## FAIRINGS...

## $\mathbf{N}^{0}$ 26: September 2012

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My thanks to readers who tested F25/3 (C+ WinChloe) and to the many problemists who wrote endorsing my remarks about Kamikaze in Popeye.
György shows amusing series-stalemate sequences; Michael has a novel idea which may provide inspiration for the Orbit ABC theme tourney. Mostly series problems: please don't be frightened by the long ones - full explanations of problems 10-12 appear on page 2, before the definitions. Best wishes to all.
1.

2.

h\#2 2 solutions Couscous eagle ${ }^{5}$
3.

h\#3 b) 何d6>f2 PWC kangaroo 3 R/B-locust 3 [19 $/$ /2d

1 1.Qxc7[Bd8] Bxc7[Qc1] 2.Qf4 Bd7\# (Bc8?) \& 1.Qxe8[Rd8] Rxe8[Qh1] 2.Qe4 PAd8\# (PAd7?) A Couscous-specific theme, but perhaps a rather futuristic use of fairy pieces? $\quad \underline{\mathbf{2}} 1 . \mathrm{Qxa} 5[\mathrm{EAd} 8] \mathrm{EAxg} 3[\mathrm{Pg} 8]$ 2.Bxg3[EAf8] $\mathrm{Kxg} 8[\mathrm{Pe} 1=\mathrm{B}] \#[\mathrm{Pe} 1=\mathrm{S}]$ ? \& 1.Rxa5[EAh8] EAxg4[Pg8] 2.Rxg4[EAa8] Kxg8[Pe1=S]\# [Pel=B]? Everything is directed towards setting up the dual-avoidance K-batteries. $\underline{\mathbf{3}}$ a)1.LRxb6-a6[KAd6] KAd5 2.Rd1 KAd3 3.Rxd3[KAd1] KAd2\# \& b)1.LRxd2-c2[KAf2] KAe3 2.Qa7 KAc5 3.Qxc5 [KAa7] KAb6\# Black \& white switchbacks; pinmates.
4. Michael McDowell

h\#3.5
5. György Bakcsi

6. György Bakcsi

ser-stale\#14 MirrorCirce ser-stale\#17 MirrorCirce
$\underline{4} 1$...bxc6 e.p. 2.Sc7 a8=R 3.b5 Rg8+ 4.Kf7 0-0\# An unusual Valadão. Retroanalysis in ABC seems questionable to me if based on an initial array (many positions will be illegal in that scenario!) but perfectly valid if working backwards from the diagram. $\underline{\mathbf{5}}$ 1.Rxb1[Bf1] 2.Rxc1[Sg1] 3.Rxd1[Rh1] 4.[Rxf1] 5.Rxg1 6.Rxh1 7.Rxh6 [Ra1] 8.Rxh7[Sb1] 9.Rxh8[Bc1] 10.Ra8 11.Rxal 12.Rxb1 13.Rxc1 14.Rc8= 6 pieces must all be removed twice; a round trip is included. $\underline{\mathbf{6}}$ 1.Rxh8[Ra1] 2.Rxf8 [Sg1] 3.Rxe8 [Sb1] 4.Rxd8[Qd1] 5.Rxc8[Bf1] 6.Rxb8[Bc1] 7.Rxa8[Rh1] 8.Rxa1 9.Rxb1 10.Rxc1 11.Rxd1 12.Rxd2 13.Rxf2 14.Rxf1 15.Rxg1 16.Rxh1 17.Rh4= And this time it's 7, with a full-length round trip. I do love humour in chess problems. Thanks, György!
7.

ser-h\#3 4 solutions Couscous
8.

ser-h\#6 2 solutions PWC
9.

ser-h\#12* PWC+T\&M edgehog 䁙

7 1.h1=Q 2.Qd5 3.Qxf5[Pd8=Q] Qd4\#, 1.h1=R 2.Rh5 3.Rxf5[Pa8=Q] Qa5\#, 1.h1=B 2.Be4 3.Bxf5[Pc8=Q] Qxc5[Bd1]\# \& 1.h1=S 2.Sg3 3.Sxf5[Pg8=Q] Qc4\# All the routes and mates are different. $\underline{\mathbf{8}} 1 . \mathrm{Rd} 12 . \mathrm{c} 1=\mathrm{Q} 3 . \mathrm{Qc} 44 . \mathrm{Qb} 45 . \mathrm{Qxb} 2[\mathrm{Sb} 4]$ 6.Qc1 Ba1-c3\# \& 1.Rh1 2.Rxa1[Bh1] 3.Ra8 4.Rh8 5.Rxh1[Bh8] 6.Rc1 Bh8-c3\# 2 round trips from/to c1; 2 WB routes to c3. $\underline{9}$ Set: 1...EHxe5-e4[Ph2]\# Sol.: 1.Kxh2-f4[EHh1] 2.Kg5 3.Kh4 4.Kh3 5.Kh2 6.Kxh1-e4[EHh2] 7.Kf5 8.Kg5 9.Kh4 10.Kh3 11.Kxh2$\mathrm{f} 4[\mathrm{EHh} 3]$ 12.gxh3-f5[EHg4] EHh4\# The BK gyrates with both fast and slow steps!
10.

ser-h\#20 2 sols PWC ContraGsio 1,6-leaper
11.

ser-h\#171 2 sols PWC 1,6-leaper
12.

ser-h\#198 PWC 1,6leaper 0,3-leaper 3

10-12 Solutions and commentary are on the next page.

## Problems 10-12:

In a series problem the combination of PWC with a piece such as the 1,6 leaper (or flamingo: see definitions) allows Black to manoeuvre white units into position by capture, sometimes in surprising ways. Let us meet the flamingo in $\mathbf{1 0}$. Because of its long leap it has trouble getting around on the tiny $8 \times 8$ board, so capturing and repositioning the CG takes it 9 moves in solution I (1.Fc8 2.Fb2 3.Fh3 4.Fb4 5.Fh5 6.Fb6 7.Fh7 8.Fg1 9.Fxf7[CGg1]) and 13 in solution II, whose moves are given here in italics, for clarity (1.Fe8 2.Ff2 3.Fg8 4.Fh2 5.Fb3 6.Fh4 7.Fb5 8.Fh6 9.Fb7 10.Fc1 11.Fd7 12.Fe1 13.Fxf7[CGel]). Now the mates by CGg1-d4\# (I) and Kc2-d1\# (II) are nearly but not quite ready. In I the F must first reach f2 to act as a hurdle and in II it must block b2. Thus the remaining moves are 10.Fel 11.Fd7 12.Fc1 13.Fb7 14.Fh6 15.Fb5 16.Fh4 17.Fb3 18.Fh2 19.Fg8 20.Ff2 in I and 14.Fg1 15.Fh7 16.Fb6 17.Fh5 18.Fb4 19.Fh3 20.Fb2 in II. Composers will realise that devising two different mates in equal-length sequences was the hard part here!

Now you may or may not have noticed that in $\underline{\mathbf{1 0}}$ the sequences from moves 3 to 19 inclusive in I and from 4 to 20 in II are exact reversals of each other. That feature made me realise that this fairy combination may be used to repeat sequences of moves, and of course if that is done without adding any moves in between, we shall have successive round trips. In $\underline{\mathbf{1 1}}$ we see 7 identical round trips in each solution - identical, that is, except for the fact that each capture moves the white pawn to a different point in the circuit. The 22 -step flamingo circuit in $\mathbf{I}$ is as follows (just the squares are given): b7-c1-d7-e1-f7-g1-h7-b6-h5-b4-h3-b2-c8-d2-e8-f2-g8-h2-b3-h4-b5-h6-b7; if we play that 7 times in succession we move the WP as follows: e1-d7-c1-b7-h6-b5-h4-b3-h2 - in effect the WP makes flamingo-moves too! Thus we have completed $22 \times 7=154$ moves when we finally return the F to b 7 . Now what? The following sequence leads to mate: $155 . \mathrm{Fc} 1156$.Fd7 157.Fe1 158.Ff7 159.Fg1 160.Fh7 161.Fb6 162.Fh5 163.Fb4 164.Fh3 165.Fb2 166.Fc8 167.Fd2 168.Fe8 169.Ff2 170.Fg8 171.Fxh2[Pg8=Q] and Qxa2[Pg8]\# (not Qg1? - the flamingo controls b1).

The repeated-sequence concept may seem complicated at first, but after a little study one quickly comes to see the circuits as single units, so to me this is just an odd kind of ser-h\#24, that is: 7 circuit-units plus 17 other moves! Now such problems tend to look accidental unless one incorporates evidence of design, which is why we also have solution II (again italicised). This time the repeated F-circuit is $b 7-h 6-b 5-h 4-$ b3-h2-g8-f2-e8-d2-c8-b2-h3-b4-h5-b6-h7-g1-f7-el-d7-cl-b7 (notice that it reverses the previous one) and if we play that 7 times in succession we move the WP as follows: el-f7-gl-h7-b6-h5-b4-h3. Now, having again completed $22 \times 7=154$ moves by returning the F to b 7 , we find that the following sequence leads to a different mate, which seems to me to be an indispensable feature: 155.Fh6 156.Fb5 157.Fh4 158.Fb3 159.Fh2 160.Fg8 161.Ff2 162.Fe8 163.Fd2 164.Fc8 165.Fb2 166.Fxh3[Pb2] 167.axb2[Pa3] 168.b1=R 169.Rb8 170.Ra8 171.Rxa3[Pa8=Q] Qh1\#.

Although I am really not a fan of task problems, I felt compelled to ask myself what is the greatest number of successive identical round trips with these resources. I believe it to be 9, as shown in problem 12. Although the total number of moves may (pointlessly!) be increased, I do not think that more circuits can be added, though of course I may be wrong. Anyway, I prefer to show the basic $22 x 9=198$
moves. The 22-step circuit is g6-a5-g4-a3-g2-f8-e2-d8-c2-b8-h7-b6-h5-b4-h3-b2-c8-d2-e8-f2-g8-a7-g6, which after 9 occurrences and the return of the F to g 6 has moved the 0,3-leaper as follows: b8-c2-d8-e2-f8-g2-a3-g4-a5-g6-a7. For the mate I chose the simplest piece possible, the $(0,3 / 3,0)$-leaper, which finally plays 3 La $7-\mathrm{a} 4 \#$. [There is an alternative possibility with the F starting on a 5 and a white rosehopper (or rose-lion) starting on b8 and ending on a7, as before. This finishes with Kc2\#, the last black move $198 . \mathrm{Fa} 5$ being a hideaway.]

This last problem is less satisfactory than the previous one, in my view; nevertheless I should be pleased to hear from anyone who extends the task, perhaps using a different leaper. On the $8 \times 8$ there are, after all, 35 basic leapers to choose from, not counting the 0,0 -leaper (a piece of somewhat limited usefulness), and my guess that the 1,6 -leaper might be the best for the purpose was a purely intuitive one.

## Definitions

ABC (Alphabetical Chess): The squares are considered in the order a1, a2...a8, $\mathrm{b} 1 \ldots \mathrm{~b} 8, \mathrm{c} 1$ and so on to h 8 . The player whose turn it is may move only his unit standing on the square which comes earliest in this order. However check and mate are normal.

Circe: Captured units (not Ks) reappear on their game-array squares, of the same colour in the case of pieces, on the file of capture in the case of pawns, and on the promotion square of the file of capture in the case of fairy pieces. If the rebirth square is occupied the capture is normal.

MirrorCirce: Rebirth squares (see Circe) are those of the corresponding units of the other colour.

CouscousCirce: As Circe, but the captured piece reappears on the Circe rebirth square of the capturing unit. Pawns reappearing on promotion squares are promoted instantly, at the choice of their own side; those appearing on their $1^{\text {st }}$ rank have no moving or checking power until reactivated by being captured again

PWC (PlatzWechselCirce): Captured units reappear on the square just vacated by the capturing unit. Pawns appearing on their $1^{\text {st }}$ rank have no moving or checking power until reactivated by being captured again; those appearing on their $8^{\text {th }}$ rank are promoted instantly, at the choice of their own side.

T\&M (Take\&Make): Every capturing move consists of two steps. The capturing step ("take") must be complemented by a further step ("make": not a capture) by the capturing piece, using the movement of the captured unit, otherwise the capture is illegal. Pawns may not end up on their own first rank. Captures lead to promotions only if the pawn is still on the promotion rank after the "make" step. Promotions at the end of the "make" step are normal.

Grasshopper G (better: Queenhopper): Hops on Q-lines over any one unit (the hurdle) to the next square beyond.

Kangaroo KA: As G but requiring 2 (not necessarily adjacent) hurdles on the same line, and landing on the square immediately beyond the second hurdle.

Eagle EA: a grasshopper which pivots $90^{\circ}$ (to either side) at the hurdle.
ContraGrasshopper CG: Moves like a G but in reverse: the hurdle must be adjacent to the CG, which may land anywhere on the line beyond.

Lion LI: a grasshopper which can move to any square beyond the hurdle, which may be at any distance.
Rook-lion RL \& Bishop-lion BL: lions confined to R/B lines.
Pao PA: Moves as a R but captures by hopping over a hurdle at any distance to any square beyond, i.e. like a rook-lion.

Locust L (=Queen-locust): a piece which moves only to capture. It lands on the same squares as a grasshopper, but the arrival square must be empty, because the locust captures its hurdle.
Rook-locust LR \& Bishop-locust LB: locusts confined to R/B-lines.
[Note: hoppers (including all the abovementioned pieces) are line pieces, and so subject to interference and able to pin.]

Edgehog EH: Moves as a Q, but either to or from the board edge, not both
Leapers: $(\mathbf{1}, \mathbf{6} / 6,1)$ (sometimes called Flamingo) $\&(0,3 / 3,0) 3 L$ : Like the knight, which is a $(1,2 / 2,1)$-leaper, they move directly to squares at the stated distance, with no possible line-effects.

Note on computer testing in Fairings:
Problems in Fairings are tested by Popeye wherever possible.
In this issue problem 4 has not been fully computer-tested (retro-element).
Problems $\mathbf{6}$ and $\mathbf{1 2}$ were tested by Alybadix.

