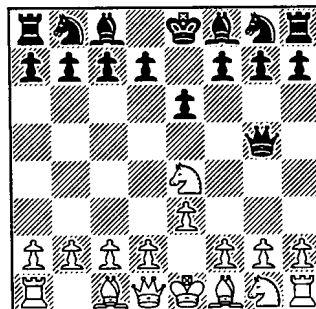

... Qxe3 (e2) Qxf2+ (f3) 5 Kxf2 (d8) Nc5 Nxe6 (e7) Kg3 Nxc7 (c6) :
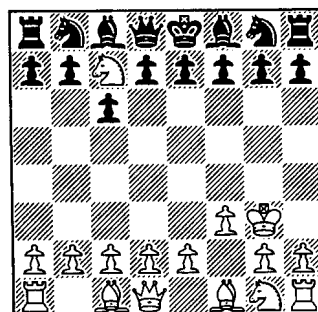
As Fred observes, if Qxe3(e2) is legal within series 4, why isn't Qxc7(Ne5) legal as a start to series 6? And indeed it apparently would have been, since the game appears with a note "non è matto" in *I Manuali di Eteroscacco* 3.

As regards the first point, the *Encyclopedia* says nothing (David's primary source appears to have been a 1943 letter to *Chess*, which I haven't

seen but which presumably didn't go to this level of detail), but in 1992, when I used Optional Replacement Chess for a *British Chess Magazine* Christmas solving competition, the solution to one problem involved "move a pinned man to capture and put the captured man back to block the check" three times, and nobody complained :
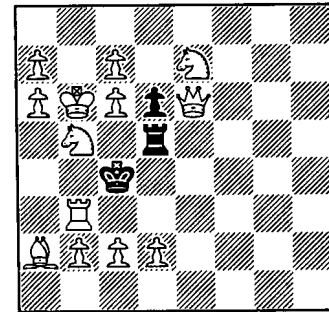
Optional replacement, selfmate in 3 (originally set two files to the right)
1 d3+ Rxd3 (Pd5) 2 Qe2 Rxb3 (Rd3) 3 c3 Rxb5 mate (Nb3)

It could be argued that what gets by in a Christmas solving competition is not necessarily a good guide for real life, but this is essentially a fun game, and the normal rule in fun games is that everything apparently possible is permitted unless it is explicitly prohibited (see for example position 53 in this time's "Proof Games").

So my personal answers would be Yes, you can make a capture which temporarily exposes your king to check and put the captured man back so as to block this check, and Yes, if the game is played in Progressive form, you can make a capture which temporarily gives check and again use the replacement to block the check. I would expect your opponent to greet either of these with at least a wry smile and quite possibly with an outright laugh, whereas if he were to do it and you were to object, I would expect there to be at the very least an argument. Fred endorses this - "if we're going to have a replace-captured-pieces rule, let's make the most of it" - but he would still be interested to know what rules have been used historically, in informal play or by organizations such as AISE and NOST. Can any reader help us?

IN THE LIBRARY

Unidentified book of makruk games
(possibly a Surathip Tournament book
as sent to David Pritchard, June 1992)

David Pritchard's *Encyclopedia* files
contain a letter of 4 June 1992 from
the Vice President of the Thailand
Chess Federation, which clarified
some of the rules of Makruk (Thai
chess) and was accompanied by two
"Surathip Tournament" books. The
present book appears to have been one
of these. It was the source of the first
and third of the makruk games in
the first edition of the *Encyclopedia*,
and the second game apparently came
from the other volume. The present
book contains some forty games, half
of them wins, ranging in length from
33 to 175 moves. I cannot decipher
the names of individual players, but
they apparently included a many-times
national champion and a runner-up.

The differences between Makruk
and our chess are soon described. No
queen, but a "met" which moves one
square diagonally. No bishops, but
two "thons" which move one square
diagonally or straight forward. Kings
start on d1/e8, pawns start on rank 3
and promote to met on rank 6 (no
promotion to other pieces). I used an
elephant symbol for the thon in *ECV 2*
since it has the same "trunk and four
feet" move as the elephant in Burmese
chess and (as recorded by al-Beruni)
in ancient Indian chess, and I will
denote it by "E" in what follows.
Array (Kd1/e8, Me1/d8) :
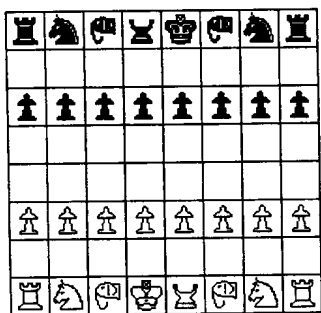
The most striking game was also
the shortest.

1	Ng1-e2	Ng8-e7
2	Nb1-d2	Nb8-d7
3	Ec1-c2	Md8-c7

4	Me1-f2	Ef8-f7
5	b3-b4	Ec8-b7
6	a3-a4	g6-g5
7	e3-e4	h6-h5
8	f3-f4	Ef7-g6
9	h3-h4	g5-g4
10	Mf2-e3	Ke8-f7
11	Ef1-f2	Rh8-e8
12	Rh1-f1	b6-b5
13	a4-a5	e6-e5
14	Nd2-b3	d6-d5
15	Me3-d4	e5xd4
16	c3xd4	Mc7-d6
17	Ef2-e3	
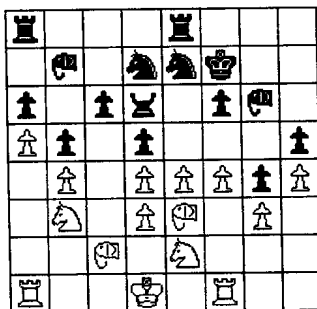
All this has been typical Makruk
development: pieces behind pawns,
Black king advanced to leave the back
rank clear for the rooks (White's will
soon do the same), and a met freely
sacrificed for a single pawn. Black
now tried to exploit the unguarded
man on e3 by

17	...	d5xe4
18	d3xe4	Ne7-d5,

since 19 exd5 would have allowed
19...Rxe3 20 dxc6M Exc6 with
...Rae8 to follow. So White played

19	Kd1-d2	

to defend e3, and please can a reader
tell me the answer to 19...Nxb4 ?
Black can meet 20 Ec3 with 20...c5,
and I can get no further than 21 e5
with immense complications.

Whatever the reason, Black settled
for an exchange of N against E (this
seems to be regarded as a fair trade),
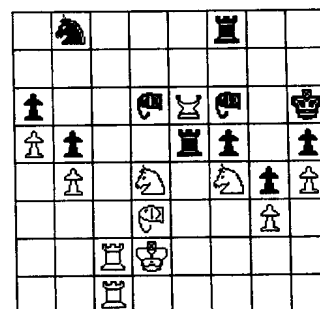but his attack soon petered out, and
after

19	...	Nd5xe3
20	Kd2xe3	f6-f5
21	e4-e5	Eb7-c8
22	Ke3-d2	Ec8-c7
23	Ec2-d3	Kf7-g7
24	Ra1-c1	Ra8-c8
25	Rc1-c2	Eg6-f7
26	Rf1-c1	

it was White who had the initiative :
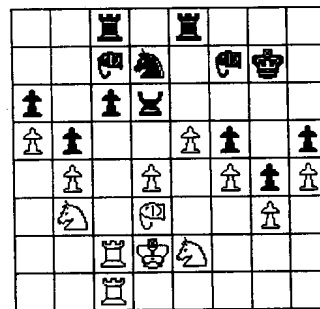
Even so, the end was unexpectedly
swift.

|			
26	...	Nd7-b8
27	d4-d5	Md6xe5
28	f4xe5	Re8xe5
29	Ne2-f4	Kg7-h6
30	Nb3-d4	Ef7-f6
31	d5xc6M	Rc8-f8
32	Mc6-d5	Ec7-d6
33	Md5-e6!!	

This lovely little move took away the
Black knight's only free square and
prevented the rook on e5 from coming
back to its defence, leaving White free
to penetrate to c8 and pick up a lot of
material. No more moves are given,
so presumably **Black resigned**.

Many games came down to an ending,
and I found two of particular interest:
R + N + M v R and R + 2M v R. The
former occurred in two games, both
won by the stronger side. R + N v R is
only a draw, but the extra M may be
able to shield its K from checks, and
at the very end the attacker may be
able to exchange rooks and mate with
N + M. (K + N + M v K is normally
drawn, but the attacker may be able to
force mate if the defender is already
penned into a corner commanded by
the M.) R + N + M v R may therefore
offer significant winning chances. In
the first game, it was reached at move
121 with the defending king already
penned against the side of the board,

but the defender held out until move 156. In the second game, it was reached at move 54 with the defending king on its third rank and an extra M on the defending side, and mate followed at move 104. So there was a marked disparity in skill (in particular, the move immediately before the ending in the second game strikes me as an outright blunder), and I am not sure that any useful general conclusion can be drawn. When Marc Bourzutschky's computer has finished analysing ordinary 7-man endings, perhaps he will be able to tell us.

The ending R + 2M v R occurred in three games, in each case with the mets running on the same set of squares. R + B v R in orthochess is only drawn and M is much weaker than B, but the possession of two of them may help the attacker to defend himself against checks. The first game reached the ending at move 50 with the defending king on its third rank, and after a further 59 moves this position was reached :
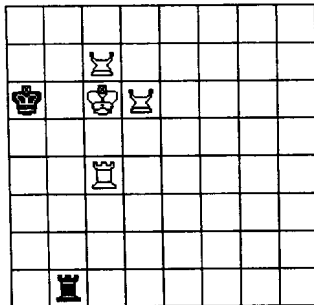
Black played **109...Rb6+** and repeated the dose a few moves later, and the game was soon given up as drawn.

In the second game, the defender unwisely moved his king to the corner and allowed the attacker to gain command of the second rank :
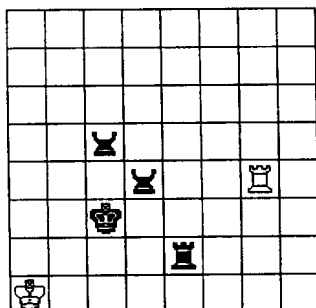

From here, I don't think there was any

defence, and play concluded **127 Rg1 Mb4 128 Rc1+ Kd3 129 Rb1 Mdc3 130 Rf1 Kc4 131 Rg1 Ma3 132 Rb1 Rd2 133 Rh1 Kb3 134 Kb1 Mab2 135 Rg1 Rd4** (aiming for a4 and a1) **136 Rg2** (perhaps a desperate hope for 136...Ra4 137 Rxb2+) **Rd1#**.

The third game had a weird finish. Play reached the following position
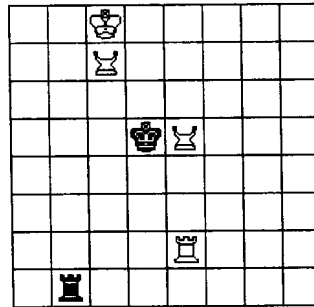
and Black played **93...Rb2** (!!). White declined the gift, **94 Re1**, but Black persisted with **94...Rb1** and this time White captured, **95 Rxb1 Kxe5**. At this point, there is a comment in which the Thai numeral "6" is visible. Play continued **96 Rb4 Kd5 97 Kd7 Kc5 98 Ra4 Kd5 99 Ke7 Ke5 100 Me6+ Kd5 101 Rf4 Kc6 102 Ke6 Kb5 103 Kd7 Kb6 104 Rf5 Kb7 106 Mc7 Ka6** and White had a mate in two, but there is a further comment including the numerals "16" and the game appears to have been declared **drawn**. All I can conclude is that for some reason the final stage was started assuming that six moves of the normal 16-move allowance for K + R v K had already been played.

Let's finish with another complete game. **1 Nd2 Nd7 2 Ec2 Mc7 3 g4 Ne7 4 h4 b5 5 Eg2 Ef7 6 Mf2 a5 7 Ne2 Kf8 8 Kc1 Kg7 9 Kb2 g5 10 b4 Eb7 11 Raf1 d5 12 f4 Md6 13 Ef3 gxf4 14 Nxf4 axb4 15 axb4 Rag8** (most of us would have kept this rook on the a-file) **16 e4 Kf8 17 h5 e5 18 Ne2 Ke8 19 Me3 Nf8 20 Rd1 Ne6 21 Rhg1 Eb6 22 Nb3 Ec7 23 Md4 exd4 24 cxd4 Me5 25 Ec3 Ed6 26 Rda1** (at last someone is taking an interest in the open file) **Nc8 27 Ra6 Kd7 28 Na5 Ne7 29 Ra7+ Nc7 30 Ng3 Ee6 31 Nb7 Rb8 32 dxe5 fxe5 33 Nxd6 Kd6 34 d4 Nc8 35 Raa1 Nb6 36 Nf5+ Kd7 37 Kb3** and **37...Ra8** offered a pawn :
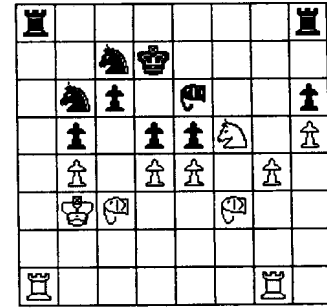
White accepted, though it gave up the file and took his knight out of play. **38 Rxa8 Rxa8 39 Nxh6 Nc4 40 exd5 Ra3+** (this penetration is much more damaging than White's at move 27) **41 Kc2 Nxd5 42 Exc4 bxc4 43 Ee4 Nxb4+ 44 Kd2 exd4** (Black now has three pawns against two, and his help his attack whereas White's are doing nothing) **45 Ng8 Ra2+ 46 Ke1 d3M 47 Ef3 Nc2+ 48 Kf2 Nd4+ 49 Kg3 Ee5 50 Re1 Me2 51 Eg2 Ra3+ 52 Kh4 Ef4 53 Rc1 c3M** :
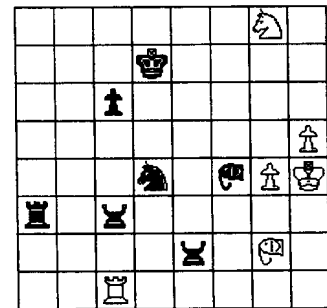
White's king is oppressed, his pieces are scattered, and Black's new mets will add their weight to the attack. **54 Nf6+ Ke7 55 Ne4** (desperation) **Mf3 56 Rxc3 Rxc3 57 Nxc3 Mxg2 58 h6M Kf6 59 Kh5 Mf3 60 g5+ Ke5 61 g6M Kf6 62 Nd1 Ne2 63 Mh7 Ng3+ 64 Kh4 Nf5+ 65 Kh5** :
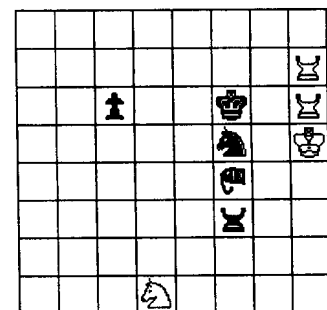
65...Nxh6 66 Nf2 (66 Kxh6 Eg5+ 67 Kh5 Mg4#) **Eg5 67 Mg6 Mg4+ 68 Nxg4 Nxg4** and **White resigned**.

ExCaVations

Strozewski's Hexagonal Chess (U.S. Patent 4,045,030 of 30 August 1977)

One of the consequences of working on the *Encyclopedia* was that I had to take a second and closer look at games which I had previously passed over. One such was Strozewski's form of Hexagonal Chess.

The rook (six directions), bishop (six directions), and queen (twelve) all have a natural move on a hexagon. The king, knight, and pawn are more problematical. Some inventors have restricted the king to a one-step R move, others have given it a one-step Q move. The knight is normally given a one-step R move followed by a one-step B move, but this produces a move of length √7 units (compare √5 units for its move on a square board) and the result is a little unwieldy. If the board is oriented so that "forwards" is one of the directions of rook movement, the pawn can be given its normal one-step R move when not capturing, but does it capture with a one-step R move at 60 degrees or with a one-step B move at 30 degrees, and how are we going to treat it when the board is oriented the other way and it is a bishop and not a rook which moves directly forwards?

Casimir Strozewski had a radical solution to this problem. He tilted and elongated the hexagons so that the directions of rook movement were N-S, E-W, and NE-SW, and of bishop movement NW-SE, NNE-SSW, and ENE-WSW :
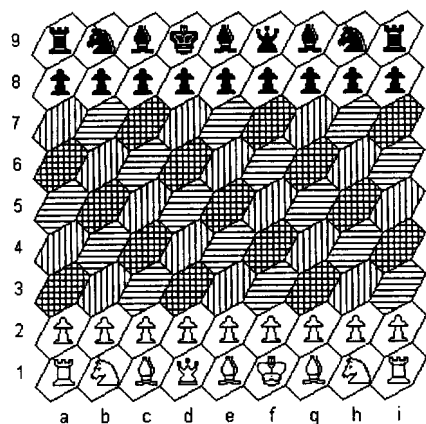
The king, knight, and pawn can now

be given their ordinary square board moves, while rook, bishop, and queen retain their hex moves. (The pawn move is not specified in the patent, or at least not in the possibly defective copy in David's files, but "give it the normal square-board move" seems a natural view to take.)

Although the game was patented, David's files contain no marketing information, and it could well be that the only beneficiaries of the inventor's ingenuity were his patent attorneys. In any case, patent rights granted in 1977 will surely have expired by now. I have no idea what the game is like to play, but Armchair Artisans will find it easy enough to create a board (for the individual hexagons, I went 10 points left and 10 up, 10 right and 18 up, 18 right and 10 up, and so on round) and an ordinary set can be used with an extra bishop and pawn. The cell colouring should of course extend over the whole board. Cells b8/h2 are undefended in the array (Fool's Mate appears to be 1 c4, 2 Qb3, 3 Qxb8) and I wonder if the KR and KN might usefully be interchanged - or would this take the KN too far away from the action?

Food for thought.

Mini-Checkers

To my relief, those who enjoyed last time's excursion into checkers seem to have outnumbered those who did not, so here are a few mini-problems. No originality is claimed.

The first pair of positions are orthodox checker endings, and a complete 8x8 board is to be assumed in each case. Each side has one king and one man (the kings are on b8 and f6), and Black is to move and win.
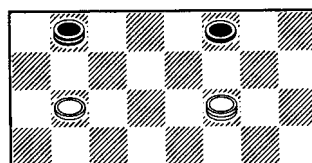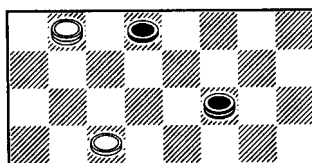
The second pair of positions explore the game on a 4x6 board, where the men are placed on the first row or the first two rows, and the question is "Black to play, who wins?"
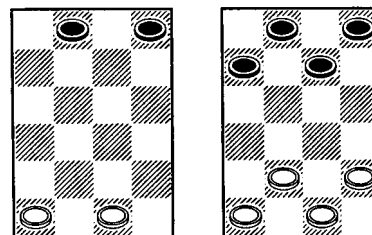

A little background theory. We saw last time that two kings normally win against one on an 8x8 board, and the same is true on a 4x6 board (and on all larger boards, though they only draw on a 4x4). Winning a man is therefore normally enough to win the game. Additionally, checker players talk about "having the move", which is a more generalized version of the one-against-one initiative that we saw in king-against-king endings. Suppose that the number of units on each side is the same (kings and men not being distinguished). Count the total number of units on a set of alternate files, either a-c-e-g or b-d-f-h, and if the result is odd the side due to play next "has the move"; if it is even, the side which has just played has it. "Having the move" is fundamental in king-against-king endings (the side that has it may be able to win, the other side cannot possibly win and must seek refuge in a double corner), and it is *usually* an advantage in general though the second 8x8 position is an exception (Black wins even though White has "the move"). However, a simple one-against-one exchange, where the checker which has just jumped is immediately taken, transfers "the move" to the other side.

In these 4x6 positions, it is soon seen that White starts with "the move". In general, therefore, Black will seek to make one or perhaps three simple exchanges, White will seek to avoid exchanges altogether or to make two, and this will often be a helpful guide as to which of the available moves should be tried first.

With this background, I think the 4x6 positions can be analysed to completion. Answers on pages 38-9.

MAILBAG

Seirawan-Chess (*VC* 55 page 9). In the ending examined last time, after 3 Ec3+ Ka5 4 Ec5+ Rb5 5 Ec4+ Ka6 6 Ec6+, Noam Elkies points out that Black has 6...Kb7 :
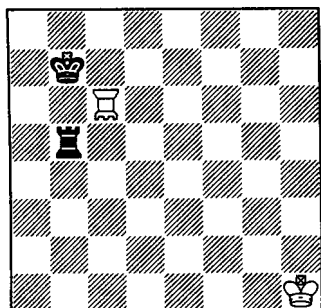
Now the fork 7 Ed6+ can be met by 7...Ka8, and 8 Exb4 will be stalemate. Similarly, after 3 Ec5+ Ka3 4 Ec4+ Black has 4...Kb2. No doubt White can still win by bringing up his king, but the object of the exercise was to show that the elephant could force "mate or win of the rook" on its own, and this no longer appears to be possible by the systematic manoeuvre originally envisaged.

Instead, after 1 Ec2+ Ka4, Noam suggests 2 Ec5+ Kb4 (if 2...Ka3 then 3 Ec4+ as below) 3 Ee4+ :
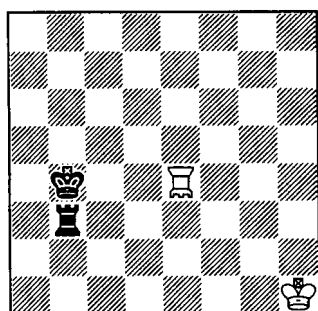
Now 3...Ka3 allows the systematic mate 4 Ec4+ Ka2 5 Ec2+ Rb2 6 Ec3+ Ka1 7 Ea3+ Ra2 8 Ec1 which should have been given last time (the stalemate resource is only available when the rook is on the fourth rank), 3...Kb5 allows the immediate fork 4 Ed4+, and 3...Ka5 is met by 4 Ec4+ with 4...Kb5 5 Ed4+ and 4...Ka6 5 Ec5+.

**Cambodian Chess** (*VC* 55 page 4). From Peter Michaelsen: "It could be

interesting to know if this variant is played in the same areas of Cambodia where 'Ouk Chatrang'='Mak Ruk' is played, or if it is played in an area where the 8x8 variant is unknown or uncommon. If further research reveals or makes it likely that this 9x9 variant is in fact the original Khmer Chess, which has later been replaced by the 8x8 game with rules like Mak Ruk, this will certainly have implications for the difficult question of the origin of chess."

Yes indeed, though for "difficult" I would personally say "impenetrable". The tidiest hypothesis is that all our modern games are descendants of a single ancient protochess of which no record remains, but the possibility of independent regional discoveries and cross-fertilization cannot be excluded. Readers will recall Lex Kraaijeveld's analysis of shogi variants in *VC* 32, where he fed their various properties into a standard phylogenetic analysis program as used in scientific research, and obtained an implied evolutionary tree somewhat at variance with the historical record. The conclusion has to be that the assumptions made by the program (broadly speaking, that any particular mutation normally occurs once and once only) were not justified, and either the same development occurred independently in separate places, or variants took features from each other after branching from the main tree.

As regards the possible spheres of influence of the 8x8 and 9x9 games, at least two "Cambodian" chess sets have appeared on the London auction market in recent years, and although I did not take particular note of them I think both were 32-men sets. They were certainly not described in the catalogues as being of a different number, and had they been I think the catalogues would have said so. It could however be argued that the high-quality sets which eventually find their way into London auctions are not typical of what is used where a game is actually played. Cheap plastic or wooden chess sets as sold by the thousand in game and toy shops up and down the country, and their xiangqi and shogi equivalents, tend to be conspicuous by their absence.

"Bolyar Chess" and "Abagoren Chess" (*VC* 55 pages 4-5). Peter Michaelsen shares our doubts, and he tells me that Alexey Lobashev (a name previously unknown to me, but presumably of somebody well known among specialists in the field) was also suspicious when asked about these games. More importantly, nobody has come up with a verifiable pointer to the alleged source material, and until somebody does I shall see no reason to take the games seriously.

Switching Chess (*VC* 55 page 11). I had assumed from the wording "pieces of identical colour" that a player could exchange two of his opponent's men, but on reflection this is absurd; as Alain Villeneuve points out, it would be difficult to give mate. Alain tells me he was lucky; he won one game on time in a lost position, and in another lost position he brought off the following swindle (essentials only shown) :
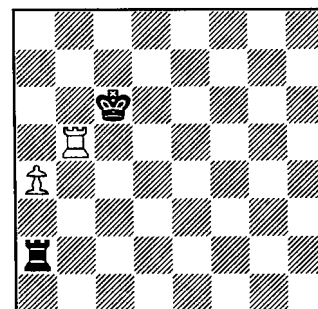
Now the exchange of wP and wR gave check, and won the Black rook!

And two **web sites** have been drawn to our attention.
George Jelliss reports a link
<www.mi.sanu.ac.yu/
vismath/isis.htm>
which points to two sites on "**Visual Mathematics**" and **Symmetry** which he finds "fascinating".

Sue has passed on a message from Richard Hutnik, who is in the process of forming an **association to promote abstract strategy games** and tells us that the site
<www.abstractgamers.org>
will be hosting a discussion forum for it. I would have thought that this was already an overcrowded field, but you never know.

THE ARMCHAIR ARTISAN

by Peter Fayers

Just about every book on Chess Variants - and other games - seems to have a section on Making Boards and Pieces. The trouble is that they all seem to be written assuming we are Master Craftsmen, able to whittle intricate artefacts from billiard balls with a blunt penknife, and of no use at all to a cack-handed individual like me, who can't even draw a straight line. Either the ruler slips, leaving an arc, or I notice too late that there is a notch in it, leaving regular blips on all the lines across the board.

(Which reminds me of a story about 19th Century Russia. Apparently an argument about the precise route of the Trans-Siberia railway was resolved by the tsar drawing a straight line between Moscow and Vladivostok, and ordering "Build it there". The engineers did precisely as ordered - disobeying the tsar was not a good career move. There was a notch in the ruler, and to this day the rail track, having run arrow-straight for thousands of miles, suddenly makes a wide arc around a huge expanse of empty tundra for no apparent reason. But I digress.)

It occurred to me that, in these days of colour printers, Powerpoint, digital cameras and Internet clipart, a lot of the clever stuff can be done perfectly well by computer, we don't have to pick up even a pencil. And so I present "Making Boards and Pieces for the Armchair Artisan".

Firstly, the boards. It's easy with Powerpoint; all the straight lines are done for you, you can even draw perfect hexagons, and paint the board whatever colour(s) you like without dripping paint on the carpet! Better, you can pretend your boards are made of cork, wood, parchment or a variety of other textures using the "fill effects" feature. But why stop there? Want your board to look like the sky? The sea? The Mona Lisa? Just take a digital photo, or download one from the Internet, insert it as the Slide Master and draw your board onto it.

I found the most difficult part was working out how big to make the squares. I measured my largest chess-piece and largest draughtsman (and a few other items I might use) and worked out that the squares must be a minimum of 3.5cms wide in the end product. Which on A4 means you can do tic-tac-toe and little else, so you're going to have to visit your local copy shop and get the sheets enlarged to A3. (My local one charges me £2 per sheet for this in colour). Sometimes even A3 will not be big enough, so you'll need two sheets back-to-back. To get 3.5cm on A3 you need 2.5cm on the A4 original. (As you're on the computer anyway, just go into Excel and divide by SQRT(2).)

The end result needs sticking onto stiff card / hardboard / plywood, whichever you wish (but remember that the stronger the backing, the less likely you are to be able to cut it neatly without messing it up.) Beginners are recommended to stick to card, and also to try it out with the A4 originals first. If two sheets are being used for a single board the board sheets should be trimmed to the centre line, but do not trim around the outer edges - this is best done after sticking them to the backing board. Glue them with wallpaper paste, but (very important) apply the paste to the board, not the paper. If you paste the paper it will stretch and the end result will have either wrinkles or bubbles or both. Brush a thin coating on the backing board, leave to go tacky, and then place the paper, smoothing it down with an old tea-towel. Leave for 24 hours to dry thoroughly, pressed between two heavy boards to keep it flat. (Not so important if using hardboard, but anything thinner will try to curl up as it dries.)

At this point you can (if you wish) apply a thin coat of clear varnish. Some boards look a lot better for it, some a lot worse, which is why I recommend experimenting with the A4 sheets first - varnish over half of each sheet, leave to dry (another 24 hours), and see which side you like the look of best. Whatever you do, don't try a second coat. (Or if you do, try it on the A4 sheets which you're going to throw away anyway).

Now all that remains is to cut round the printed section to make your board. Whatever the backing material, make the first couple of cuts with a craft knife or a scalpel to get through the paper, then move on to a Stanley knife or similar to get through the main board. (A bigger knife, when it starts to get blunt, can drag and pull up the paper as it goes past, and that's another £2 down the drain). And that should leave you with a reasonable-looking game board. For some examples, see the front page.

Now for the pieces. I did at one time try making some three-dimensional pieces by buying two identical sets of chessmen and then doing a bit of hacking and gluing, and managed reasonable examples of rook-plus-knight and bishop-plus-knight. However, this was as far as I got; every other attempt to mix-and-match to make something new ended up in the dustbin. So unless you want to limit your games to those playable with Empress and Princess, I should stick to two dimensions, and let the computer do the artwork for you. Straight-edged pieces (eg Shogi) can be made in the same way as the boards: pasting two sets back-to-back before cutting out the pieces gives a better result than trying to paste the reverse side of each piece individually. For other games, sheets of circular labels / stickers are readily available, and I found that checkers are the best material for the actual pieces; sticking a 19mm diameter label onto a 3cm-wide checker leaves enough edge to determine which pieces are on which side, so you have free rein in what you print onto the labels themselves.

I started trying to make the Jungle Game, and soon downloaded an impressive selection of wildlife photographs from the Internet. But then found it didn't really work - however majestic a lion, it loses a lot of its grandeur when reduced into a 19mm circle. So I had a re-think, and a brainwave. My Jungle now features Dumbo the elephant, Lenny the Lion, Tigger (from Winnie-the-Pooh), Deputy Dawg, a fairy-tale Big Bad Wolf, and of course Tom and Jerry as the cat and the mouse. (My understanding is that I am within my rights to

download these for personal use, but would be infringing copyright were I to try to market the end result.) Aficionados of the game will notice the leopard is missing; that's because I couldn't find one, or anything remotely like one, in cartoon form. So in my jungle, instead of leopards, there are panthers. Pink ones. This has the spin-off benefit that all the animals start with a different letter, making it easier to record game scores. (And I still don't understand why the dog is more powerful than the wolf).

So, having decided on what to put on your playing pieces, there are only two remaining problems: how to print the picture centrally in the sticker, and how to fix the sticker centrally in the checker.

To print the stickers, you need to create a template in Powerpoint - a rectangle containing 30 circles (or however many stickers there are on a sheet) of exactly the same size and layout as the original. I started using trial-and-error, but found myself making more and more trials. And errors - I couldn't get it right. In desperation, I photographed the sheet of stickers, downloaded the picture onto my PC and imported it into the presentation. It was than relatively easy to scale it to the right size, and draw the outline and circles in the right proportions. (I have since bought a flatbed scanner, which makes it easier still.)

Now group the circles, and add your clipart. By selecting the circles and moving to front, you will find it easy to get the pictures the right size and centred correctly. First print the page out on A4 paper, then position the label sheet over the printed image and glue it down with a stick glue or similar. Now you're ready for the real thing. Temporarily delete the photograph and circles, and print the clipart images onto the same A4 sheet. You should find your pictures perfectly sized and centred in the stickers. (Actually you probably won't until the second or third attempt, but it's fairly simple to fine-tune the operation.)

Now just peel the labels off the backing and stick them onto the checkers. Easier said than done, I am afraid - I found it very difficult to get the position exactly central, and the slightest deviation is very obvious. Then I had another brainwave, inspired by my CD labelling kit: Don't fix the label to the disk, fix the disk to the label. So I invented Peter's Patent Piece Positioner :
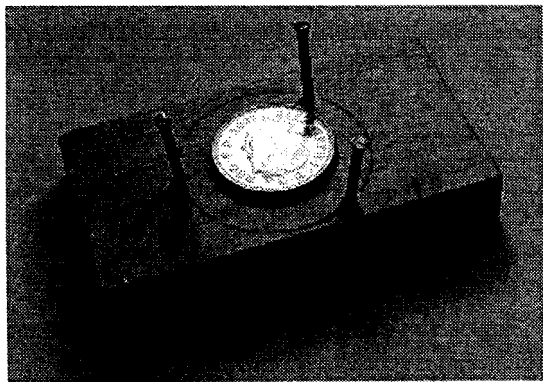
To make this, hold a checker down firmly on a piece of scrap wood and get someone you trust to tap in three small nails round it, so the checker fits snugly and slides up and down easily. Draw round the outside of the checker. Next get a coin the same size - or a shade larger - than the stickers. For 19mm stickers the UK penny is ideal. Position this dead-centre of the circle and hold with a dab of superglue. Your PPPP is now ready for use.

Peel a label off the backing (actually, try to peel the backing off the label - it is less likely to curl up) and place it face down on the coin. This is tricky - it doesn't want to let go. I found it easiest to push it into place using a craft knife and a needle, but it is still very fiddly. (But not half as fiddly as sawing the head off a rook, filing a knight's ears off, and gluing one to the other). Having the coin raised up helps (my Mark 1 version had a second circle drawn on the wood) as the label can be edged into place from underneath, making it less likely to stick to the needle.

Once it is in place, slide a checker down between the nails until it rests on the label, then lift it and press it down with your thumb. Again, you may have to discard two or three initial attempts until you get used to it. Once the label is stuck to the checker, it is difficult to get off - I had to resort to soaking earlier attempts in hot water, scraping the label off, then cleaning the residual glue off with white spirit.

And that's all there is to it. I very quickly realised that two-dimensional pieces give the possibility of hidden forces, and so I could at last try John's Walnut Chess, which hitherto has eluded me as (i) my fingers are too thick and clumsy to fiddle around with broken matches, and (ii) I am incapable of cracking a walnut without the shell shattering into at least a dozen pieces.

I created two different armies, the White forces from comic cartoons and the Black ones from more serious military clipart. Plenty of spares showing one, two and three infantrymen allow these to be combined or separated, and it is played on a hexagonal chess board which I had prepared earlier.

If any member wants to try this, copies of all my Powerpoint files (lots of different boards and examples of printing pieces onto labels) are available free-of-charge. Just send me an email, and I shall reply with attachments.

The idea of using two-dimensional men for "hidden force" games has an obvious appeal, and a double set would allow the Cleaton-Solomon "Liar Chess" (ECV 2 pages 38-9) to be played far more conveniently than in its original realisation. Men constructed on the same principle might also be used to see if the "Knighted Chess" version of "Chess in Disguise" (ECV 2 page 189) is in fact a playable game.

And there is another way of producing robust practical boards from paper sheets: my local copy shop will laminate paper to at least A3 size. The result is perhaps a little slippery for use with wooden men and I would be inclined to felt them, but the cost is no more than that of doing the original copying. It might be added that Peter's coloured originals are very attractive; our monochrome front page does not do anything like justice. - JDB

LATIN CUBE MAGIC TOURS

Last time, I reported a remarkable 4x4x4 magic knight's tour which Guenter Stertenbrink had discovered in 2003. It was so elegant that I assumed he had constructed it by hand. No, he has since told me, the computer found it.

Its search was based on the method of "Latin squares", which is an arrangement of *n* letters in an *n* x *n* square such that none appears twice in any row or column. In a 3 x 3 square, there are two ways of doing this (Figures 1 and 2) :

```
A B C      a b c      A+a B+b C+c      4 9 2
C A B      b c a      C+b A+c B+a      3 5 7
B C A      c a b      B+c C+a A+b      8 1 6

Fig 1      Fig 2        Fig 3          Fig 4
```

If we add these, as in Figure 3, we get a square in which each possible combination appears once and once only. So to get a square (not a knight's tour) which is row and column magic, all we need do is give *ABC* the values 0,3,6 in some order, and *abc* the values 1,2,3. The property of being diagonally magic has to be arranged separately, but it is soon seen that we need only set *A* to 3 and *c* to 2. The ancient Chinese square we saw last time (Figure 4) is obtained by setting *ABC* to 3,6,0 and *abc* to 1,3,2.

```
A B C D      a c d b      07 12 01 14
C D A B      b d c a      02 13 08 11
D C B A      c a b d      16 03 10 05
B A D C      d b a c      09 06 15 04

  Fig 5       Fig 6         Fig 7
```

The 11th-century Arabic 4 x 4 square which we saw last time is soon seen to have been similarly constructed. Figures 5 and 6 show two Latin squares, and we can obtain a square which is row and column magic by combining them and giving *ABCD* the values 0,4,8,12 in some order and *abcd* the values 1,2,3,4. Furthermore, if we look at the pairs of antipodean cells (cells two rows and two columns apart), we see that in Figure 5 they are always *AB* or *CD*, and in Figure 6 *ab* or *cd*. So to obtain a square in which any pair of antipodean cells adds to 17, and hence which is not merely diagonally but pandiagonally magic, we merely need to set *ABCD* so that *A* + *B* = 12 and *abcd* so that *a* + *b* = 5. The Arabic square (Figure 7) is obtained by setting *ABCD* to 4,8,0,12 and *abcd* to 3,2,4,1.

Guenter's computer search extended this technique to three dimensions. He enumerated all closed-loop knight's tours which could be constructed by combining three 4x4x4 Latin cubes, and found a total of 784. These were automatically magic along rows, columns, and "lines through". However, a tour can be oriented in 48 different ways, so these 784 tours in fact represent only 16 truly different tours each repeated 48 times. Furthermore, if a closed-loop tour from 000 (quaternary) round to 333 is a Latin cube tour, so will be the tours starting from 100, 200, and 300, and so will be the tours starting backwards from 333, 233, 133, and 033. Figure 8 shows last time's tour

```
323 212 001 130    000 231 112 323
000 131 322 213    313 122 001 230
211 320 133 002    232 003 320 111
132 003 210 321    121 310 233 002

032 103 310 221    221 010 333 102
311 220 033 102    132 303 220 011
100 031 222 313    013 222 101 330
223 312 101 030    300 131 012 223

201 330 123 012    312 123 200 031
122 013 200 331    201 030 113 322
333 202 011 120    120 311 032 203
010 121 332 203    033 202 321 110

110 021 232 303    133 302 021 210
233 302 111 020    020 211 332 103
022 113 300 231    301 130 213 022
301 230 023 112    212 023 100 331

      Fig 8              Fig 9
```

reoriented to start near the top left corner, with the possible starting points underlined. So even the 16 tours are derived from a mere two basic tours. Figure 9 shows the other.

Let us now revert to decimal, and count from 1 to 64. If a closed-loop tour has the "antipodean" property noted last time (cells two rows, columns, and levels apart add to 64 if odd, to 66 if even), it will retain this property if we start forwards from 33, or if we start backwards from 64 or 32. So each orientation of an "antipodean" tour has four starting points which give this property. Figure 10 shows Figure 8 in decimal, with these four starting points in bold.

The tour of Figure 9 lacks the "antipodean" property, but Awani Kumar has found Figures 11 and 12 which do have this property (and so are pandiagonally magic in three dimensions). These are not Latin cube tours, but have other properties which readers may enjoy working out; answers (or at least some of them) on page 38. He reported them in <http://magictour.free.fr/4x4x4.txt>, and others may await discovery; yet more gems the computer is finding for us.

```
60 39 02 29    19 16 61 34    17 36 63 14
01 30 59 40    62 33 20 15    64 13 18 35
38 57 32 03    47 52 01 30    45 32 03 50
31 04 37 58    02 29 48 51    04 49 46 31

15 20 53 42    42 53 08 27    44 25 06 55
54 41 16 19    07 28 41 54    05 56 43 26
17 14 43 56    22 09 60 39    24 37 58 11
44 55 18 13    59 40 21 10    57 12 23 38

34 61 28 07    63 36 17 14    61 16 19 34
27 08 33 62    18 13 64 35    20 33 62 15
64 35 06 25    03 32 45 50    01 52 47 30
05 26 63 36    46 49 04 31    48 29 02 51

21 10 47 52    06 25 44 55    08 53 42 27
48 51 22 09    43 56 05 26    41 28 07 54
11 24 49 46    58 37 24 11    60 09 22 39
50 45 12 23    23 12 57 38    21 40 59 10

   Fig 10          Fig 11          Fig 12
```

LOSING CHESS : A CLAIM TOO BOLD

Giveaway Chess : A Complete Analysis by Michael Muff (122 pp, privately printed, circa 1993-94)

In the entry for Losing Chess in *ECV 2*, I wrote that the production of a full-length book covering all aspects of the game was long overdue. When recently going through some boxes of stored material, I came across a book once sent to me by Ken Whyld which had claimed to be just that. However, its claims were generally regarded as unbelievable, and it has had little or no impact. I therefore thought it might be worth a re-examination in the light of the definitive computer analyses now available. The book is undated, but internal evidence suggests that it was written around 1993-94.

The book is in two parts, "Theory" amd "Analysis". "Theory" starts with one-against-one piece endings, and is essentially complete and correct apart from the omission of the "move away and allow a sacrifice" losses typified by Ra1 to move against Bh8. However, the result in each such case quickly becomes obvious, and it could fairly be argued that the omissions are not serious.

The treatment of multiple-piece endings is soon seen to be less happy. The first example comes down to a win with Ra4 + Nc6 to play against Kh2, and although this in itself is correctly analysed the quite unwarranted conclusion is drawn that 'a rook and knight can work in tandem to force final capture against a king'. In fact the win can be forced only when the king is already on or near the edge, and I think expert players were aware of this even in pre-computer times. Not encouraging.

The "Analysis" section examines each White opening move in turn, and makes the remarkable claim that every opening move apart from 1 b3 loses for White. If this had been provable by human analysis, it would surely have been verified by the computer, so let us see on what sort of argument the verdict is based.

The natural move to look at first is the popular

   1   e3.

'I had formerly believed this to lead to a win for white, with 2...c6 being black's best try. NM Bill Harrison, however, found the surprising 2...Bb7! which utilizes the "force feed" technique to refute white's first move.' ("NM" appears to be an honorific title of some sort, and "force feed" is a procedure expounded earlier in the book.) He describes

   1   ...   b5

in reply as 'The only move. Black's position would quickly crumble if white's bishop is allowed to reach a6.' He gives four illustrative examples.

1...Na6 2 Bxa6 bxa6 3 Qe2 'with the unstoppable threat of 4 Qa6 followed by 5 Kf1. (Black's queen bishop becomes a pac-man.)' 1...Na6 was indeed reported as losing in *VC* 41, though there is no forced win within my own computer's horizon. "Pac-man" was a famous gobbler in early computer video games.

1...Nc6 2 Ba6 bxa6 3 d4! (his exclamation marks throughout) **Nxd4 4 Qxd4 g6** '(5 Qxg7 must be prevented)' (which is not necessarily true, since 4...Rb8 gives Black an alternative capture, and in any case ...g5 and ...f6 offered other means of prevention) **5 Qxa7 Rxa7 6 Na3 a5** '(Or else white plays 7 Nb5 ab 8 c4 bc 9 b3 Rxa2 10 Rxa2 cb 11 Ra6 Bxa6 12 Kf1)'. The threatened win after 7 Nb5 is sound enough, as is the winning play given after 6...a5, but **6...c6** gives Black an alternative capture after 7 Nb5 and now there is no win within my computer's horizon. To the best of my knowledge, the status of 1...Nc6 remains unknown.

1...e6 2 Ba6 bxa6 (2...Nxa6 is correctly diagnosed as losing) **3 a3! Bxa3 4 Nxa3 a5 5 b4 axb4 6 Qh5 bxa3 7 Qxh7 Rxh7** and now given is '8 Rxa7' which would indeed win for White if it were playable, but unfortunately there is a pawn in the way at a3.

1...a6 2 Bxa6 bxa6 '(If 2...Nxa6 3 b4 Nxb4 4 Qf3 Nxa2 5 Qxb7 wins. Or 2...Rxa6 3 Qf3 Rxa2 4 Qxb7 Rxa1 5 Qxc7 Qxc7 6 h3 Qxc2 7 d3 etc.)' **3 Na3 a5 4 b4 axb4 5 Qg4 Rxa3 6 Bxa3 bxa3 7 Qxg7** 'wins'. The final

verdict is correct and 1...a6 was reported in *VC* 41 as a losing move, but after 5...bxa3 and earlier 3...c6 for Black there is no win within my computer's horizon; after 2...Nxa6, 4 c4 is crisper (after 4 Qf3, 4...Nxc2 again allows no win within my computer's horizon).

All these are sidelines. Given as the main line is

2	**Bxb5**	**Bb7 !**
3	**Bxd7**	**Bxg2**
4	**Bxe8**	**Qxd2**
5	**Kxd2**	

with various notes:
- that 5 Nxd2 loses after 5...Bxh1 6 Bxf7 'Bxe4' 7 Bxg8 Rxg8, which indeed it does, but my computer prefers 7 Nxe4 and now there is no forced win within its horizon;
- that 5 Qxd2 loses after 5...Bxh1 6 Bxf7 Bf3, which again it does;
- that 5 Kxd2 is better than 5 Bxd2 because it "unprotects" f2 ('a possible point of attack by one of black's rooks') and saves the need for White to be on guard for the move ...a5 after Black's rook has moved.

However, there is no mention of a fifth capture, **5 Bxf7**, which eventually leads to a White win and is part of the computer analysis that has proved 2...Bb7 to be in fact a losing move.

Do I need to go on? I don't think so. It is easy to criticize earlier work in the light of computer analysis, but the move 2...Bb7 is in fact ancient and the line had long been thought doubtful (see Fabrice Liardet's comments on the classic Dawson-Klüver game as recorded in *VC* 35). Losing Chess is not only a difficult game to analyse but an extremely unforgiving one, in that a single error can totally change the verdict on a move, and what we seem to have here is the work of someone who proceeded in isolation, without knowledge of what had already been done and with no expert colleague able to subject his analyses to competent independent scrutiny. In its circumstances I am sure it was a very creditable piece of work and I am certainly not going to claim that I could have done better, but as a supposedly definitive treatment of the subject I am afraid it won't do.

PROOF GAMES

by Peter Fayers

New member Alain Brobecker comments that the third Pawn-Animal-Human problem in the last issue does not lead to a unique game score. (PAH problems: you are told which type of unit moves on each turn, Pawn, Animal (R or N) or Human (K, Q or B), and also of any captures, promotions and checks. You have to deduce the final set-up on the board.) The problem read 1 A A; 2 A A; 3 AxP A; 4 AxA A; 5 AxA A; 6 AxA A; 7 AxA. The solution given was 1 Nc3 Nf6; 2 Nd5 Rg8; 3 Nxe7 Nd5; 4 Nxg8 Ne7; 5 Nxe7 Nc6; 6 Nxc6 Rb8; 7 Rxb8. Alain points out that the Ng8 can go via h6-f5-e7 as well. So it's just a normal PAH problem, not a "proof game" one.

Since then a computer testing program has been written, which has had two effects, (1) it has found cooks in all but two of the HAP problems that had been composed up until then, and (2) it opened the flood gates for other composers to try their hand. The latest list can be found on Alain's website

</abrobecker.free.fr/chess/hap.htm>

but as a taster here is one of his problems (one of the two that passed the first computer test) :

50 - Alain Brobecker, Website

1	Pawn	Pawn
2	PawnxPawn	Animal
3	AnimalxAnimal	HumanxAnimal
4	Pawn	HumanxPawn
5	PawnxPawn	HumanxHuman
6	Pawn=Animal	Human
7	AnimalxAnimal	Human
8	AnimalxHuman+	Human
9	AnimalxHuman checkmate	

Game score?

Alain also provides a "real" Varaint Proof Game, the first I have seen using the original Marseillais chess (unbalanced – White plays a double-move on his first turn as well), and has

also drawn my attention to **52**. Here White has to lose a tempo in part (a), while Black is forced to go the long way round in part (b).

51 - Alain Brobecker, Original
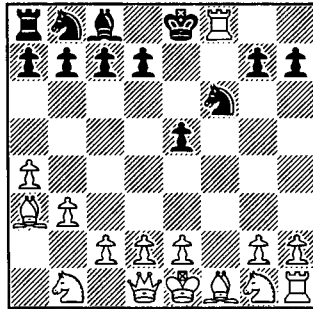
After White's 4th. Game score?
Marseillais Chess

52 - Richard Stanley
MIT Website, 2001
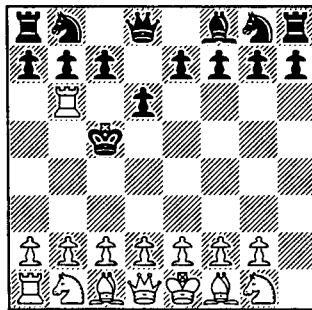
(a) After Black's 5th, Orthodox
(b) After Series 4, Progressive
Game scores?

Following on from my "Perils of Invention" article last time, earlier this year I encountered another example of incomplete definition when An-Nan chess was the subject of a composing tourney. The definition given was pretty much the same as in *ECV* :

> A man moves and captures in the manner of a friendly man stationed on the square behind it.

There are many imprecisions in this rule; here is a demonstration of one. The solving program Popeye couldn't find a solution; its logic is less devious than mine, obviously. (A broad hint, that – look for something a bit dubious). Do you think it's sound? (As an aside, other publications now refer to this variant as Southern Chess:

apparently An-Nan has an offensive meaning in some parts of the world. Not wishing to give offence, I shall follow their example.)

53 - PF, Original
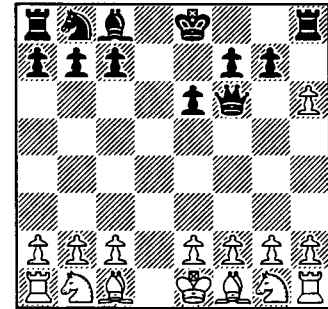
After Black's 5th. Game Score?
Southern Chess

After the introduction of Othello proof games in *VC*54, and the article on Checkers last time, I suppose the next idea was fairly predictable. The trouble is, it is very difficult to get multiple captures on each side sound, and free-for-all problems with no real theme are pretty uninteresting. So I tried to adapt some well-known chess PG themes. **54** is a Frolkin theme; a unit has promoted and the promoted piece has subsequently been captured. (Normally you would have to discover that for yourselves while solving, but it is so obvious from the diagram that this is what has happened I don't feel I've spoiled it for you too much.)

54 - PF, Original
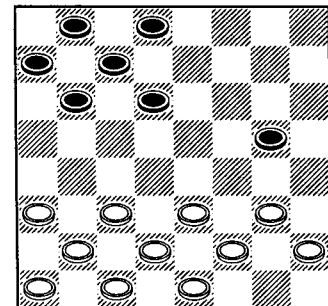
After Black's 7th.
Game score?

A Pronkin theme (a promoted unit is in it apparent game-array square) is more difficult to disguise, as it is normally obvious from the diagram

which are the Kings. So I have used a little subterfuge in the next one, and only shown a single checker. (My excuse is simple – there are only 12 White checkers in the box, and all 12 units are in play, so I didn't have a spare one to "crown" the promotion). Again, I'm not really giving anything away – it is obvious that there has been a White promotion.

55 - PF, Original
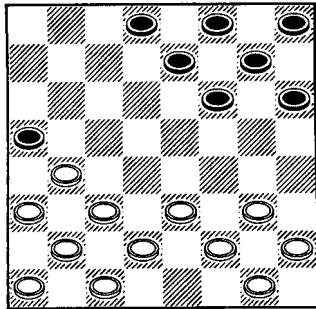
After White's 7th.
Identify which checker is a King.
Game score?

After composing these I thought what next? Backgammon? Shogi? – But Alain pre-empted me on his website with a proof game in (believe it or not) Noughts and Crosses (Tic-tac-toe). Despite its apparent simplicity, the logic required for the solution isn't easy to find. You are told that this is a mistake-free game between experts – what was the game score?

56 - Alain Brobecker
Website, 2007

(Hint: In an error-free game the situation can never arise where one player can force a win. In the diagram, X to play could win with 3 Xa3. This is impossible in an expert game, so it must be O to play, hence O played first. Take it from there.)

Whatever next, I wonder – Stone-Paper-Scissors?

Solutions on page 38.

CASTLES IN THE AIR

I've not had any formal text from Jed, but a recent letter starting with his inimitable "Morning" contains notes of an **Alice Chess** tournament which has started between Paul Yearout, Michael Ferris, and Jacques Maes. Clearly e-mail hasn't quite taken over.

ISOLATED PAWNS

David Pritchard's files. After I had finished work on the *Encyclopedia*, I asked Elaine and Wanda what I should do with David's files, and we agreed that I should keep them for a year so that I could field queries, and then pass them to the Musée Suisse du Jeu (which has Ken Whyld's library and offers an excellent reading room) so that they would available to future researchers. I have now furnished them with some explanatory sheets which should help future readers to find their way around, and transfer to the Musée will be arranged in due course.

I should perhaps stress that these are merely David's "games" files, and I do not think they contain anything sensitive. I do not have his private correspondence files.

In David's files was a **Progressive Chess** game Leoncini-Dipilato from the 1981 Italian Championship final which had clearly taken his fancy. Exclamation marks are his. **1 e4 2 e5 f6 3 Bc4 Bb3 f3 4 a5 Bb4 Ke7 Nh6 5 a3 axb4 Rxa5 Rxa8 Kf2 6 b5 Bb7 Bxa8 Nf5 Ne3 Nxd1+ 7 Ke2(!) h4 h5 h6 hxg7 gxh8Q Qxd8+ 8 Kxd8 Ke7 Bxe4 Bxc2 Bxb3 d5 Nf2 Nxh1 9 d4 Bf4 Bxe5 Bxc7 Bxb8 Nh3 Kf1 Nf2 Nxh1 :**
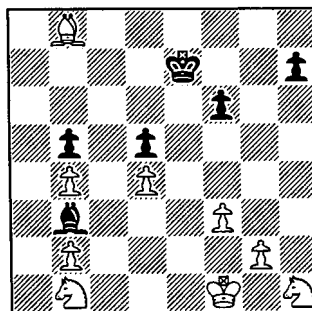
10 Bc2 Bxb1 Be4 Bxf3 Ke6 Kf5 Ke4 Kxd4 Ke4 Bxb2+ 11 Kxg2!! Be5 Bxf6 Bg5 Bd2 b3 Kg3!! ... ... Nf2+ and wins, with a note that if White had not played Kg3, Black would draw by the "stupendous manoeuvre" 12 d4 d3 Kf5 Kg5 Kh4 h5 stalemate!

Danse macabre. Black's curious behaviour at the end of one of the R + 2M v R Makruk endings which are quoted in "In the Library" reminded me of an orthochess game between two then state-of-the-art computers which caused great amusement when it went the rounds in 2001. They reached this position :
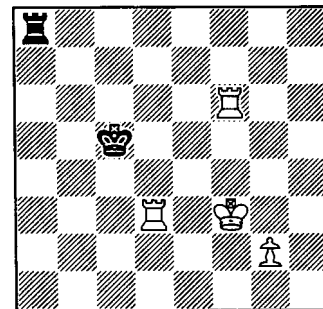
and White played **70 Rc6+!** The reason? It had access to a complete table of results for R + P v R, and could see that if Black took the rook it could reel off the win without further analysis. But Black had access to the same table, and declined the sacrifice by **70...Kb5!** The dance continued **71 Rc5+!! Kb4!! 72 Rb5+!!! Kc4!!! 73 Rd4+!!!! Kc3!!!! 74 Rc5+!!!!! Kxd4** (now Black could calculate that nothing else would hold out longer), after which they produced 35 moves of impeccable endgame play and White mated on move 109.

And a correspondent who should perhaps remain nameless has suggested **Handbag Pieces**, which he describes as "A variation on Pocket Pieces for women players. These pieces have a fluorescent coating, so they glow in the dark, making them easier to find at the bottom of handbags. So when a Handbag Piece is deployed, the player doesn't waste so much time on the clock rummaging around for it. Otherwise rules as for Pocket Pieces."

Guess whose dinner is in the dog.

VANISHING POINTS

Last winter, George Jelliss alerted me to a newspaper report of the so-called Anglo-Russian **Ice Chess** Challenge. 'It's just chess played with pieces made of ice, so I'm not sure that it counts as a chess variant. It suggests ideas for possible variants though. For example: the larger pieces reduce to pawns when moved a certain number of times, due to melting making their design indistinguishable. Another idea is "chess on (thin) ice": where a move across or into and out of a cell weakens it, and any subsequent move through it leaves a void (hole in the ice).'

The latter suggestion has caused me to look again at **Loch Ness Chess**, which I used in 1989 as a medium for some joke problems. Loch Ness is one of the lochs in the Great Glen, which divides the Highlands of Scotland in a virtually straight line from south-west to north-east (it was apparently the observation that certain prominent strata on one side of the glen did not continue directly across it, but did so with a shift of a hundred kilometres or so, that first alerted geologists to the idea that the Earth's surface might have moved over the years), and as every Briton knows from childhood and every incoming tourist very soon learns, it is home to the fabulous Loch Ness Monster. This famous survivor from prehistoric times lurks in the fathomless depths of the loch, and has two properties: (a) everyone knows it exists; (b) nobody has actually seen it (I am ignoring the faked photographs which are occasionally palmed off on newspapers by students and other irreverent persons). This suggested the following chessic interpretation: (a) the long black diagonal represents the dark and mysterious loch; (b) as long as a man on the loch is observed by another man, nothing happens; (c) as soon as it is no longer observed, the monster appears and swallows it. As originally conceived for problems, the loch went all the way from a1 to h8, but this creates difficulties for play (the dark-square rooks would vanish at the start of the game) and it is better to let it go only from b2 to g7 :
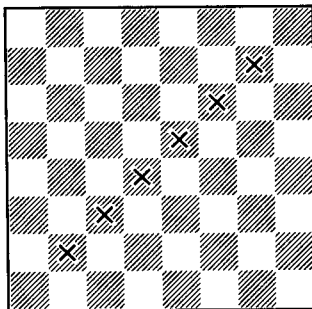
Monsters are of course voracious, and swallow as much as possible at a time. Consider the position below :
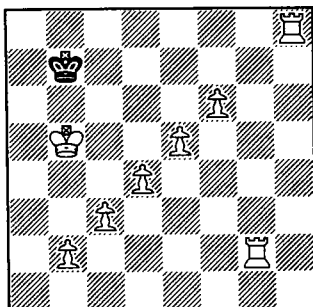
A pawn "observes" the squares it attacks, so White may think that he can give mate by **Rg7**. However, this leaves the pawn on b2 no longer under observation, so the monster appears and swallows it; now c3 is no longer under observation, so that goes as well; and so on all the way up to g7.

Is this a playable game? Probably, though the normal initial array appears to give White a marked advantage. White can play 1 e4, and Black cannot reply 1...e5 since this will give his pawn to the monster. 0-0 by White takes his king to safe ground, 0-0 by Black takes him dangerously close to the loch. Black cannot easily develop his dark bishop (if he simply plays ...e6 and ...Be7, the monster will swallow the pawn on g7, and if he plays ...g6 and ...Bg7 it will swallow the bishop), whereas White can play d2-d4, c2-c4, Nf3 to take over observation of d4, Qc2 to watch b2, and his bishop will be free to move. So a new array seems desirable, and perhaps the best idea is to put the kings near to the loch on a1 and h8 or maybe b1 and g8 - forcing the enemy king into the loch is surely a tactic to be encouraged - and to let the players arrange their remaining pieces as they wish.
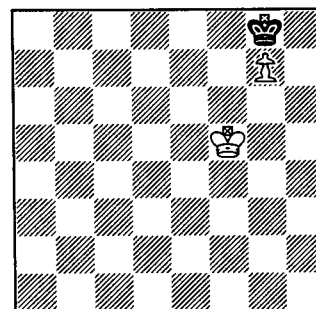
Here are some puzzles for those who don't have frivolously minded friends willing to experiment. In each case, the task is to find the solution both in ordinary and in Loch Ness chess.
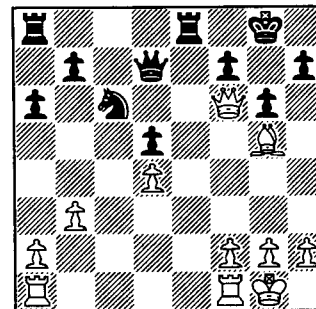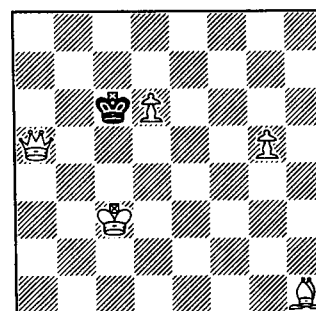

White to play and win
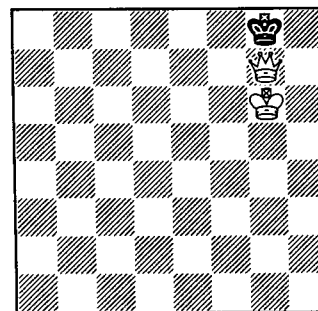
Is this mate?

White to play and win

What was the last move?

Answers on page 38.

THE END IS NIGH !

by Paul Byway

Solutions to competition 31

#191 8 Be4 Bd3 Kd7 Ke6 Kf5 Kf4 Re8 Re2 mate. (In the original the king started on d7. Two Italian mates!) **#192** 7 Ne2 Nf4 Ne6 Ke2 Rc1 Rc8 Rd8 mate. **#193** 8 Kb6 Be4 Bc2 Nd5 e5 exd4 d3 Bb4 mate. **#194** 9 Kd2 Kc3 Kb4 Ka5 Ka6 Kxa7 Ka8 Nc3 Bb5 Italian mate. **#195** 7 Nb5 Nh3 Nf4 Bh3 Rc1 Rc8 Nxd5 mate. **#196** 8 Ng4 Nxh2 Re8 Kxd7 Rab8 Rb5 Rxd5 Rexe5 Italian mate. **#197** 1 Cb10+ Hbc10 2 Pxg10 Pa6 3 Ph10 Pa5 4 Cb3 Hd8 5 Cg3 He6 6 Ce3 Pb5 7 Pg10 Pc5 8 Kf1 and wins next move. (*The Black man on h5 was a rogue. Sorry. - JDB*) **#198** 1 Pe6 Ke10 2 Ce3+ Kf10 3 Pf6 Ke10 4 Kd1 Pe2 5 Ce8 Ke9 6 Cg8 Ke10 7 Pf7 Pg6 8 Pg7 wins the pawn and then the game.

Although **#191**, **#194**, and **#196** were played under "Italian" rules (giving check before the end of a series is illegal), there would in each case have been a mate next turn had play continued under traditional rules.

The current scores:- FG 140, IR 117, JB 47, RC 45, PW 35, CL 24, RT 19.

Competition 32 is alongside.

In the game below, from the recent 10th World Championship of Chinese Chess, I rejected the straightforward ...HxC in favour of ...Pg5 setting a trap; what must Red avoid here?

```
10   . . . g k g e . .
 9   . . . : : : . . .
 8   . . . : e : h . .
 7   p . . . p . . . .
 6   . r . h . . p c p
 5   P . P . . H . R .
 4   . . C . P . . . P
 3   H . . : : . . . E
 2   . . . . : . . . .
 1   . . E G K G . . .
```

Black to play move 17

Answer on page 38.

#199 Figura - Benedetto (1992)
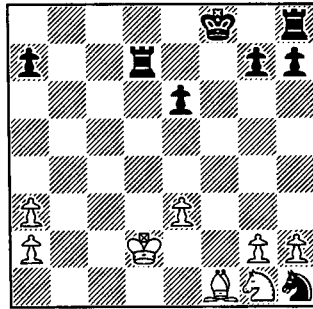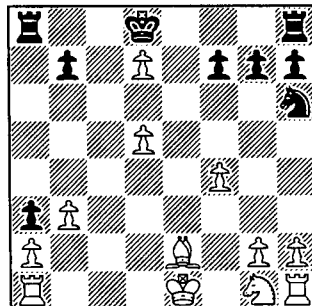

White wins (series 9)

#200 Gatto - Sarale (1991)
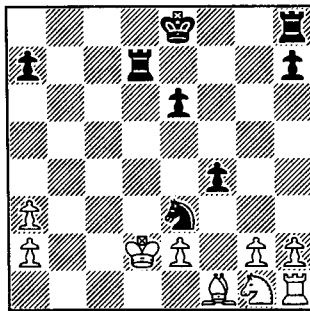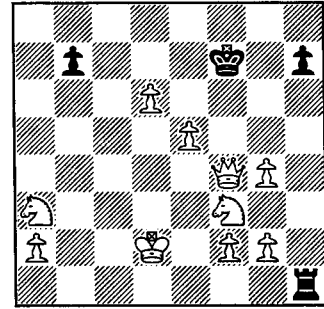

White wins (series 9)

#201 Wojnar - Lantillo (1992)
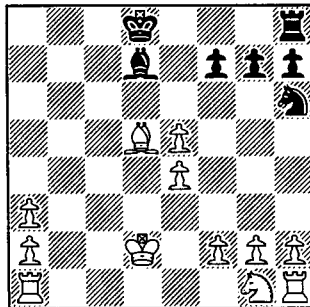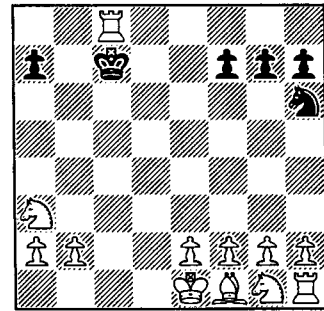

Black wins (series 8)

#202 Sarale - Rallo (1992)

Black wins (series 8)

#203 Forzoni - Benedetto (1993)

Black wins (series 10)

#204 Stefanelli - Wolff (1991)

Black wins (series 8)

#205 Cannon + Pawn #18

```
10   . . . k : g . . .
 9   . . . : : : . . .
 8   . . . : : g . . .
 7   . . P . . . . . .
 6   . . . . . . . . .
 5   . . . . . . . . .
 4   . . . p . . . . .
 3   . . . : : : . . .
 2   . . . : K : . . .
 1   . . . : : : . . C
```

XiangQi : Red to play and win
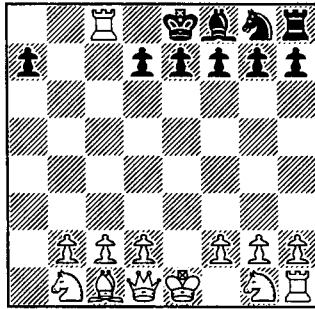
#206 Cannon + Pawn #17

```
10   . . . : : : . . .
 9   . . . : g : . . .
 8   . . . k : : . . .
 7   . . . . P . . . .
 6   . . . . . . . . .
 5   . . p . . . . . .
 4   . . . . . . . . .
 3   . . . : : : . C .
 2   . . . . : : : . .
 1   . . . : K : . . .
```

XiangQi : Red to play and win

SOLUTIONS

Proof games (pages 34-35). **50** 1 a4 b5 2 axb5 Na6 3 Rxa6 Bxa6 4 b6 Bxe2 5 bxc7 Bxf1 6 c8R Ba6 7 Rxa8 Qb8 8 Rxb8+ Bc8 9 Rxc8# :

51 1 a4/Ra3 e5/Qh4 2 Rf3/b3 Ba3/ Qxf2+ 3 Rxf2/Rxf7 Nf6/Rf8 4 Bxa3/ Rxf8#.

52 a) 1 h3 d6 2 Rh2! Bxh3 3 Rxh3 Kd7 4 Rb3 Kc6 5 Rb6+ Kc5; b) 1 h3 2 d6 Bxh3 3 Rxh3 Rb3 Rb6 4 Kd7 Ke6 Kd5 Kc5.

53 1 Pd2-h6 Pd7-d3 2 Qxd3 e6 3 Qxh7 Be7 4 Q(P)xNg8=N! Bf6 5 Nxf6 Qxf6.

54 1 f6-e5 e3-d4 2 g7-f6 f2-e3 3 h8-g7 g1-f2 4 f6-g5 d4^f6^h8 5 f8-g7 h8^f6^h4 6 h6-g5 h4^f6 7 e7^g5.

55 The king is at e3. 1 b6-c5 c3-b4 2 a7-b6 d2-c3 3 c5-d4 e3^c5^a7 4 c7-b6 e1-d2 5 b8-c7 a7-b8 6 d6-e5 b8^d6^f4 7 b6-a5 f4-e3.

56 1 Oc2 Xa2 2 Oc1 Xc3. As we have seen, O must have played first. Not 1 Oc1, since X would have played in the centre to prevent a forced win. X's last move couldn't have been 2...Xa2, as with Oc1/Oc2/Xc3 he would have played 2...Xa3 forcing a win (3 Ob3 Xa1).

"Antipodean" tours (page 32). Let's assume the four planes in each figure to be placed one in front of the other.

In Figure 10, 33-48 are 16-1 reflected front to back, and 49-64 are 32-17 reflected similarly.

In both Figures 11 and 12, 17-24 are 8-1 reflected front to back, 25-32 and 16-9 are similarly related, so are 49-56 and 40-33, and so are 57-64 and 48-41. Additionally, in Figure 11, 33-64 are 1-32 rotated through 180 degrees.

Loch Ness Chess (page 36). First problem. In ordinary chess, **1 Bh6** with mate on g7. This doesn't work in Loch Ness chess because the queen is left unobserved, but now there is no need to guard g7; White can play **1 Qg7 mate** at once. The queen is safe from the monster since she is observed by the Black king, but if Black takes the queen he will be unobserved and the monster will swallow him.

Second problem. In ordinary chess, obviously **yes**. In Loch Ness chess, perhaps not, on the grounds that after Black's KxQ White's recapture KxK will allow his own king to be eaten by the monster and this is surely only a draw? But White needn't recapture, he can withdraw his king by say Kg5 and let the monster do his work for him. So again the answer is **yes**.

Third problem. In ordinary chess, **1 Kf6** with 1...Kh7 2 Kf7 to follow. In Loch Ness chess, **1 Ke6** (to stop 1...Kf7) and the same. Not however 1 Kg5 intending to play Kh6 at the right moment and win as in ordinary chess, because 1...Kf7 will threaten 2...Ke7 withdrawing observation of the pawn. This forces 2 Kh6 at once, and after 2...Kg8 3 K~ Kf7 the game is drawn.

Final problem. In ordinary chess, **e5xd6 e.p.+**, preceded by d7-d5 and e4-e5+ :
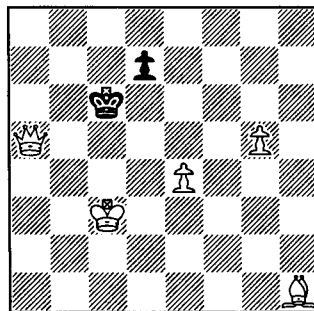
e4-e5+, d7-d5, e5xd6+

This couldn't have happened in Loch Ness chess because Black's d7-d5 would have cut off the queen's observation of the pawn on e5, but instead White could have played **c5xd6 e.p.+**. Again the queen's observation of e5 would have been cut off, and his previous move could have been with a pawn, knight, or rook

moving to this square to discover ` check :
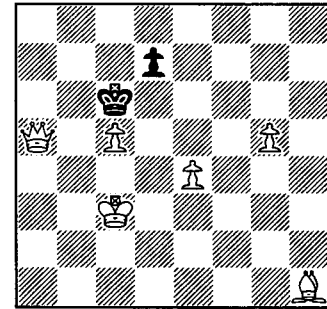
e4-e5+ (e5 off), d7-d5, c5xd6+

XiangQi (page 37). Play continued 17...Pg5 18 RxP Hxe4 and Red fell for it, playing 19 Rxg8 and allowing 19...Ce6+ 20 Ge2 Hf6+ and 21...HxR (a manoeuvre peculiar to xiangqi, the cannon putting itself behind the horse with gain of tempo). Paul told me that he really ought to be ashamed for trying this, but I don't see why; few things are as satisfying in any game as pulling off a successful swindle.

Mini-checkers (page 28). First 8x8 position. **1 f6-e7** (not 1 f6-e5, when 1...c5-d6 2 e5^c7 b8^d6 wins for White) **b8-a7** (if 1...c5-b6 then 2 e5-d6, with 2...b8-a7 3 d6-c7 winning a man or 2...b6-a7 3 d8-c7 blocking White completely) **2 d8-c7 a7-b8 3 c7-b6 c5^a7 4 e7-d6** and Black wins with one against two :
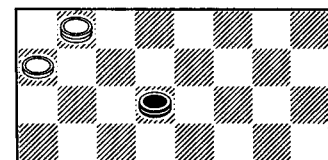
Second 8x8 position. **1 a8-b7 b6-c7 2 f8-e7 f6^d8 3 a7-b8** and again Black wins with one against two :
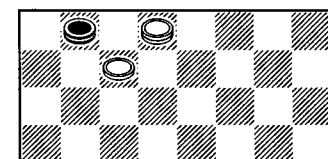
Not 1 f8-e7 f6^d8 2 b8-a7 hoping for the same finish, when White can play 2...d8-c7 and reach the double corner.

(I used this little trifle as an April Fool when I was running the problem

column in the *British Chess Magazine*: "White king on g1, man on c1, Black king on c3, man on g3, White to play and win, how is it done?" And it wasn't new even then; "it's not chess, it's checkers" had been done by Dunsany in *Fairy Chess Review* in 1948, while the sacrificial finish dates back at least to Payne's *Introduction to the Game of Draughts* of 1756.)

Left-hand 4x6 position. White wins. However Black starts, White can play 1-2...a1-a3, and this simplifies the analysis.

Best for Black is to play his corner man down to the third rank, **1 d6-c5 a1-b2 2 c5-b4/d4 b2-a3 3 b4/d4-c3**. White continues **3...a3-b4**, and we have the left-hand diagram below :
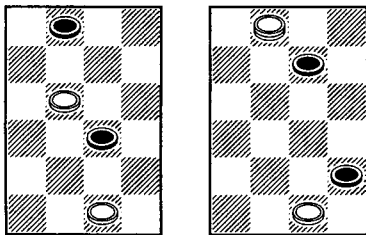
If Black now plays **4 c3-d2**, White continues **4...b4-a5 5 b6-c5 a5-b6** giving the right-hand diagram, after which he can wait for Black to impale himself on b2 and then win with two against one.

If instead Black plays **4 b6-a5**, intending to occupy a3 and usher the man on c3 through to promotion, play continues **4...b4-c5 5 a5-b4 c5-b6 6 b4-a3 b6-c5 7 c3-b2 c5-b4 8 b2-a1 b4-c3** giving the left-hand diagram below, and both Black units go.
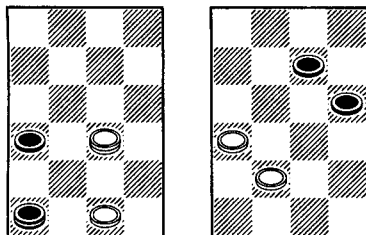
If Black plays otherwise at moves 1-3, putting one man on rank 5 and the other on rank 4, White plays 3...c1-b2 and wins at once. The right-hand diagram shows one case, and it is easily seen that Black's other alternatives are no better.

Right-hand 4x6 position. Again White wins, but the play is more complicated and we need to analyse in greater detail. We normally omit the wins in lines where a player is a man up (the play may be lengthy but it is no more than routine), and also transpositions back into lines already examined.

Black has three possible first moves (a5-b4, c5-b4, c5-d4).

Case 1. **1 a5-b4 b2-c3 2 b4-a3** (2...b6-a5 3 c3-d4 and White wins a man) **c3-b4** (simplest), with either **3 b6-a5 d2-c3 4 c5-d4 a1-b2** and Black must give his men away one after another (left-hand diagram below) or **3 c5-d4 a1-b2 4 b6-c5 d2-c3** and he has no moves at all (right-hand diagram). White has successfully avoided having to make an exchange, so he has retained "the move", and at the end this is decisive.
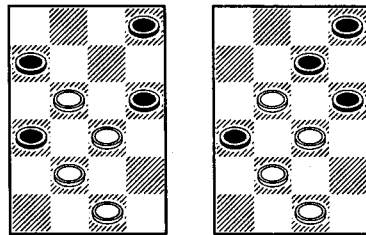
Case 2. **1 c5-b4 b2-c3 2 b4-a3** (2 d6-c5 c3-d4 3 b4-a3 transposes into the first line below) **c3-d4** (simplest), with **3 d6-c5 a1-b2 4 c5-b4** (4 a5-b4 b2-c3) **b2-c3** and another pretty finish (left-hand diagram below) or **3 a5-b4 a1-b2 4 b6-a5 b2-c3** and much the same (right-hand diagram). Once again, White has successfully avoided an exchange, and the advantage of "the move" is decisive.
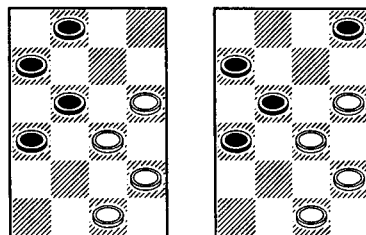
Case 3. **1 c5-d4 d2-c3** (the natural move, and the only one to win) **2 d6-c5** (2 b6-c5 is no better) **c1-d2**, and Black's natural move is **3 c5-b4** giving the left-hand diagram at the end of the paragraph. The immediate concession of a man by 3 a5-b4 holds out longer, the longest line being

3...c3^a5 4 c5-b4 b2-a3 5 b4-c3 ` d2^b4 6 d4-c3 b4-c5 7 b6^d4 a5-b6 8 c3-d2 b6-c5 9 d2-c1 c5-b4 10 c1-d2 b4-c3 11 d2^b4 a3^c5 12 d4-c3 c5-b6 13 c3-d2 a1-b2 14 d2-c1 b2-c3 15 c1-b2 b6-a5 16 b2^d4 a5-b4, but all this is routine and 3 c5-b4 allows Black to force an exchange gaining "the move" :
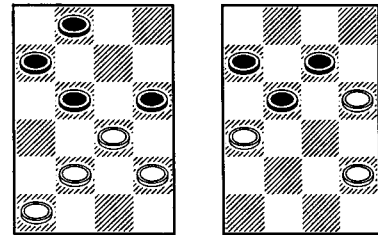
However, the gain proves to be illusory. From the left-hand diagram, play continues **3...b2-a3 4 d4^b2 a1^c3 5 b6-c5 c3-d4** giving the right-hand diagram, and even though Black now has "the move" he loses at once.

There is one final twist. Suppose that after 1 c5-d4 d2-c3 2 d6-c5 in the line above, White plays the losing move 2...b2-a3. Black continues 3 d4^b2 a1^c3 4 c5-d4 soon winning a man (4...c1-b2 5 b6-c5), but if White concedes the man straight away, 4...c3-b4, and then meets 5 a5^c3 with 5...a3-b4, is not his single man at c1 neutralizing Black's two men at c3 and d4 (left-hand diagram below)?
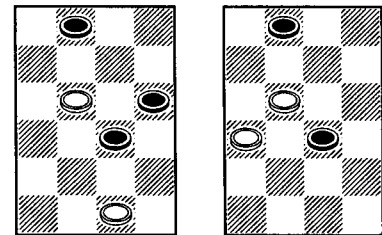
Yes, for the moment it is, but Black can give back the man by 6 c3-b2, and after 6...c1^a3 7 d4-c3 it is Black who has one man holding two of his opponent's (right-hand diagram). Black can now promote his free man at leisure, wait for White to give up a man on c5, and win with two against one.

I do not propose to devote further space in *VC* to checkers, but I hope readers have enjoyed this brief look at a game which is far more subtle than its modern reputation would suggest.

CONTENTS

For an important notice about **David Pritchard's files**, see page 35.

VC 55 contained some unfortunate **typographical errors**. On page 8, George Jelliss reminds me that the first magic knight's tour was found by **William Beverley**, not Berkeley; on page 17, near the bottom of the first column, Peter Fayers himself points out that we have an Adulterer's Bible moment, the word "not" having been omitted before "reborn"; on page 19, Seirawan-Chess, the line 3 Ec5+ must end 8 Ea3+ Ra2 9 Eb3# to avoid a first-rank pin (Seirawan did give this, the mistake was mine). My apologies. And Noam Elkies makes a further point, which is examined on page 29.

Jackets for *ECV 2*. Readers who bought or received an unjacketed copy of *ECV 2* are reminded that jackets are now available, and that I can arrange for one to be sent without charge.

BCVS NOTICES

AGM 2008. Members are reminded that nominations for office, and any resolutions for the AGM, should reach me as secretary by **March 1**. To the best of my knowledge, the existing officers are willing to continue, but we are all getting older, and if anyone else would like to join the team either now or at some future date we shall be delighted to explain what is involved.

In particular, I am now 67 knocking on 68, and I shall not want to continue editing *VC* beyond 70. Peter and I have been looking at the difficulties that will occur if no successor then comes forward and members have partial subscriptions outstanding, and we think it will be best if I declare my "final issue" well in advance so that he can accept subscriptions up to and including that issue. If a new team comes forward, new subscriptions can then be taken, and no harm will have been done; if the worst happens and none does, we can tidy up and decide what to do with any money left (which he says there probably won't be if I continue to produce 20-page issues).

I therefore give informal notice that I intend to continue editing *VC* **up to and including** *VC* **64** unless members decide in the meantime to entrust the task to somebody else. If, as these issues unfold, a new team decides that it would like to carry on forward, we shall be delighted to hear from them.

VC **57** is scheduled to appear during May. Copy date is **April 1**, though early receipt always is helpful.

Peter Wood, who produced *VC* 9-20, has moved to **5 Hillyglen Close, Hastings, East Sussex TN34 1XU**.

EVENTS

Mike Adams was the principal organizer of last year's **Guildford Chess Club Variants Evening**, a pre-Christmas event in which David Pritchard's memory is very definitely being kept alive. It was a most civilized affair, with hot mince pies halfway through, and latecomers were allowed to join in at any stage with half-point byes for the rounds they had missed. We played Rifle Chess, Avalanche, Pocket Knight Chess, Three-Check Chess, Extinction Chess, Static Chess, and Triplets, and the number of participants had grown to 18 by the end of the evening. My notes say that the prizes were shared by Phil Stimpson, Trevor Jones, and Christophe Roset, each with 5/7, but something may be wrong here because my recollection is that one of them went to Peter Horlock. I didn't note any positions, but I remember a post-mortem at the end of round 2 :

"If he had played so-and-so, he would have mated you."

"No, I would have taken him by ... oh, we're not playing that game now."

It was that sort of evening.

Mike and Mike Gunn also organized what seems to be becoming a traditional **New Year's Eve Variants Tourney** at **Hastings**. Eight rounds were played and Jack Rudd won from 18 participants, but I have no further details.

I presume that the **Circular Chess World Championship** will again be held in Lincoln during May, and that details will be posted on the web site
<www.circularchess.co.uk>
in due course.