## BEST PROBLEMS

 Rassequa dei migliont problemidiretta da Antonio Garofalo

Anno XXVIII- n. 110
2ㅇ/2024-April

Col sostegno dell'API (Associazione Problemistica Italiana)

## Hanno collaborato a questo numero:

Thomas Brand, Mr. Veneziano, Awani Kumar.

## EDITORIALE

Welcome to Germán Bielefeldt, José Luis Velasco, Uberto Delprato for their first publication on Best Problems.

$\leftarrow$ Kostas Prentos - Original - Out competitions.
r3n3/pbbp1ppp/5kn1/8/8/8/P1PPP1PP/RNBQKBNR
SPG $11.0 \quad(14+11) \mathrm{C}+$



Comment by Author: A Schnoebelen and a Prentos Knight promote on the same square (d8). A Rook captures the former and is captured by the latter. White homebase.

## Memorial Tourney Jorge Marcelo Kapros 2024-2025

Kapros died in Moreno, Province of Buenos Aires, on August 27, 2023 at the age of 67. During his life, he resided in the city of El Palomar, Argentina. He had the title of International master of the FIDE for chess composition.
The Unión Argentina de Problemistas de Ajedrez (UAPA) organizes the Memorial Tourney Jorge Marcelo Kapros, containing three sections - Theme free:
Twomovers ( $\neq 2$ ) Judge: Miguel Uris (Spain)
Helpmates ( $\mathrm{H} \neq 2$ ) Judge: Ricardo de Mattos Vieira (Brazil)
Helpmates ( $\mathrm{H} \neq 3$ ) Judge: Jorge Joaquín Lois (Argentina)
Please send your entry with diagram, full solution, name and address of author, to the tournament director: Mario Guido García, producer and editor the UAPA.
E-mail: marioggarcia@gmail.com - All received problems will be presented to the judge in anonymous form.
Prizes, Honourable Mentions, Commendations and Special Nominations will be awarded.
The preliminary and final award will be published in mid- 2025 will be available in the website https://www.problemistasajedrez.com.ar, and will be sent to all participants by e-mail - Closing date: $30^{\text {th }}$ November 2024.

## Please reprint

## Inediti (Originals)

5862. G. Sardella Italia
5863. G. Bielefeldt

Cile
$\neq 2(12+12) \mathrm{C}+$
5867. J.A. Garzon \&
M. Uris - Spagna

5864. G. Bielefeldt Cile
5865. F. Magini Italia

$\neq 2^{*}(10+9) \mathrm{C}+$
5866. M. Uris

Spagna

$\neq 2(14+9) \mathrm{C}+$
5868. J.L. Velasco

Spagna

$\neq \mathbf{2}$ v(7+7) C+
5869. L. Lyubashevsky
\& L. Makaronez Israele

$\neq 2 \mathrm{v} . . .(10+14) \mathrm{C}+$
5870. D. Gatti Italia

$\neq \mathbf{2}$ v (12+11) C+
5871. A. Pankratiev Russia

$\neq 2(8+8) \mathrm{C}+$
5872. A. Pankratiev
\& Y. Gorbatenko Russia

*3* (11+12) C +
5873. M. Uris

Spagna

$\neq \mathbf{3}$ vvv (11+8) C+

$\neq 3$ v (10+12) C+

$\neq 3(9+12) \mathrm{C}+$

$\mathrm{H} \neq 2(5+7) \mathrm{C}+$ 2 sol.
$\neq 2$, n. 5862-5868 (Judge 2024: NN
$\neq \mathbf{3}$, n. 5869-5872 (Judge 2024-2025: Antonio Garofalo).

$\mathrm{H} \neq 1,5(2+5) \mathrm{C}+$ 8 sol.
5878. M. Vasyuchko \& M.T. Galma Ucraina

$\mathrm{H} \neq 2(5+6) \mathrm{C}+$ 2 sol.
5882. A. Pankratiev Russia
5875. J.J. Lois

Argentina

$\mathrm{H} \neq 2$ (5+13) C+ 2 sol.
5879. A. Armeni Italia Ialia

$\mathrm{H}=2(6+3) \mathrm{C}+$ 2 sol.
5883. A. Pankratiev \& I. Antipin Russia

$H \neq 3^{*}(3+3) \mathrm{C}+$
5876. L. Makaronez Israele


H $=2$ (3+9) $\mathbf{C}+$ 2 sol.
5880. A.V. Ivunin \& A. Pankratiev Russia

$\mathrm{H} \neq 3(3+12) \mathrm{C}+$ 2 sol.
5884. E. Zimmer Polonia

$\mathrm{H} \neq 3 \quad(3+3) \mathrm{C}+$
b) 둡 $\mathrm{d} 8 \rightarrow \mathrm{f} 8$
5877. E. Zimmer Polonia

$h=2 *(3+4) C+$
5881. A.V. Ivunin \& A. Pankratiev Russia

$\mathrm{H} \neq 3(3+13) \mathrm{C}+$ 4 sol.
5885. V. Koci Rep. Ceca


H $\neq 3(2+12) \mathrm{C}+$
b) ${ }^{\Omega} \mathrm{d} 6 \rightarrow \mathrm{~h} 6$
$\mathbf{H} \neq \mathbf{2 ,} \mathbf{H}=\mathbf{2}, \mathbf{n} .5873-5879$ (Judge 2024-2025: NN
$\mathbf{H} \neq \mathbf{2 . 5} / \mathrm{H} \neq \mathbf{3}, \mathbf{H}=\mathbf{2 . 5} / \mathbf{H}=\mathbf{3}$, n. 5880-5885 (Judge 2024-2025: NN).
5886. A.V. Ivunin
\& A. Pankratiev
Russia

$\mathrm{H} \neq \mathbf{3 , 5} \quad(3+8) \mathrm{C}+$ 2 sol.
5890. M. Degenkolbe \& R. Wiehagen

Germania

$\mathrm{H} \neq 5,5(2+7) \mathrm{C}+$
b) Eb3 $\rightarrow$ b7
5894. S. Luce

Francia

hs $\neq 3(1+3+1) \mathrm{C}+$
b) $\mathbf{\alpha} \mathbf{a} \mathbf{2} \rightarrow \mathrm{e} 6$

Alphabetic Chess
5887. S. Hudak Slovacchia

$\mathrm{H} \neq \mathbf{3 , 5}(3+7) \mathrm{C}+$ 2 sol.
5891. F. Magini Italia
$\mathrm{H} \neq 6(2+7) \mathrm{C}+$
$\mathrm{H} \neq 6$
1 sol.
5895. S. Luce
Francia
5895. S. Luce
Francia


$$
\begin{aligned}
& \mathrm{H}=4(3+6) \mathrm{C}+ \\
& \text { 㞗=Grasshoppers }
\end{aligned}
$$

5888. Z. Mihajloski Macedonia del Nord
5889. U. Delprato \& R. Cassano Italia
$h s \neq 3(7+11) \mathrm{C}+$
b) $\boldsymbol{S}^{\mathbf{Q}} \mathrm{h} 8 \rightarrow \mathrm{c} 3$
5890. L. Kekely

Slovacchia

sh=8 (1+4) C+
b) $\boldsymbol{\alpha} \mathbf{a} 7 \rightarrow \mathbf{b} 7$

Without check
到=Lion
$\mathbf{H} \neq \mathbf{n}, \mathbf{n}$. 5886-5891 (Judge 2024-2025: Antonio Garofalo). $\mathbf{h s} \neq \mathbf{\neq} / \mathbf{n}, \mathbf{n}$. 5892-5893 (Judge 2024-2025: NN).

5898．S．Luce
Francia

$\mathrm{H} \neq \mathbf{6}(1+3) \mathrm{C}+$
f2＝Royal piece
$\bar{m}=$ Grasshopper
沺＝Multi－Vizir
部 0 ＝Aigle（Eagle）
5902．H．Nieuwhart Olanda
$\mathrm{H} \neq 3(4+5) \mathrm{C}+$ 2 sol．PWC


5899．S．Luce
Francia

sd＝23（3＋12）C＋ $\mathrm{S}=$ Shooter Grasshopper／Knight

5903．L．Kekely
Slovacchia

ss $=14$（7＋5）C＋ C＋from Author

5900．I．Bryukhanov
Ucraina


S $\neq \mathbf{8}(4+2) \mathrm{C}+$
Circe

5901．M．McDowell
Gran Bretagna

$\mathrm{H} \neq 2(4+5) \mathrm{C}+$ 2 sol．
Anti－Kings

5904．S．Luce Francia

hs $=5(8+4) \mathrm{C}+$ $\bar{m}=$ Grasshopper

5905．G．Tar Ungherìa

hs $\boldsymbol{\neq 2 , 5} \quad(8+10) \mathrm{C}+$ Zeroposition：
a）
b）誊 $\mathrm{f} 5 \rightarrow \mathrm{f8}$
Anticirce

Fairies n．5894－5905（Judge 2024：（NN）．

## Note agli inediti（Fairy elements）

$\mathrm{sh}=$ aiutomatto a serie（Serie helpmate／helpstalemate）．
hs＝helpselfmate．
sd＝diretti a serie（Serie direct）
ss $=$ serie selfmate
－Alphabetic Chess（Alphabétiques）：Each move of either side must be by the piece occupying the first square in the order of $\mathrm{a} 1, \mathrm{a} 2, \mathrm{a} 3 \ldots \mathrm{~b} 1, \mathrm{~b} 2, \mathrm{~b} 3 \ldots \mathrm{c} 1, \mathrm{c} 2, \mathrm{c} 3 \ldots$ etc．，which is able to make a legal move．Castling is permitted if the King has the right to make a legal alphabetical move， provided the usual other rules for that move are obeyed．

- Anticirce: On making a capture, any unit (including K) is reborn on its game-array square (as determined according to Circe rules), and the captured unit disappears. Since rebirth is obligatory, a capture is legal only if the relevant rebirth-square is unoccupied. A capture may be made from a rebirth-square. Promotion with capture is legal provided the rebirth-square of the promoted unit is unoccupied. In Anti-Circe type Calvet capture on a rebirth-square is allowed (it is default type if type is omitted). In Anti-Circe type Cheylan capture on a rebirth-square is not allowed.
- Anti-Kings: A King is in check, if it is not attacked.
- Circe: When captured, a piece (other than King) is reborn on its game-array square. Rook, Bishop and Knight are reborn on the square that is the same color as the square of the capture, Pawns on the file of the capture. If the game-array square is occupied, the captured piece disappears, as in a normal capture. Castling is permitted with a rebom Rook. Fairy pieces are regarded as being the result of promotion and so are reborn ori the promotion-square ori the file of the capture.
- Eagle=Aigle: Se déplace comme une Sauterelle (Sauteur( 0,1 )+(1,1)), ma dévie de $90^{\circ}$ (dans un sens ou dans l'autre) au-dessus du sautoir. La case d'arrivée est contiguë au sautoir. [Si muove come un Grasshopper ma devia di $90^{\circ}$ in un senso o nell'altro appena dopo l'ostacolo. La casa d'arrivo è contingua all'ostacolo. - Moves like a Grasshopper but deflects $90^{\circ}$ in one sense or another just after the obstacle. The arrival square is adjacent to the obstacle.]
- Grasshopper: Moves along Queen-lines over another unit of either colour to the square immediately beyond that unit. A capture may be made on arrival, but the hurdle is not affected.
- Lion: Moves and captures like a Grasshopper, but its arrival square may be any number of squares beyond the hurdle, provided the line is clear.
- Multi-Vizir::Can play many consecutive moves of Vizir $(0,1)$ till it captures.
- PWC = PlatzWechselCirce: A captured unit is reborn, according to Circe rules, on the departure square of the capturing unit. (Quando viene fatta una cattura, l'unità catturata viene piazzata nella casa del pezzo che l'ha appena catturata, in pratica scambiandosi il posto con il pezzo catturante.)
- Royal piece: = Royal unit, a unit having the function but not the move of a King. A threat to capture it is check, and if this threat cannot be removed the position is one of checkmate.
- Shooter Grasshopper/Knight: Moves without capture like a Grasshopper and captures like a Knight.
- Without check: Sans échec: Un échec qui n'est pas un mat est illégal. [Uno scacco che non sia scaccomatto è illegale.]


## Soluzioni Inediti

Fascicolo n. 110
Commenti degli autori e del redattore.
5862. ( $\neq 2$, Giuseppe Sardella)
n1N4b/K2B1nRr/Q1p4q/p1Pk1P2/8/3N1P2/4r3/B7


1. 亘 $\mathrm{g4} 4$ ! [2. 莶 $\mathrm{c} 4 \ddagger$ ]



Rukhlis

## 5863．（ $\neq 2$ ，Germán Bielefeldt）

b7／r1p5／1P2p1K1／N3kp2／QP4R1／p2Rp1P1／Pn2P2N／1n3rbB

## 1．数 c6！tempo






## 5864．（ $\neq 2$ ，Germán Bielefeldt）

8／2p3Bb／2P3pQ／1R1ppN2／NbP1k1PP／3pP1PK／7n／3BR3
1． d $^{2}$ ！tempo



## 5865．（ $\neq 2$ ，Fabio Magini）

8／4R3／p1KN1np1／8／2pkp3／Q7／2P1P3／N2n4
1．总e6？tempo

1．断 g3！tempo

Feldmann 2，Somov B2，Rukhlis condensé（WinChloe）
5866．（ $\neq \mathbf{2}$ ，Miguel Uris）
3NbKB1／1pp2n2／2r3Q1／1Npkp1R1／r3p3／BP1n1P2／7p／3R2bq

1．燃e $6+$ ？ma $1 \ldots$ 胃xe6！a


1．黑 $\mathbf{b 2}$ ！［2．箅xe5 $\ddagger$ ］

Kharkov 1 －Separation of refutations－Defences on same square
5867．（ $\neq \mathbf{2}$ ，José Antonio Garzon \＆Miguel Uris）
N2B2K1／1Bn1pR2／3p2p1／Rnk5／P3P3／PP1bP2Q／2p1p3／r2r4



Comment by Authors：




1．．．d5 2．Bxe7\＃（営 pin－宪 mate）
1．．．©e6 2．寞b6 $=1$ 1．．．Bc4 2．b4\＃
Exchange of functions（Pin／Mate）；Pin－mate（x6）；Changed mate．

## 5868．（ $\neq \mathbf{2}$ ，José Luis Velasco）

5Qb1／2p3K1／4pP2／2ppk3／3RP1p1／b3B1P1／3N4／8
1．䋩 e 8 ！［2．暈 $\mathrm{xd} 5 \ddagger$ ］

Comments by Author：Flight giving key，Selfblock－Pinning－Line opening．

5869．（ $\boldsymbol{*}$ 3，Leonid Lyubashevsky \＆Leonid Makaronez）
8／K2Npb2／2R1PPr1／1Pp3pp／1Pp1k3／4b1P1／3RQppP／1n6
$1 .$. ．




1．．．exf6 2．管cd6［3．气xc5 $\ddagger$ ］
Comments by Authors：Changed mates，Active sacrifice．

## 5870．（ $\neq 3$ ，Daniele Gatti）

1R1K2Q1／6P1／kB1P1p2／2P2p2／2P5／1p2R2B／5p2／N4qrb
1．茴 $\mathrm{a} 8+? 1 \ldots$ 賭xa8！


1．宣 $\mathbf{g 2 !}$［2．党 $\mathrm{a} 8 \ddagger$ ］



After 3875．Daniele Gatti，Best Problems 2017， $5^{\text {a }}$ Lode
1R3N2／8／kB6／2P2P1p／P1p5／4p2Q／KP3p1p／1BN2qrb－$\neq 3(11+9) \mathrm{C}+$
1．





5871．（ $\neq 3$ ，Alexandre Pankratiev）
8／prP1pBpb／1P2P1P1／3N1kpr／1RR2P1p／4pP1q／6n1／8





$1 \ldots$ axb6 2．气xb6＋筸f6 3．气d7 $\ddagger$
Batterie de Siers，Mat（suite）changé（e）au moins 2 fois（WinChloe）．

## 5872．（ $\neq 3$ ，Alexandre Pankratiev \＆Yuri Gorbatenko）

8／1n6／bpN5／2pPR2Q／BpkpN3／1Rp2r2／2Pp1r2／1Kb5




Keller（paradoxe）；（WinChloe）．
5873．（ $\mathrm{H} \neq 2$ ，Miguel Uris）
2B2Kn1／8／n3q3／1p1k4／R2P4／2pp4／4P3／8



Comments by Author：Chumakov theme（b－s，simplified，2，2）
Exchange of functions（bSa6／bBe6，Captured／Pinned）
Exchange of functions（wRa4／wBc8，Mate／Passive pin）
Model mates（x2）－Anticipatory self－pin（x2）－Distant selfblock（x2）
Meredith

## 5874．（H＝1．5，Valery Liskovets）

n7／KR6／8／kr6／pp6／8／8／8



Comments by Author：
$\mathrm{h} \# 1.5$ miniature－task： 8 solutions in the Neumann form without repetitions．
$8=6+1+1$（solutions are of 3 types）．
8 sol．is the presumable record among 1．5－and 2－movers with 8 or less pieces excepting the absolute record－tanagra https：／／pdb．dieschwalbe．de／P0564727 by Mintz with 12 （trivial，uniform） solutions．Closest is the recent problem https：／／pdb．dieschwalbe．de／P1400481 by Grinchenko （Problemist Ukrainy，2022，h\＃1．5）with 9 pieces and 8 sol．
－Active sacrifice（black）$\times 6$ • AntiZielElement（W1，self－pin）• Hideaway（bR，sacrificial）$\times 6$
－Hideaway（wK）• Self－pin／unpin（white）• Tempo move（bP，waiting）• Model mate $\times 6$
－Umnov．
（Apropos，in general，the PDB contains $300+\mathrm{h} \# 1.5$－problems including $80+$ miniatures without twins．）
5875．（H＝2，Jorge J．Lois）
8／8／Kn3rp1／1n2kpN1／1N4p1／B4qp1／3pbpp1／7Q

Comments by Author：
Thematic content：• Self－block（bQf3）$\times 2 \cdot$ Bi－valve（wSb4－wBa3－bBe2）
－Bi－valve（wSb4－wBa3－bRf6）• Model mate $\times 2$ • Pin－mate $\times 2$
5876．（Hキ2，Leonid Makaronez）
1r1q4／5p2／3Q1n2／2n5／3K4／pkP5／1r6／2b5

5877．（ $\mathrm{H}=2$ ，Eligiusz Zimmer）
8／8／8／2B3np／5p2／5P1k／5K2／8


## 5878．（H $\neq 2$ ，Mikola Vasyuchko \＆Mikhaïlo T．Galma）

1nk5／2pp4／Ppp5／NP6／3K3B／8／8／8
1．bxa5 b6 2．a4 b7ף 1．cxb5 气c6 2．b4 气a7†
Comments by Authors：Exchange of functions（bPb6／bPc6，Active piece／Passive）
Exchange of functions（ $\mathrm{wSa5} / \mathrm{wPb} 5$ ，Captured／Mate）
JT Onkoud 50 theme
Tempo move（bP，waiting，type 1 ）$\times 3$
Zilahi（passive，SP，2）
Model mate $\times 2$［View in Helpmate Analyzer］
5879．（H＝2，Alberto Armeni）
8／N7／8／2K1k1P1／1P3p2／5P2／8／r2B4

Zilahi，Sacrifice noir，Captures réciproques，Pats modèles（WinChloe）
5880. (Hキ3, Alexeï V. Ivunin \& Alexandre Pankratiev)

8/3R1ppp/4p2B/8/2np4/5k1p/r5r1/2Kbb3

5881. (H $\mathbf{H}$ 3, Alexeï V. Ivunin \& Alexandre Pankratiev)

2n1r3/8/2KR1p1p/2p1ppp1/3pk1r1/2bp4/8/2B5


Comments by Authors: BK moves only, Chumakov theme (pp, 2), Helledie theme,
Hideaway (bS) [View in Helpmate Analyzer]
5882. ( $\mathrm{H} \neq 3$, Alexandre Pankratiev)

8/8/2K5/8/2p5/1rkN4/1N6/8

Chumakov, ideal mate.
5883. (H $=3$, Alexandre Pankratiev \& Ivan Antipin)

8/3pq3/1r3pn1/2pkB3/2n1Rp2/4p3/2K5/8


5884. (H $\neq$ 3, Eligiusz Zimmer)

2bK4/NrN5/1k6/8/8/8/8/8

5885. ( $\mathrm{H} \neq 3$, Vladimír Koci)

1b6/2p5/r1rP2p1/5n1b/4pk2/4np1K/q7/8

5886. ( $\mathrm{H} \neq 3.5$, Alexeï V. Ivunin \& Alexandre Pankratiev)

8/2p4B/2pb2Rn/8/2p1k3/1q3r2/8/K7


Umnov différé, Mats modèles, Mats sur la case initiale du Roi adverse (WinChloe)

## 5887. (H $=3.5$, Stanislav Hudak)

6bK/8/2pbr3/2rkp3/8/1P6/B7/8


5888. (H $\neq 4$, Zlatko Mihajloski)

8/r7/nk6/1q1B4/1P6/8/p7/n1K5



Comments by Author: • Bukovina theme, - Consecutive Umnov (B-W, qPkP, 2) • Reciprocal
capture (bS/wP), • Model mate $\times 3$

## 5889. (H $=5$, Uberto Delprato \& Roberto Cassano)

$6 \mathrm{~K} 1 / 5 \mathrm{p} 2 / 7 \mathrm{r} / 8 / 3 \mathrm{k} 4 / 6 \mathrm{~b} 1 / 2 \mathrm{P} 5 / 7 \mathrm{~B}$


5890. ( $\mathrm{H} \neq 5.5$, Mirko Degenkolbe $\&$ Rolf Wiehagen)

8/8/5k2/3p4/4B3/prp5/p7/b1K5



Comments by Authors：
－Kniest on the SAME square（a2），in a）by wK，in b）by wB．
－In a），Rundlauf of wK in 5 moves；in b），Rundlauf by wB in 4 moves（e4－－＞e4）\＆switchback wB（d5），and Kozhakin．
－Mating move of $a$ ）＝Key move of b）．
－Identical model mate．－Minimal and 9 pieces．－Identical black play．
Two pieces for comparing：
P1380021－also Kniest on the SAME square（h3），but no Rundlauf neither of wK nor of wB．
P1394232－also Rundlauf of wK（in 4 moves，only），and Rundlauf of wB（d2－－＞d2）；but Kniest on DIFFERENT squares（ $\mathrm{c} 5 \& \mathrm{f} 4$ ）and almost doubling the number of black pieces from 7 to 13 ．
5891．（H $\neq 6$ ，Fabio Magini）
r4k2／2b2p2／8／8／8／1p6／1P6／rn5K

5892．（hs $\neq 3$ ，Mikola Vasyuchko \＆Mikhaïlo T．Galma）
4B2b／4p3／P3k2q／2PN1pnp／1p1P4／7p／3p2pK／6N1


Switchback di e 宽 per liberare una linea nera ostruita．Un lavoro interessante．

## 5893．（hs $\neq$ 3．5，Jorge J．Lois）

8／3R1B2／3NN3／PP1kp1rb／K7／P7／8／8


Echo diagonal－orthogonal，Batteries réciproques（WinChloe）
Comments by Author：Thematic content：Dismantling a white direct battery and creation a black direct battery．［Un altro helpselfmate interessante．］

## 5894．（hs $\neq 3$ ，Sébastien Luce）



Comments by Author：
Unique example of AUW in hs\＃n with ABC only．Neutral Bishop or Knight of promotion comes to give a check on the＂ h ＂file and black mating move is forced by an effect of the condition．Also note in b）that 2．Sne7？is not good as black Queen on c1 would have to play the next move．
5895．（H＝4，Sébastien Luce）


Comments by Author：
In a＂very horizontal position＂two pinned stalemates on the first rank．
One with a black Grasshopper pinned on c1，the second with a black Knight on the same square．
5896．（sh＝8，L＇ubos Kekely）


Comments by Author：Tanagra．Double excelsior．Minor promotions．Analogies．Ideal stalemates．
5897．（Hキ7．5，Sébastien Luce）
8／8／k7／8／8／pr6／1r6／1NK5

气c3 $\ddagger$ Comments by Author：White Knight rundlauf and Kozhakin．Black has to promote to Bishop to avoid a move by the piece of promotion．
5898. ( $\mathrm{H} \neq 6$, Sébastien Luce)
1.Se4 AIf5 2.Sg1 AIg2 3.MVRf3 AIg4 4.Sh4 AIe4 5.MVRh1 AIh3 6.Sh2 AIg2 $\ddagger$
1.MVRb5 AIb4 2.MVRc3 AIb2 3.Sb1 AIb4 4.Sa4 AId4 5.MVRa1 AIa3 6.Sa2 AIb2 $\ddagger$
1.MVRc6 AId7 2.Se7 AIb7 3.Sa7 AId7 4.Sd8 AId5 5.MVRa8 AIc8 6.Sb8 AIb7 $\ddagger$

Comments by Author: Triple echo on the corners h1, al et a8. Despite its great power, the MultiVizir, incarcerated by the black Grasshoppers, is mated by the Eagle.
5899. (sd=23, Sébastien Luce)
1.TSCf8 2.TSCxd7 3.TSCa7 4.TSCc7 5.TSCc1 6.TSCh1 7.TSCa8 8.TSCc6 9.TSCxa5 10.TSCxb7 11.TSCb2 12.TSCb4 13.TSCxc2 14.TSCxa1 15.TSCxb3 16.TSCh3 17.TSCxg1 18.TSCxe2 19.TSCxg3 20.TSCxh5 21.TSCh8 22.h5 23.h6=

Comments by Author: Long rundlauf with four corners theme by the shooter Grasshopper/Knight (TSC).
5900. (S $\neq 8$, Ivan Bryukhanov)

3Q4/1N6/8/8/kr6/8/K7/2N5


5901. (H $\mathbf{2}$, Michael McDowell)

8/8/5pK1/3R2q1/P2kp3/3pB3/8/8

5902. (Hキ3, Hans Nieuwhart)

8/3p4/4Np2/2p2k2/1P1r4/4P3/8/K7


5903. (ss $\neq 14$, L'ubos Kekely)

6b1/5p1k/p7/5PP1/1R6/n7/PKP5/B7


5904. (hs $\neq 5$, Sébastien Luce)

1B6/7P/2p4P/^q1Pp4/2pK4/4P3/P7/6N1

Comments by Author: Four corners theme by black Grasshopper with a surprising promotion to white Grasshopper at the beginning. White Knight f 3 avoids the escape of Grasshopper c3.
5905. (hs $\neq 2.5$, Gábor Tar)

8/pNR3B1/R1p1k3/2p2q2/2P1Bp1N/6p1/1r3r2/3K1n2



## I concorsi su Best Problems:

- $\neq 2 /=2,(2023 / 2024): ~ N N$
$\cdot \neq 3 /=3$, (2024-2025): Antonio Garofalo
- $\mathrm{S} \neq 2 / 3-\mathrm{S}=2 / 3$ (2024-2025: Antonio Garofalo
- $\mathrm{H} \neq 2 / \mathrm{H}=2$, (2024-2025): NN
- $\mathrm{H} \neq \mathbf{2 , 5} / \mathbf{3}-\mathrm{H}=\mathbf{2 , 5} / \mathbf{3}$, (2024-2025): NN
- $\mathbf{H} \neq \mathbf{n} / \mathbf{H}=\mathbf{n}$, (2024-2025): Antonio Garofalo
- HS $\neq 2 / 3 / n$ (Orthodox helpselfmate) 20242025: Antonio Garofalo
- Fairies (2024): NN

E-mail \& web site: perseus@bestproblems.it http://www.bestproblems.it

## Marco Bonavoglia Memorial Tourney

## Award by Thomas Brand

It was a very sad honour for me to be invited to judge this tourney: It's the second time I took over the judgement of an intended Jubelee and now a Memorial Tourney: The first one was the intended Wolfgang Dittmann 80 Tourney.

Both Wolfgang and Marco were very interested not only generally in retros, but liked the exploration of different fairy conditions in retrograde analysis: While Wolfgang since the new millennium focused on Anticirce in Proca defence retractors, in his younger years he often dealt with illegal clusters and last movers - including those based on fairy conditions. And both met a few times - at Andernach and during Wolfgang's business stay in Italy.

And I liked it very much to meet with both: Not only to discuss on problem chess and specifically retrograde analysis, but because both were very likeable dialogue partners in discussions on a wide range of topics.

So it was a great honour when tourney director Antonio Garofalo asked me to act as judge for the now rededicated memorial tournament, where the announced theme was "Last move?" problems with any fairy conditions (Fairy pieces are not allowed unless the initial game array is clrearly stated).

Antonio sent me a file with 15 contributions (frankly, I had hoped for more participants) from the following authors (* indicates co-productions): Themis Argirakopoulos 9*, 10*; Allan Bell 6, 7; Dirk Borst 5; Michel Caillaud 14; Jacques Dupin 13*; Theodoros Giakatis 9*, 12; Maryan Kerhuel 13*; Enzo Minerva 15; Ladislav Packa 11; Kostas Prentos 9*, 10*; Paul Raican 1, 2, 3, 4; Manfred Rittirsch 8.

Intensive checks - I am very grateful to Hans Gruber for his valuable support - resulted in the exclusion of a few problems:

2: (Kh8/Kb8, 12+4): anticipated by Plaksin \& Kornilow feenschach 1988 (P0008680).
6: (Ke4/Kc6, 4+3): cooked, many other solutions like Pd5xS/Bc4.
7: (Ke1/Kg1, 4+11): cooked, for example a) Kd1xSel\#, b) Qe5xPf4.
9: (Kg8/Ke4, 9+2): no solution, since the intended e.p. capture recolours $\operatorname{Pg} 7$.
10: $(\mathrm{Kg} 6 / \mathrm{Kd} 5,19+1)$ no solution according to our understanding of the "Masand Generalized" definition given together with 10 :
See the diagram "Position before -1.Sd1-e3" (i.e. the position when exactly 1 single move is retracted - notabene, the solution move we are looking for). Then play the move forwards in the diagram: 1.Sd1-e3. After this move (obviously a check, so bQf5 and bPg4 are recoloured) the queen rebirth square is free, so all white queens check and recolour all the pieces they observe/cover, so all knights and bishops (thankfully queens don't observe each other ...)
So it is ALSO true: 1.Se3+ leads to the wQd4 (which now checks) - recolouring the wSe3! So there should be a BLACK Se3 in the diagram - but there isn't!
12: $(\mathrm{Ke} 1 / \mathrm{Ke} 5,4+2)$ : no solution in b$)$ : R 1.Rc3xPh3 [wRh1]+ is illegal because the resulting pawn constellation $\mathrm{bPh} 3 / \mathrm{wPh} 7$ is illegal in Anticirce, and the additional Circe condition does not change this.
15: ( $\mathrm{Kg} 1 / \mathrm{Kh} 3,9+1$ ): cooked, since for a "last move" problem to be correct the last move must be completely be determined - including captures. This is not the case in b), where the black man captured might have been a Knight, a Rook, or a Queen.

The quality of the remaining problems seems me to be from "average" to "excellent", so I decided to integrate six out of the eight now to be considered problems into the award. Brief remarks on the two not included:
1: $(\mathrm{Kd} 4 / \mathrm{Ke} 1,4+9)$ : Obvious last (checking) move; the only Rex Multiplex use is to fix the white Queen - so "too orthodox" in my mind.
4: (Se1,Sb7, 4+2): Indeed, $\mathrm{Co}+$ with 488 proof games in 14.5 (no shorter one), all ending with 15.RglxQd1 - but do I overlook any specific "last move?" arguing? Note, the unique last move is only forced by the "proof game time pressure", not by any retro arguments. (Compare 14)

Now let's switch to the awarded problems:


$\leftarrow 1^{\text {st }}$ Prize: 14 ) Michel Caillaud<br>rlb3k1/S2S1SpS/8/4Q3/3P2RR/sSB1S3/5K1P/1b3BSR<br>Last move? (16+6) - Einstein<br>1.e4 Sa6(P) 2.e5 a5 3.e6 a4 4.exf7(S) e6 5.c4 Bd6(S) 6.c5 Se7(P) 7.c6 0-0(Bf8) 8.cxd7(S) c6 9.b4 c5 10.b5 c4 11.b6 c3 12.bxa7(S) Qb6(R) 13.Sxc3(B) Rb1(B) 14.g4 b6 15.g5 b5 16.g6 b4 17.gxh7(S) b3 18.axb3(S) e5 19.Rxa4(Q) e6 20.Qh4(R) e4 21.d4 e3 22.Bxe3(R) e5 23.Rxe5(Q) Se4(P) 24.Qg4(R) e3 25.fxe3(S) Ba3(S) 26.Ke1-f2!

«In Einstein Chess, any move of a unit except Kings and non capturing Pawns changes its nature. So that the total number of moves of a non capturing player (as is the case for Black in this problem) is limited, except for the King moves.
As Black didn't capture, there is only 1 explanation for some pieces : Dd8-b6(T)-b1(F) and Ff8a3(C) (with Ff8 either original or issued from Th8-f8(F))
Some captures by white are clear: $a \times b 3(C), b \times a 7(C), c ̧ \times d 7(C)$, é $\times f 7(C), f \times e ́ 3(C), g \times h 7(C)$, $\mathrm{C} \times$ ç $3(\mathrm{~F})$ and Dé 5 comes from $\mathrm{Fç1} 1$ after 2 captures $\mathrm{F} \times$ é $3(\mathrm{~T}) \times$ é5 $(\mathrm{D})$ or $\mathrm{F} \times \mathrm{g} 5(\mathrm{~T}) \times$ é5(D).
The last 10th white capture accounts for $\mathrm{Tg} 4, \mathrm{~h} 4 . \mathrm{Tg} 4$ is the original Dd 1 after $\operatorname{Dg} 4(\mathrm{~T})$, and Th 4 is
Ta1 after $\mathrm{T} \times$ a4 (D)-h4(T) or Tél $1(\mathrm{~F}) \times \mathrm{h} 4(\mathrm{~T})$
Only $\mathrm{T} \times \mathrm{a} 4(\mathrm{D})$-h4(T) accounts for capture of Cb 8 captured as a Pawn on file a, ç or d.
Some sequences can be ordered. The critical one is : ç $\times \mathrm{d} 7(\mathrm{C})$, ç7 to ç3+ $\mathrm{Db} 6(\mathrm{~T}), \mathrm{C} \times$ ç3(F), $\mathrm{Tb} 1(\mathrm{~F}), \mathrm{a} \times \mathrm{b} 3(\mathrm{C}), \mathrm{T} \times \mathrm{a} 4(\mathrm{D})$ and at last $\mathrm{Fa} 3(\mathrm{C})$ When Ff 8 leaved, f 8 was controled since long by Cd7.
So that black King was already in g 8 (after $0-0(\mathrm{Ff} 8)$ ). As h 8 is controled by Cf 7 before original Ff8 moved, black King played only one move in the game! Now as black King is restricted the exact number of black moves (25) is known with 2 variations for the original Bf8 : Ff8-c5,d6(C)-é4(P)-é3 for Fç $1 \times$ é3(T)×é5(D) or Ff8-é7(C)-g6(P)-g5 for Fç $1 \times \mathrm{g} 5(\mathrm{~T}) \times$ é5(D)
At the same time, minimal number of white moves can be determined to 26 , so white played the last move, and the retroplay is under pressure as white has to make black moves available.
The try $\mathrm{F} \times \mathrm{g} 5(\mathrm{~T}) \times$ é $5(\mathrm{D})$ fails :
26.Tg5×Pé5(D) $25 . \mathrm{Ff} 8-\mathrm{a} 3(\mathrm{C})$ Ré1-f2 24.é6-é5 f2×é3(C) 23.é4-é3 Fç1×Pg5(T) 22.g5-g6 d2-d4 21.Cé7-g6(P) Dd1-g4(T) 20.é5-é4 Da4-h4(T) 19.???

So the last move is 26.Rél-f2!!
It happens that time pressure makes all the moves determined until the initial position!! So that the stipulation could also be "Last 25,5 moves?" as well as "Proofgame in 25,5 moves" or simply "Proofgame?" as move number is superfluous.» Comment by Author.

With use of only one (of course well-chosen) fairy condition the author manages to create a truly "retro without words": You may start with the initial game array and try to play to the diagram position, you will notice that this game is unique with 25.5 moves - or you might retract from the diagram, and you will reach the initial game array just 25.5 moves before with a unique retraction order. The technical clue is that the black King has only moved once (castling); the Knights on $\mathrm{d} 7, \mathrm{f} 7$, and h 7 are not only there so that White has many moves and thus the order of White and Black is determined, but also and very importantly so that the black King is immobilised -because the Einstein condition rule says that kings and non-capturing pawns would ruin everything. (And of course White has 16 pieces as a basic prerequisite for Black never being able to benefit from the Einstein capture upgrade).
Clearly number one in this tourney!


## $\leftarrow \mathbf{2}^{\text {nd }}$ Prize: 5) Dirk Borst

Last move? (13+7)
5Rn1/2pp4/p1r1P3/6p1/2P5/3P4/PPkPBP2/RN3RK1
Zeroposition: a) + a 5 b) + b8 $\quad$ c) $\boldsymbol{\phi} 5 \rightarrow \mathrm{~h} 5$
Monochromatic
Solutions:
a) 0-0
b) $8 g 7 x$ 吾 $f 8=$ 営
c) $\} f 5 x e 6$ e.p.

Valladao.
«In all three, Black has no legal last move, so White made the last move in each. White's retraction must enable Black to retract a legal move.
In a) not $\mathrm{gxTf8}=\mathrm{T}$ ? because wTf8 captured $\mathrm{Sb8}$. After f5xe6 e.p.? the bD cannot get back home.
In b) not $0-0$ ? because the wK captured the a-pawn. After f5xe6 e.p.? the bD cannot get back home. In c) not gxTf8=T? because wTf8 captured Sb 8 . Not $0-0$ ? because the wK captured the apawn.» Comment by Author.

Using Monochromatic specifics the author manages to make two of three possible last moves "all being" special moves" forming the Valladao task- cyclically illegal in the three positions.
Even the fact that Black has no last move, so White must start the retraction is motivated by the fairy condition used. It was much fun to figure out the detailed intelligent reasoning for the uniqueness of last move in the three positions - but the Zeroposition with quite unbalanced twinning is a drawback.
Sometimes it's not so easy to see that a Monochromatic position is legal, so the authors added three proof games to demonstrate legality.

$\leftarrow \mathbf{1}^{\text {st }}$ Hon. Mention: 8) Manfred Rittirsch
Last move? - (14+3)
5n2/2PPP3/3R4/PPk5/p2P4/2P1P3/2K5/1N1NBB2

a) $1 . \mathrm{Rd} 4 \mathrm{xSd} 6[+\mathrm{wPd} 4]$ (Sc,e8-d6)
b) $1 . \mathrm{Rd} 4 \mathrm{xBd} 2[+\mathrm{wPd} 4](\mathrm{Bc} 1-\mathrm{d} 2)$
c) $1 . \mathrm{Rd} 4 \times \mathrm{Rb} 4[+\mathrm{wPd} 4](\mathrm{Ra} 4-\mathrm{b} 4[+\mathrm{bPa} 4])$
d) $1 . \operatorname{Rd} 4 x \operatorname{Pf} 4[+w P d 4](e, f, g(x) f 4)$
«Large rook cross. 4 different types of uncaptured pieces.»
Comment by Author

Well-linked four solutions (uncapture of different black men o the same square by the "thematic" rook) with optimal "geometric" twinning. And it's fun to figure out why other uncaptures don't work. Very elegant, but of course not as deep as the Prize-winners.


The question is "how to retract the double check via $\mathrm{Rd} 7(\operatorname{Rd} 5)$ and Bf4?" This is done by uncapturing a Knight (not so surprising due to the e-wall). As to be expected the doublecheck move is performed by the Bishop in one solution and in the other one by the Rook.
Fine twinning, as you might ask "what does it change?"


## $\leftarrow$ Commendation: 3) Paul Raican

Last move? - (12+10)
8/4p1p1/8/8/5P1P/PppPPPkr/1PPbr1R1/q1Bb1RK1
Madrasi
Vertical Cylinder
«Sol: White King is in check from bQa1, then:
-1.Qa2-a1+! (-1.Qa2xSa1? or a2-al=Q? are both illegal, too many white captures) O-O-O-O!
Extended castling, specific for vertical Cylinder (wK is now in el and wR in al).
Thematic try:
$-1 \ldots \mathrm{O}-\mathrm{O}-\mathrm{O}$ ? and the cage South cannot be released.
$-2 . \mathrm{Kh} 2-\mathrm{g} 3$ ! Now, a possible retro-play is the following:
-2 ...Rg5-g2 -3.a4xBb3! Re5-g5 -4.Rg2-e2. The cage South is released by: Rg2>a8, Rh3>h8, Bd1>c8, Qa2>d7>d8, Pa4>a7, Kh2>e8, e2>e3, Re5>h1, Be3xQd2, Be3>g1, d4xSc3, g2-g1=B! (bB is promoted because the Pawns e7-g7 are both at home) $\mathrm{g} 3-\mathrm{g} 2, \mathrm{Pd} 4>\mathrm{d} 7, \mathrm{Bb} 3>\mathrm{f} 1, \mathrm{~g} 2 \mathrm{xSf} 3>\mathrm{b} 8$, g4-g3, h5xSg4, bBf8 was captured from f8 by a Knight» Comment by Author

The answer to the question "What was the last move?" is extremely obvious, while the main topic of this problem is the penultimate move, the very specific and quite spectacular castling. The subsequent retraction is more or less purely (Madrasi-) technical.

$\leftarrow$ Commendation: 11) Ladislav Packa
Last move? - (1+4)
6r1/5n2/8/4q1K1/8/8/8/k7
Zeroposition
a) - 曾 e 5 b ) -f 7 c ) - 営 g 8

Anticirce
a) - Qe5 1.Sh8-f7+ 1.Rb8-g8+
b) - Sf7 1.Rd8-g8+, 1.Qh8-e5+
c) - Rg8 1.Qb8-e5+, 1.Sd8-f7+

Black officers cycle. Cycle of departing squares.
Here the Zeroposition does not disturb: Removing one of the three black men results in a double check position which is resolved by mutual blocking of the Anticirce rebirth square automatically resulting in a cycle of departing squares. Very elegant, very easy to solve, an ideal Anticirce retro merchandizing problem.

Bornheim (Germany), December 2023

## Thomas Brand

International Judge of the FIDE
I miei più sinceri ringraziamenti a Thomas Brand per il suo qualificato verdetto, il quale diverrà definitivo passati 3 mesi dalla pubblicazione. Eventuali reclami vanno inviati al Direttore del Concorso: Antonio Garofalo, E-mail: perseus@bestproblems.it [My most sincere thanks to Thomas Brand for his qualified award, which will become definitive 3 months after publication. Possible claims must be sent to the Director of the Competition: Antonio Garofalo, E-mail: perseus@bestproblems.it.]

NUTS (48) di Mr. Veneziano
mr.veneziano@yahoo.com

## Esame d'ammissione

Dal $1^{\circ}$ marzo di quest'anno la FIDE ha apportato alcuni correttivi al rating per calcolare la forza dei giocatori, il noto sistema Elo, dal nome del fisico statunitense di origine ungherese che lo ideò. La novità più consistente è l'innalzamento della soglia minima da 1000 a 1400 punti e il conseguente incremento per tutti i giocatori sotto l'indice 2000 attraverso la formula:

## 2000 - rating $\times 0.4=$ incremento.

Ad un presente iper-digitalizzato, caratterizzato da cavillose misurazioni in centesimi e millesimi, si contrappone un passato sicuramente più dozzinale, avvolto tuttavia da un allettante afflato romantico.
"In Unione Sovietica avevamo due corsi differenziati di due ore a settimana sulla teoria - ricorda il GM Iosif Dorfman - e alla Domenica si giocavano tornei chiusi con 10 o 12 giocatori, separati per ogni categoria. Gli open non esistevano. Dovevi fare una prima norma e poi una seconda per passare alla categoria successiva, da quella principianti, alla $5^{a}$, via via su fino alla $1^{a}$ categoria, che oggi varrebbe circa 2000 punti Elo. Potevi poi ambire al titolo di Candidato Maestro (circa 2200 odierni) e poi a Maestro (2400 o più)".

Questa era la cosiddetta piramide sovietica che ogni ambizioso scacchista si proponeva di scalare！ Una storiella che girava nei circoli scacchistici fino a qualche anno fa，raccontava che ogni alun－ no della scuola sovietica dovesse dimostrare di conoscere l＇esatta risposta al quesito in diagram－ ma，prima di poter accedere al torneo per principianti，una sorta di esame d＇ammissione．．．

DIAGRAMMA


Può il Bianco，senza muovere il tata，dare matto al 詀 del Nero？ ［ Can White，without moving the tatc，give checkmate to the Black king？］

Invitiamo i gentili lettori a sottoporsi all＇esame，rinviandoli al prossimo numero di Best Problems per la soluzione！

Mr．Veneziano

## Affermazioni italiane（Italian award winners）


＜Marco Guida－Prize，G．Mosiashvili－75 JT，Kudesnik 2023
2V5／1j4s1／1P1PJ3／1S1kpP2／2JP4／K4PS1／1V1pj3／3s1D2
$\neq 2(13+7) \mathrm{C}+$
1．．．$仓$ e 2 ．寞c $6 \ddagger$ A but $1 . . .0 x d 4$ ！a
$1 \ldots$ e5～2．Ce3 $\ddagger$ B but $1 \ldots$ ．．．exd4！b

1．㯖b4？［2．崽 $\mathrm{c} 6 \ddagger$ ］A




## Thematic Highlights

－2x Le Grand（Try2－Solution：AaC－CaA；Try3－Solution：BbC－CbB）
－2x Dombrovskis，Inverted Form（Setplay－Solution：Aa！／Bb！－aA／bB）
－2x Dombrovskis using double－refutation（Try1－Try2－Try3：Ca！b！－aC－bC）
－Rukhlis distributed across 4 phases（Setplay－Try2－Try3－Solution）
－2x Transfer of Mate（A／B）：Setplay（x／y－A／B）；Solution（a／b－A／B）
－2x Change of Mate over three phases re．defenses $a / b$ ：Try2（a－C），Try3（b－C）；

## Solution（ $\mathrm{a} / \mathrm{b}-\mathrm{A} / \mathrm{B}$ ）

－2x Kharkov theme（Try1－Try2－Solution：a！－aC－aA；Try1－Try3－Solution：b！－bC－bB）．
－NOTE：Bpd2 added to avoid a spurious Try that would make the mechanism less precise and content less clear（partial duplication of Try1，with the same threat but only one refutation： 1 ．


$\leftarrow$ Marco Guida－Prize G．Mosiashvili－75 JT，Kudesnik 2023
3V4／5K2／1SpJPJ2／1P1Pkp1p／1s2P3／5pPP／1dvV3D／1S6
$\neq 2(14+8) \mathrm{C}+$
1．宽c7？C［2． 0 c4 A， 0 d $7 \neq \mathrm{B}]$
$1 . .$. 寞xd2 a $2.0 x f 5 \neq \mathrm{D}$

1．寞e3？［2．崽 $\mathrm{f} 4 \neq$ ］ 1



Thematic Highlights：
－2x Dombrovskis（Try 1：Ab－Try 2：bA；Try 1：Bb；Solution：bB））
－Key－Mate Reversal（Try 1：CaD；Solution：DaC）
－Pseudo－Erokhin（Try1：BaD；Solution：DbB）
－Threat Correction in Solution（a generic move of 0 d6 would make apparently possible 2.0 d 7 B，but this will not be possible since it will remove control on square e4；the key corrects by introducing a new threat）．The non－threatened mate returns as variation mate in Solution．
－It is interesting to see that thematic defences in the Tries defend indirectly by eliminating the control of Rd2 on square d 4 ，while in the Solution they defend directly against the threat．
－Interchange of defences and refutations（Try 1：ab！；Try 2：ba！）
－2x Change of mates after thematic defences


## Thematic Highlights：

－Makihovi
－Dyatchuk combination：Erokhin（Try1－Try2：AaC－CaA）＋Le Grand（Try1－Solution：BaC－CaB）
－Dual－avoidance
－All Keys on the same square
－All refutations by the same 亘g3

$\leftarrow$ Marco Guida－${ }^{\text {st }}$ Prize，The Macedonian Problemist League 2023
1K1R4／2p1N2r／2Bpp3／2ppRP2／b1Pk1P2／5P1n／1N1B1b2／2r1nQ2
$\neq 2(12+12) \mathrm{C}+$
1．${ }^{2} x \mathrm{xd} 5$ ？［2．営 $\left.\mathrm{e} 4 \neq\right]$


1．cxd5？［2．䍖 $4 \neq]$
1 ．．．dxe5 a $2 . d x e 6 \neq$ C 1 ．．．鼻c2 b 2 ．毞c $4 \neq$ D $1 . . . e x f 52.0 x f 5 \neq$

1．寞xd5！［2．曽e4 $\neq$ ］



## Thematic Highlights

－Zagoruiko 3x2 with 3 Masked Battery variations．
－A novelty，whereby all three thematic mates following 1．．．dxe5（a）are masked battery mates．Usually in Zagoruiko with masked battery mates the pattern is Set／Try／Solution，with， e．g．，the set mate after $1 \ldots$ ．．dxe 5 （a）would be 2 ．${ }^{\text {昆xd5 }}$ ，and only 2 thematic mates are masked battery mates（respectively in Try and Solution）．


## Thematic Highlights

－＂Extended＂Urania，is a Novelty：the same white move 鼻 fl （A）acts not only as Key （Solution），Threat（Try1）and Mate（Try2），but also as：
－Non－Threat（dual－threat avoidance）in Try2：the Key controls d5 and opens the line for 寞g2， therefore in principle allowing 2．鼻 fl （A），but it also closes the line of 鼻el giving a flight to b4 to black King；
－Non－Mate（dual avoidance）：the defence $1 . .$. 宸xd5（x）open the line of 曽b8 to square b 4 ， therefore in principle allowing 2 ． C 累 $\mathrm{fl} \neq(\mathrm{A})$ ，but at the same time it controls the mating line．
－Key－Threat Reversal（Try1－Solution）；Pseudo－Salazar（Try2－Sol．：CzA－AyC）
－White Correction and Threat Correction，
－Battery Play in Solution across the threat and 2 variation mates
－Change of Mate after 1．．．㟶xd5（x）
－Flight－giving keys in Try2 and Solution，with different mates after King’s flight

$\leftarrow$ Valerio Agostini \& Antonio Garofalo
Commendation, Variantim 2021
8/8/3p2k1/pR1P3K/5Bp1/2n1n1P1/2r5/6b1
$\mathrm{H} \neq 2(5+8) \mathrm{C}+$ - Ultra Patrol, (Ultra-Patrouille)


[Ultra-Patrol Chess: A piece can move, capture or give check only if it is observed by a piece of its own side.]
The activation of the white king as a mate piece requires the opening of the white rook line. This demands precise interplay between the black knights and the white bishop. (Judge Sven Trommler)

$\leftarrow$ Daniele Gatti - Special Hon. Mention, Chess Study Art (2023) 5k1K/3p1p2/3P4/3P4/8/pp6/2r4N/R7
Draw $=(5+6)$
[English notation]
Try: 1. Sf3?
but 1. ... a2! 2. Rg1 Rg2! 3. Rxg2 a1=Q+ [-+]

## Solution:

The rooks are going to the g-file soon that's why the knight should close it. 1. Sg4!

## First Main Line

1...Rc3 2. Sf6 Rh3+ 3. Sh7+ Rxh7+ 4. Kxh7 b2 5. Rg1 (5. Rb1? Ke8! 6. Kg7 Kd8! 7. Kxf7 Kc8! 8. Ke7 a2! 9. Rxb2 a1=Q)

With two variations:
The f-pawn is a switch between two draws: 5. ... f5 6. Kg6 (6. Rg8+? Kf7 7. Rg7 Kf6 8. Rg6+ Ke5 [-+]) a2 7. Rh1 Kg8 8. Re1 Kf8 9. Rh1 Kg8 10. Re1 (= repetition of position)
5. ... f6 6. Rg8+ (6. Kg6? a2! 7. Rh1 b1=Q+ [-+]) Kf7 7. Rg7+ Ke8 8. Rg8+ Kf7 9. Rg7+ Ke8 10. Rg8+ (= perpetual check)

## Second Main Line

1. ... a2 2. $\operatorname{Rg} 1$ ! $\operatorname{Rg} 2$ (now the white rook can leave the g-file) 3. Rc1 Rc2 4. $\operatorname{Rg} 1 \operatorname{Rg} 2$ 5. Rc1 f5 6. Sh6 Rg8+ 7. Kh7 Rg7+ 8. Kh8 Rg8+ 9. Kh7 Rg7+ perpetual check to the white king. (Author) Each main line has two positional draws. They all are simple but the construction is great, each pawn is involved. Maybe that's the reason why at some moments I like this study more, but then I look at the draws and I like it less. This explains its special distinction. (Judge: Serhiy Didukh)

$\leftarrow$ Daniele Gatti - $4^{\text {th }}$ Hon. Mention, Unto Heinonen MT 2023. 3B3N/8/8/7k/8/pPpPpP2/P1P1P3/Knr1Rn2 sd $\neq 7(10+7) \mathrm{C}+$ Anticirce

Comment by Author: "Serie-directmate in 7. (C+ - Tested with Popeye v4.55). - English notation.
Solution: 1.Rd1! 2.Kxbl (>el) 3.Rxcl (>a1) King and Rook switched places, so now:4.0-0-0! 5.Re1!
First Try: 5.Rxf1 (> h1)+ ? ... but Kg5! [Refutes], White Kings occupies the Bishop rebirth square!

Second Try：5．Kbl 6．Rxf1（＞h1）＋？．．．but Kg6！！［Refutes］，White Kings occupies the Knight rebirth square！
Third Try：5．Kb1 6．Kal 7．Rxf1（＞h1）＋？．．．but Kh6！！！［Refutes］，White Kings occupies the Rook rebirth square！
6．Kd1！White Kings occupies the Queen rebirth square，but the Queen is missing from the board， so it＇s the only safe place．And now is possible：7．Rxfl（＞hl）$\neq "$
－Comment by Judge Hans Gruber：«After a funny（and violent）introduction in which king and rook switch places so that White can castle，a critical position is created．White intends to mate by Rxfl［Rh1］but has to take care that the white king does not block a rebirth square of a white piece such that the black king is granted a flight．The only safe place is the queen＇s rebirth square d 1 ，as the thematic tries show：5．Rxf1［Rh1］＋？ Kg 5 ！（block of the bishop＇s rebirth square）， 5．Kb1？6．Rxf1［Rh1］＋？Kg6！（block of the knight＇s rebirth square），5．Kb1？6．Kal 7．Rxf1 ［Rh1］＋？Kh6！（block of the rook＇s rebirth square）．An excellent idea，but the construction with so many pawns is clumsy．The problem is sound both with the Calvet and the Cheylan type of Anticirce．»

$\leftarrow$ Daniele Gatti，Mario Parrinello，Marco Guida，Francesco
Simoni－Commendation，Csak－Majoros－Pasztor 2023
8／Q7／4B2R／3Np1B1／4k1n1／3pPp2／2P1P1p1／3N2Kb
$\mathrm{S} \neq 7(10+7) \mathrm{C}+$（Tested with Gustav 4.2 a with Brute Force）
Comment by Authors：＂Try：1．Sf2＋？but 1．．．Sxf2！2．exd3＋Sxd3 3．Qa4＋Sb4 and not possible Queen sacrifice in $d 5$ ．
Solution：1．Sf6＋！1．．．Sxf6 2．Qb7＋（2．Qa8＋？Sd5 3．Qa4＋Sb4 4．exd3 ${ }^{1}$ Knight is pinned）2．．．Sd5 3．Qb4＋Sxb4 4．exd3＋（4．cxd3＋？Sxd3 5．Sf2＋Sxf2 6．Rh4＋Sg4 7．Bh6 fxe2！And no mate）4．．．Sxd3 5．Sf2＋ Sxf2 6．Rh4＋Sg4 7．Bh6［zugzwang］．．．f2キ＂
$\leftarrow$ Francesco Simoni－ $1^{\text {st }}$ Commendation， $7^{\circ}$ FRME 2021
$1 \mathrm{q} 6 / \mathrm{b} 7 / 2 \mathrm{~K} 2 \mathrm{n} 1 \mathrm{r} / 2 \mathrm{nBN} 3 / 4 \mathrm{P} 1 \mathrm{~PB} / 3 \mathrm{P} 1 \mathrm{P} 2 / 2 \mathrm{r} 2 \mathrm{Nk} 1 / 7 \mathrm{R}$
$\mathrm{H} \neq 2(10+7) \mathrm{C}+$


1．今fxe4＋气g6（气c4？）2．气d6 气f4
1．今cxe4＋气c4（包g6）2．气c5 气e3
－Battery check（B1）x 4
－Annihilation（B1）x 4
－Direct white self－pin（W1）x 4
－Reciprocal Dual Avoidance for check（W1）
－Indirect white unpin（B2）x 4
－Bi－valve（bS－wB－bR）x 4
－Switchback（bS）x 3
－Exchange of functions（wSe5／wBd5，Passive guard／Mate）x 2.
Comment by Author：＂Annichilazioni di pedoni bianchi per aprire le linee dell＇Alfiere，che matta o controlla una casa，liberando da quel compito un altro pezzo bianco．Il giudice ha considerato un difetto l＇assenza dello Swichback nella sol．1．$\dagger$ fxe4．In realtà si era voluto che il cavallo nero giocasse in una casa differente．＂

$\leftarrow$ Francesco Simoni - $1^{\text {st }}$ Comendation e.a. $7^{\circ}$ FRME 2021
8/8/3k4/2pnp3/3N1p2/K2N1r1b/5r2/3B1q2
$\mathrm{H} \neq 3 \quad(4+9) \mathrm{C}+$


Comment by Author: "Schiodatura diretta bianca preceduta dal movimento del pezzo nero inchiodante sulla linea di inchiodatura. La mossa di schiodatura è precisata da un'interferenza nera. Antiduale per interferenza bianca."
«A pinning unit moves in B1 along the pin line, so that it can abandon the line in B 2 to direct unpin. B 2 is specified by the need to interfere a black piece. W1 guards two cross flights, with reciprocal dual avoidance for white interference in mates. The unpinned unit moves in W2 to guard the other two cross flights. Model mates.»
(Comment by Judge Christopher Jones)
$\leftarrow$ Francesco Simoni - $1^{\text {st }}$ Comendation e.a. $7^{\circ}$ FRME 2021
2NB4/r3p3/1p2p2K/n2k2N1/4p3/8/prp5/1qb5
$\mathrm{H} \neq 3(4+12) \mathrm{C}+$


Comment by Author: "Schiodatura diretta bianca preceduta dal movimento del pezzo nero inchiodante sulla linea di inchiodatura. La mossa di schiodatura è precisata da un'interferenza nera. Antiduale per occupazione preventiva di una delle due case a disposizione del pezzo mattante."
«A pinning unit moves in B1 along the pin line, so that it can abandon the line in B 2 to direct unpin. B 2 is specified by the need to interfere a black piece. W1 guards two cross flights, with reciprocal dual avoidance for the block of the mating squares. The unpinned unit moves in W2 to guard the other two cross flights. Model mates.» (Comment by Judge Christopher Jones)
$\leftarrow$ Alberto Armeni - Commendation, Variantim 2021
K6R/P2np1Np/4Pp2/3P4/3p2kP/5bPp/1p5P/8
$\mathrm{hs} \neq 3,5(9+9) \mathrm{C}+$


The underpromoted black piece moves to d 5 to allow battery mate. (Judge Sven Trommler)

## 

# Ricostruzione 


< György Bakcsi - Ricostruzione 98, BP109
$1^{\text {st }}$ Prize - T.T. Fédération Hongroise des Echecs 1970 3Nn3/bpQ2B2/5pr1/pP2Pp2/r2k2p1/1Rn5/p1P1R1K1/q1B5 $\neq 2(10+13) \mathrm{C}+$ [Winchloe ID 901095]







Benvenuti (welcome) a José Luis Velasco per la sua prima partecipazione a questa rubrica e bentornato invece (welcome back) a Valeriu Giurgean. Le ricostruzioni sono tutte buone. C'è una curiosità: nei primi 4 diagrammi il 柬 bianco è stato posto in 4 case diverse, h 8 , a1, $\mathrm{h} 3, \mathrm{~d} 7$; solo Valeriu ha ripetuto la casa d 7 . Ciò ha comportato una diversa quantità di pezzi, rispettivamente: $10+13,10+11,10+13,12+10,10+12$. Quindi il più "bravo" in economia è stato il nuovo arrivo, José Luis. Però questo gli è costato una chiave di cattura di un $\mathbf{Q}_{\boldsymbol{\$}}$ nero. Egli ha anche risparmiato la 煞al nera. Ma sembra che non si possa fare a meno di questa Regina.

Ricostruzione n. 99 - Ricostruire un problema $\neq 2$ che abbia la seguente soluzione:




Inviare (send to): perseus@bestproblems.it
(last available day for to send: 10/06/2024)
A. Garofalo

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Attachment: Knight tour on 110 cell board by Awani Kumar ..... 723

# Knight tour on 110 cell board 

by Awani Kumar, Lucknow, India

Best Problems has come out with its $110^{\text {th }}$ issue and let's celebrate and commemorate this glorious achievement with interesting knight tours on $10 \times 11$ and $2 \times 5 \times 11(=110)$ cell board. Figure 1 and Figure 2 are semi magic knight tours on 10x11 board. Sum of all the columns is 555 . The two figures are almost identical - only the four digits, namely, 46, 47, 80 and 81 interchange places. Such 'twin tours' are very rare. Figure 3 has the numbers in multiples of 11 along the central row. Figure 4 has the consecutive square numbers $1^{2}$, $2^{2}, 3^{2} \ldots 10^{2}$, that is, $1,4,9 \ldots 100$ along the central row. Figure 5 and Figure 6 have the consecutive square numbers along wazir and knight paths respectively.

| 97 | 16 | 93 | 12 | 91 | 10 | 101 | 8 | 1 | 108 | 105 | 642 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94 | 13 | 96 | 19 | 100 | 21 | 90 | 109 | 106 | 7 | 4 | 659 |
| 17 | 98 | 15 | 92 | 11 | 102 | 9 | 2 | 5 | 104 | 107 | 562 |
| 14 | 95 | 18 | 99 | 20 | 89 | 22 | 103 | 110 | 3 | 6 | 579 |
| 33 | 84 | 75 | 86 | 31 | 24 | 73 | 88 | 67 | 58 | 69 | 688 |
| 76 | 29 | 32 | 25 | 74 | 87 | 66 | 23 | 70 | 41 | 56 | 579 |
| 83 | 34 | 85 | 30 | 65 | 72 | 49 | 40 | 57 | 68 | 59 | 642 |
| 28 | 77 | 26 | 47 | 80 | 39 | 62 | 71 | 42 | 55 | 52 | 579 |
| 35 | 82 | 79 | 64 | 37 | 48 | 45 | 50 | 53 | 60 | 43 | 596 |
| 78 | 27 | 36 | 81 | 46 | 63 | 38 | 61 | 44 | 51 | 54 | 579 |
| 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 |  |
| 1. |  |  |  |  |  |  |  |  |  |  |  |
| 36 | 17 | 14 | 105 | 58 | 103 | 96 | 107 | 94 | 91 |  |  |
| 13 | 20 | 37 | 18 | 15 | 106 | 59 | 92 | 97 | 108 |  |  |
| 38 | 35 | 16 | 57 | 104 | 41 | 102 | 95 | 90 | 93 |  |  |
| 21 | 12 | 19 | 40 | 43 | 64 | 89 | 60 | 109 | 98 |  |  |
| 34 | 39 | 56 | 65 | 76 | 101 | 42 | 63 | 78 | 61 |  |  |
| 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 |  |  |
| 32 | 45 | 24 | 47 | 68 | 75 | 100 | 79 | 62 | 87 |  |  |
| 23 | 10 | 69 | 54 | 25 | 48 | 67 | 74 | 1 | 80 |  |  |
| 28 | 31 | 46 | 7 | 70 | 51 | 72 | 81 | 86 | 83 |  |  |
| 9 | 6 | 29 | 26 | 53 | 4 | 49 | 84 | 73 | 2 |  |  |
| 30 | 27 | 8 | 5 | 50 | 71 | 52 | 3 | 82 | 85 |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |


| 97 | 16 | 93 | 12 | 91 | 10 | 101 | 8 | 1 | 108 | 105 | 642 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94 | 13 | 96 | 19 | 100 | 21 | 90 | 109 | 106 | 7 | 4 | 659 |
| 17 | 98 | 15 | 92 | 11 | 102 | 9 | 2 | 5 | 104 | 107 | 562 |
| 14 | 95 | 18 | 99 | 20 | 89 | 22 | 103 | 110 | 3 | 6 | 579 |
| 33 | 84 | 75 | 86 | 31 | 24 | 73 | 88 | 67 | 58 | 69 | 688 |
| 76 | 29 | 32 | 25 | 74 | 87 | 66 | 23 | 70 | 41 | 56 | 579 |
| 83 | 34 | 85 | 30 | 65 | 72 | 49 | 40 | 57 | 68 | 59 | 642 |
| 28 | 77 | 26 | $\underline{81}$ | $\underline{46}$ | 39 | 62 | 71 | 42 | 55 | 52 | 579 |
| 35 | 82 | 79 | 64 | 37 | 48 | 45 | 50 | 53 | 60 | 43 | 596 |
| 78 | 27 | 36 | 47 | $\underline{80}$ | 63 | 38 | 61 | 44 | 51 | 54 | 579 |
| 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 | 555 |  |
| 2. |  |  |  |  |  |  |  |  |  |  |  |


| 40 | 19 | 22 | 45 | 110 | 43 | 108 | 103 | 70 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 6 | 39 | 42 | 67 | 46 | 69 | 72 | 77 |
| 18 | 41 | 20 | 23 | 44 | 109 | 104 | 107 | 74 |
| 5 | 38 | 7 | 66 | 105 | 68 | 47 | 76 | 101 |
| 58 |  |  |  |  |  |  |  |  |
| 8 | 17 | 24 | 37 | 48 | 65 | 106 | 79 | 88 |
| 75 |  |  |  |  |  |  |  |  |
| 1 | 4 | 9 | 16 | 25 | 36 | 49 | 64 | 81 |
| 100 |  |  |  |  |  |  |  |  |
| 10 | 15 | 26 | 3 | 50 | 63 | 80 | 87 | 92 |
| 27 | 2 | 51 | 62 | 35 | 86 | 93 | 90 | 99 |
| 14 | 11 | 32 | 29 | 52 | 61 | 98 | 57 | 94 |
| 31 | 28 | 13 | 34 | 85 | 54 | 59 | 96 | 83 |
| 12 | 33 | 30 | 53 | 60 | 97 | 84 | 55 | 58 |

4. 

| 32 | 23 | 94 | 27 | 30 | 21 | 96 | 11 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 19 |  |  |  |  |  |  |  |
| 93 | 28 | 31 | 22 | 95 | 2 | 5 | 20 | 97 |
| 38 | 33 | 24 | 29 | 26 | 15 | 10 | 3 | 18 |
| 51 | 92 | 37 | 40 | 1 | 4 | 17 | 8 | 13 |
| 34 | 39 | 50 | 25 | 16 | 9 | 14 | 99 | 106 |
|  | 103 |  |  |  |  |  |  |  |
| 91 | 52 | 41 | 36 | 81 | 100 | 105 | 102 | 77 |
| 42 | 35 | 80 | 49 | 64 | 83 | 78 | 73 | 104 |
| 107 |  |  |  |  |  |  |  |  |
| 53 | 90 | 63 | 82 | 79 | 68 | 101 | 108 | 71 |
| 46 | 43 | 48 | 87 | 84 | 65 | 74 | 69 | 58 |
| 109 |  |  |  |  |  |  |  |  |
| 89 | 54 | 45 | 62 | 67 | 56 | 85 | 60 | 75 |
| 44 | 47 | 88 | 55 | 86 | 61 | 66 | 57 | 110 |

5. 

| 20 | 11 | 6 | 27 | 22 | 39 | 46 | 43 | 94 | 41 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 28 | 21 | 38 | 5 | 50 | 93 | 40 | 47 | 44 |
| 12 | 19 | 10 | 51 | 26 | 23 | 48 | 45 | 42 | 95 |
| 29 | 8 | 37 | 24 | 49 | 4 | 99 | 92 | 107 | 110 |
| 18 | 13 | 52 | 9 | 100 | 25 | 108 | 3 | 96 | 91 |
| 53 | 30 | 17 | 36 | 1 | 64 | 79 | 98 | 109 | 106 |
| 14 | 73 | 58 | 81 | 16 | 101 | 2 | 65 | 90 | 97 |
| 31 | 54 | 15 | 74 | 35 | 80 | 63 | 78 | 105 | 86 |
| 72 | 59 | 82 | 57 | 62 | 75 | 102 | 87 | 66 | 89 |
| 55 | 32 | 61 | 70 | 83 | 34 | 77 | 68 | 85 | 104 |
| 60 | 71 | 56 | 33 | 76 | 69 | 84 | 103 | 88 | 67 |

6. 

Figure 7 has the square numbers in wazir circuit. Figure 8 to Figure 10 have the square numbers in knight, giraffe $\{1,4\}$ and penguin $\{1,6\}$ path respectively. Figure 11 to Figure 15 have the square numbers in zigzag path of knight, zebra $\{2,3\}$, antelope $\{3,4\},\{3,6\}$-leaper and rector $\{4,5\}$ respectively. Figure 16 to Figure 18 is closed tour with the square numbers in zebra, giraffe and korsar $\{2,5\}$ circuit respectively.

| 28 | 7 | 14 | 21 | 30 | 39 | 52 | 23 | 32 | 41 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 20 | 29 | 8 | 15 | 22 | 31 | 40 | 53 | 56 |
| 6 | 27 | 12 | 3 | 38 | 51 | 24 | 55 | 42 | 33 |
| 19 | 88 | 5 | 26 | 9 | 16 | 37 | 62 | 57 | 54 |
| 86 | 11 | 2 | 17 | 4 | 25 | 50 | 59 | 34 | 43 |
| 89 | 18 | 87 | 10 | 1 | 36 | 63 | 72 | 61 | 58 |
| 94 | 85 | 90 | 105 | 100 | 49 | 60 | 35 | 44 | 71 |
| 91 | 106 | 93 | 110 | 81 | 64 | 101 | 70 | 73 | 66 |
| 84 | 95 | 104 | 99 | 48 | 69 | 80 | 65 | 76 | 45 |
| 107 | 92 | 97 | 82 | 109 | 102 | 47 | 78 | 67 | 74 |
| 96 | 83 | 108 | 103 | 98 | 79 | 68 | 75 | 46 | 77 |

7. 

| 8 | 23 | 26 | 47 | 50 | 89 | 80 | 87 | 78 | 91 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 20 | 9 | 22 | 25 | 46 | 49 | 90 | 81 | 86 |
| 10 | 7 | 24 | 27 | 48 | 51 | 88 | 79 | 92 | 77 |
| 19 | 2 | 21 | 52 | 45 | 28 | 93 | 72 | 85 | 82 |
| 6 | 11 | 18 | 29 | 94 | 71 | 98 | 83 | 76 | 73 |
| 3 | 30 | 5 | 44 | 53 | 102 | 105 | 74 | 99 | 84 |
| 12 | 17 | 54 | 95 | 104 | 97 | 70 | 101 | 106 | 75 |
| 31 | 4 | 43 | 16 | 55 | 36 | 103 | 64 | 69 | 100 |
| 42 | 13 | 40 | 35 | 96 | 63 | 66 | 109 | 60 | 107 |
| 39 | 32 | 15 | 56 | 37 | 34 | 61 | 58 | 65 | 68 |
| 14 | 41 | 38 | 33 | 62 | 57 | 110 | 67 | 108 | 59 |

10. 

| 6 | 11 | 20 | 15 | 4 | 37 | 66 | 41 | 62 | 39 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 2 | 5 | 12 | 19 | 16 | 61 | 38 | 65 | 42 |
| 10 | 7 | 18 | 3 | 14 | 67 | 36 | 105 | 40 | 63 |
| 1 | 22 | 13 | 8 | 17 | 60 | 99 | 64 | 43 | 106 |
| 26 | 9 | 48 | 109 | 68 | 35 | 104 | 107 | 100 | 97 |
| 23 | 50 | 25 | 82 | 47 | 108 | 59 | 98 | 103 | 44 |
| 84 | 27 | 110 | 49 | 34 | 69 | 46 | 73 | 96 | 101 |
| 51 | 24 | 83 | 88 | 81 | 58 | 77 | 102 | 45 | 72 |
| 28 | 85 | 30 | 33 | 78 | 91 | 70 | 57 | 74 | 95 |
| 31 | 52 | 87 | 80 | 89 | 54 | 93 | 76 | 71 | 56 |
| 86 | 29 | 32 | 53 | 92 | 79 | 90 | 55 | 94 | 75 |

13. 

| 4 | 19 | 6 | 11 | 22 | 33 | 16 | 13 | 24 | 27 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 10 | 3 | 20 | 17 | 12 | 23 | 26 | 31 | 14 |
| 2 | 5 | 18 | 9 | 34 | 21 | 32 | 15 | 28 | 25 |
| 41 | 8 | 1 | 98 | 39 | 76 | 35 | 30 | 37 | 52 |
| 106 | 99 | 40 | 87 | 108 | 97 | 38 | 51 | 74 | 29 |
| 85 | 42 | 107 | 110 | 77 | 88 | 75 | 36 | 53 | 56 |
| 100 | 105 | 86 | 67 | 90 | 109 | 96 | 55 | 50 | 73 |
| 43 | 84 | 91 | 104 | 95 | 78 | 89 | 72 | 57 | 54 |
| 92 | 101 | 66 | 81 | 68 | 63 | 70 | 47 | 60 | 49 |
| 83 | 44 | 103 | 94 | 65 | 46 | 79 | 62 | 71 | 58 |
| 102 | 93 | 82 | 45 | 80 | 69 | 64 | 59 | 48 | 61 | 16.


| 31 | 28 | 21 | 52 | 55 | 88 | 23 | 84 | 57 | 86 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 53 | 32 | 29 | 22 | 83 | 56 | 87 | 90 | 47 |
| 27 | 30 | 51 | 54 | 33 | 24 | 89 | 46 | 85 | 58 |
| 8 | 19 | 26 | 43 | 50 | 45 | 82 | 59 | 48 | 91 |
| 1 | 42 | 2 | 18 | 25 | 34 | 49 | 92 | 81 | 72 |
| 10 | 7 | 2 | 35 | 44 | 17 | 80 | 71 | 60 | 65 |
| 41 | 4 | 95 | 16 | 79 | 36 | 93 | 64 | 73 | 100 |
| 110 | 11 | 6 | 3 | 94 | 15 | 70 | 99 | 66 | 61 |
| 5 | 40 | 107 | 96 | 37 | 78 | 63 | 76 | 101 | 74 |
| 12 | 109 | 38 | 105 | 14 | 69 | 98 | 103 | 62 | 67 |
| 39 | 106 | 13 | 108 | 97 | 104 | 77 | 68 | 75 | 102 |

8. 

| 7 | 14 | 3 | 12 | 5 | 34 | 39 | 30 | 61 | 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 11 | 6 | 15 | 18 | 43 | 62 | 33 | 40 | 29 |
| 23 | 8 | 13 | 4 | 35 | 38 | 17 | 42 | 31 | 60 |
| 10 | 1 | 22 | 19 | 16 | 63 | 44 | 37 | 28 | 41 |
| 21 | 24 | 9 | 48 | 45 | 36 | 27 | 54 | 59 | 56 |
| 110 | 47 | 20 | 25 | 82 | 101 | 64 | 57 | 66 | 53 |
| 89 | 84 | 103 | 46 | 49 | 26 | 51 | 100 | 55 | 58 |
| 104 | 109 | 88 | 83 | 102 | 81 | 72 | 65 | 52 | 67 |
| 85 | 90 | 107 | 80 | 71 | 50 | 69 | 76 | 99 | 96 |
| 108 | 105 | 92 | 87 | 78 | 73 | 94 | 97 | 68 | 75 |
| 91 | 86 | 79 | 106 | 93 | 70 | 77 | 74 | 95 | 98 |

11. 

| 91 | 22 | 29 | 8 | 1 | 24 | 27 | 10 | 51 | 74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | 7 | 92 | 23 | 28 | 9 | 86 | 75 | 26 | 11 |
| 93 | 90 | 21 | 2 | 85 | 76 | 25 | 52 | 73 | 50 |
| 20 | 31 | 6 | 89 | 58 | 87 | 82 | 49 | 12 | 53 |
| 5 | 94 | 3 | 84 | 77 | 60 | 57 | 54 | 81 | 72 |
| 32 | 19 | 96 | 59 | 88 | 83 | 80 | 13 | 48 | 55 |
| 95 | 4 | 37 | 78 | 15 | 98 | 61 | 56 | 71 | 110 |
| 18 | 33 | 16 | 97 | 62 | 79 | 14 | 47 | 106 | 67 |
| 41 | 38 | 63 | 36 | 101 | 44 | 99 | 68 | 109 | 70 |
| 34 | 17 | 40 | 43 | 64 | 103 | 46 | 107 | 66 | 105 |
| 39 | 42 | 35 | 102 | 45 | 100 | 65 | 104 | 69 | 108 |

14. 

$\begin{array}{llllllllll}1 & 98 & 3 & 90 & 109 & 84 & 5 & 88 & 9 & 12\end{array}$ $\begin{array}{lllllllllll}96 & 91 & 110 & 79 & 4 & 89 & 10 & 13 & 6 & 87\end{array}$ $\begin{array}{llllllllllll}99 & 2 & 97 & 108 & 83 & 72 & 85 & 8 & 11 & 14\end{array}$ $\begin{array}{llllllllll}92 & 95 & 78 & 71 & 80 & 61 & 82 & 15 & 86 & 7\end{array}$ $\begin{array}{llllllllll}65 & 100 & 103 & 94 & 107 & 70 & 73 & 60 & 27 & 16\end{array}$ $\begin{array}{llllllllll}102 & 93 & 66 & 77 & 62 & 81 & 106 & 69 & 74 & 59\end{array}$ $\begin{array}{llllllllll}51 & 64 & 101 & 104 & 67 & 76 & 57 & 28 & 17 & 26\end{array}$ $\begin{array}{lllllllllll}54 & 39 & 52 & 63 & 56 & 105 & 68 & 75 & 58 & 29\end{array}$ $\begin{array}{llllllllll}47 & 50 & 55 & 40 & 43 & 22 & 35 & 32 & 25 & 18\end{array}$ $\begin{array}{lllllllllll}38 & 53 & 48 & 45 & 36 & 41 & 20 & 23 & 30 & 33\end{array}$ | 49 | 46 | 37 | 42 | 21 | 44 | 31 | 34 | 19 | 24 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | 17.


| 32 | 27 | 30 | 51 | 96 | 79 | 88 | 83 | 94 | 77 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 52 | 33 | 26 | 89 | 84 | 95 | 78 | 87 | 82 |
| 10 | 31 | 28 | 53 | 50 | 97 | 80 | 85 | 76 | 93 |
| 1 | 54 | 9 | 34 | 25 | 90 | 49 | 110 | 81 | 86 |
| 8 | 11 | 24 | 55 | 58 | 61 | 98 | 75 | 92 | 109 |
| 23 | 2 | 57 | 60 | 35 | 48 | 91 | 108 | 63 | 74 |
| 12 | 7 | 22 | 3 | 56 | 59 | 62 | 99 | 106 | 65 |
| 21 | 4 | 43 | 16 | 47 | 36 | 107 | 64 | 73 | 100 |
| 42 | 13 | 6 | 19 | 44 | 39 | 70 | 103 | 66 | 105 |
| 5 | 20 | 15 | 40 | 17 | 46 | 37 | 68 | 101 | 72 |
| 14 | 41 | 18 | 45 | 38 | 69 | 102 | 71 | 104 | 67 |

9. 

| 19 | 6 | 3 | 12 | 15 | 110 | 97 | 106 | 95 | 92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 11 | 18 | 7 | 4 | 13 | 90 | 93 | 98 | 105 |
| 23 | 20 | 5 | 14 | 109 | 16 | 107 | 96 | 91 | 94 |
| 10 | 1 | 22 | 17 | 8 | 89 | 36 | 67 | 104 | 99 |
| 21 | 24 | 9 | 50 | 37 | 108 | 87 | 64 | 35 | 68 |
| 52 | 47 | 38 | 25 | 88 | 75 | 66 | 69 | 100 | 103 |
| 39 | 26 | 51 | 82 | 49 | 86 | 63 | 102 | 65 | 34 |
| 46 | 53 | 48 | 85 | 76 | 81 | 74 | 61 | 70 | 101 |
| 27 | 40 | 83 | 56 | 43 | 62 | 77 | 80 | 33 | 60 |
| 54 | 45 | 42 | 29 | 84 | 73 | 58 | 31 | 78 | 71 |
| 41 | 28 | 55 | 44 | 57 | 30 | 79 | 72 | 59 | 32 |

12. 

| 89 | 92 | 97 | 82 | 29 | 84 | 77 | 80 | 27 | 108 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 98 | 31 | 90 | 85 | 96 | 81 | 28 | 109 | 50 | 79 |
| 91 | 88 | 93 | 30 | 83 | 76 | 49 | 78 | 107 | 26 |
| 32 | 99 | 86 | 23 | 74 | 95 | 104 | 25 | 110 | 51 |
| 87 | 22 | 63 | 94 | 71 | 24 | 75 | 48 | 9 | 106 |
| 100 | 33 | 20 | 73 | 68 | 103 | 70 | 105 | 52 | 1 |
| 21 | 64 | 101 | 62 | 15 | 72 | 67 | 8 | 47 | 10 |
| 34 | 19 | 36 | 65 | 102 | 69 | 14 | 53 | 2 | 7 |
| 37 | 58 | 39 | 16 | 61 | 66 | 3 | 44 | 11 | 46 |
| 18 | 35 | 56 | 59 | 4 | 41 | 54 | 13 | 6 | 43 |
| 57 | 38 | 17 | 40 | 55 | 60 | 5 | 42 | 45 | 12 |

## 15.

| 45 | 50 | 47 | 92 | 43 | 24 | 101 | 20 | 41 | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 | 93 | 44 | 71 | 100 | 103 | 42 | 23 | 26 | 19 |
| 51 | 46 | 49 | 96 | 91 | 72 | 25 | 102 | 21 | 40 |
| 94 | 97 | 52 | 99 | 70 | 65 | 104 | 73 | 18 | 27 |
| 53 | 4 | 95 | 90 | 67 | 2 | 69 | 64 | 39 | 74 |
| 82 | 89 | 98 | 3 | 110 | 105 | 66 | 75 | 28 | 17 |
| 5 | 54 | 81 | 84 | 79 | 68 | 1 | 38 | 63 | 76 |
| 88 | 83 | 6 | 55 | 36 | 109 | 106 | 77 | 16 | 29 |
| 7 | 56 | 35 | 80 | 85 | 78 | 37 | 108 | 13 | 62 |
| 34 | 87 | 58 | 9 | 32 | 107 | 60 | 11 | 30 | 15 |
| 57 | 8 | 33 | 86 | 59 | 10 | 31 | 14 | 61 | 12 |

18. 

Figure 19 and Figure 20 are closed tours with square numbers in $\{3,6\}$ leaper circuit and rector circuit respectively. Figure 21 has the multiples of 14 on the knight wheel round the initial cell. Magic squares have always been fascinating. Figure 22 has the first nine even numbers forming $3 \times 3$ magic square. Figure 23 has the first sixteen even numbers forming $4 \times 4$ magic square. Figure 24 has the multiples of 10 arranged in triangular shapes.

| 41 | 18 | 55 | 14 | 43 | 20 | 57 | 12 | 45 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | 1 | 42 | 19 | 56 | 13 | 44 | 9 | 22 | 59 |
| 17 | 40 | 15 | 110 | 93 | 50 | 21 | 58 | 11 | 46 |
| 78 | 53 | 2 | 51 | 76 | 109 | 8 | 95 | 60 | 23 |
| 39 | 16 | 77 | 92 | 49 | 94 | 75 | 100 | 47 | 96 |
| 82 | 79 | 52 | 3 | 108 | 101 | 48 | 7 | 24 | 61 |
| 69 | 38 | 83 | 80 | 91 | 74 | 99 | 102 | 97 | 26 |
| 84 | 81 | 68 | 73 | 4 | 107 | 6 | 25 | 62 | 103 |
| 37 | 70 | 87 | 90 | 67 | 34 | 65 | 98 | 27 | 30 |
| 88 | 85 | 72 | 35 | 106 | 5 | 32 | 29 | 104 | 63 |
| 71 | 36 | 89 | 86 | 33 | 66 | 105 | 64 | 31 | 28 |

19. 


22.

For over a millennium, knight tour was confined to 2-D boards and it was extended to 3-D board some 250 years ago. Figure 25 is a monogram tour on $2 \times 5 \times 11$ board. Readers can visualize it by stacking two $5 \times 11$ board in alphabetical order. The square numbers and cubic numbers $1^{3}, 2^{3}, 3^{3}$ and $4^{3}$, namely $1,8,27$ and 64 delineate letters ' B ' and ' P ', the first letters in Best Problems. Figure 26 delineates the numerals ' 1 ' and ' 0 ' which correlate with the issue number 110. Readers may like to compose more figured tours.

| 5 | 10 | 1 | 32 | 51 | 20 | 47 | 72 | 53 | 88 | 45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 31 | 4 | 19 | 36 | 33 | 52 | 87 | 46 | 95 | 54 |
| 11 | 6 | 9 | 34 | 77 | 74 | 101 | 98 | 89 | 104 | 91 |
| 28 | 3 | 16 | 37 | 100 | 35 | 76 | 69 | 94 | 55 | 96 |
| 15 | 38 | 25 | 78 | 75 | 68 | 99 | 102 | 97 | 90 | 105 |


| 12 | 65 | 8 | 85 | 110 | 73 | 50 | 21 | 44 | 71 | 92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 18 | 81 | 66 | 49 | 86 | 109 | 70 | 93 | 56 | 43 |
| 80 | 13 | 64 | 7 | 84 | 67 | 48 | 103 | 22 | 59 | 106 |
| 17 | 30 | 27 | 82 | 63 | 40 | 23 | 108 | 61 | 42 | 57 |
| 26 | 79 | 14 | 39 | 24 | 83 | 62 | 41 | 58 | 107 | 60 | 25.


| 13 | 18 | 7 | 38 | 1 | 76 | 65 | 84 | 103 | 68 | 51 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 39 | 2 | 17 | 4 | 71 | 110 | 69 | 66 | 55 | 104 |  |
| 19 | 12 | 5 | 96 | 9 | 80 | 77 | 72 | 85 | 52 | 67 |  |
| 40 | 95 | 10 | 3 | 16 | 93 | 70 | 79 | 54 | 73 | 56 |  |
| 11 | 20 | 41 | 94 | 97 | 78 | 107 | 92 | 57 | 86 | 53 | A |


| 44 | 37 | 24 | 29 | 8 | 81 | 102 | 75 | 50 | 83 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | 30 | 45 | 36 | 101 | 28 | 49 | 82 | 61 | 74 | 89 |
| 14 | 43 | 32 | 25 | 46 | 35 | 64 | 99 | 90 | 59 | 62 |
| 31 | 22 | 15 | 34 | 27 | 100 | 109 | 48 | 63 | 88 | 105 |
| 42 | 33 | 26 | 21 | 108 | 47 | 98 | 87 | 106 | 91 | 58 | B

26. 
