HELPMATES: BLACK TO PLAY AND LOSE
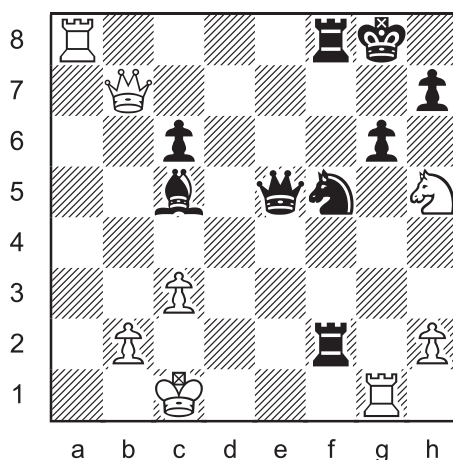
number 48   September 28, 2013

In the world of chess composition, only direct mates and endgame studies can rival the popularity of helpmates. There are more than 100,000 known problems. If you solve ten everyday, it will only take you thirty years to do them all! Let's get started.

In a *helpmate*, Black cooperates with White to checkmate the black king. In other words, Black plays the worst moves possible. White has an ally, not an opponent.

Otherwise the normal rules of chess are followed. Unless stated differently, Black always moves first.

The first three puzzles are *helpmates in one*. Find the black move that allows an immediate checkmate. Black moves, White mates. Easy!
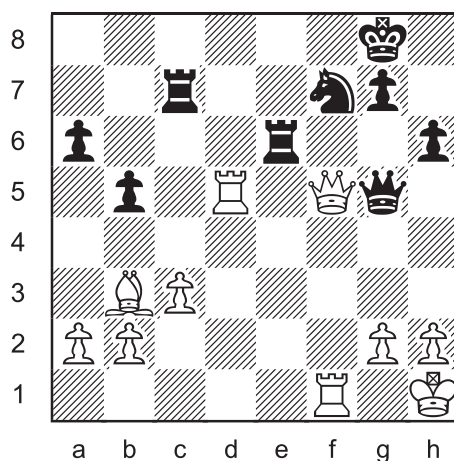
Helpmate 01

Helpmate in 1

*Black plays first. Find the move that
lets White play mate in one.*

A Note on Notation

One unusual thing about helpmates is the notation used for solutions. The convention is to write Black's move first, right after the move number, followed by White's move. The opposite of standard notation.
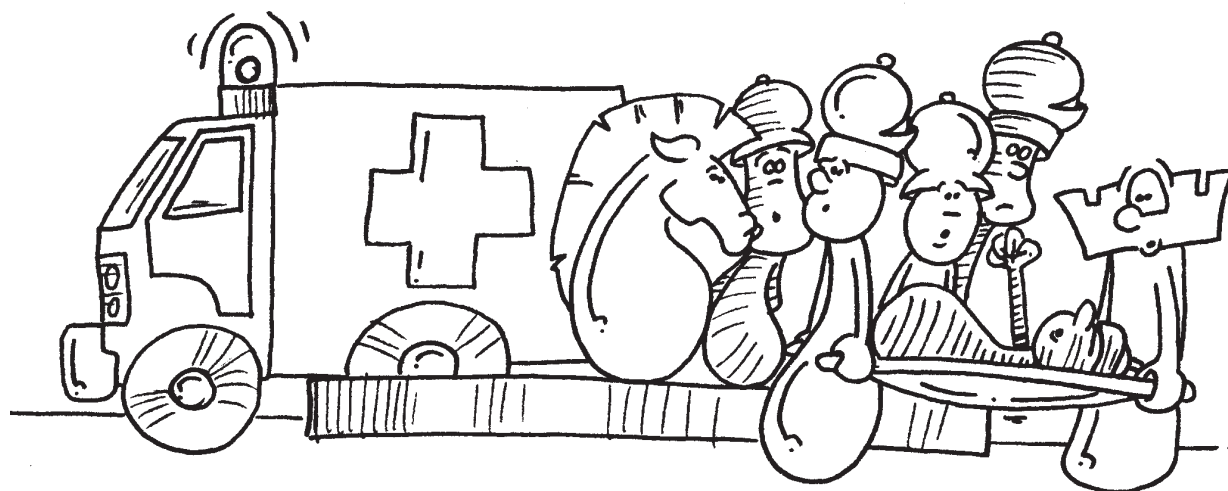
For example, in helpmate notation, 1.f5 e4 2.g5 Qh5# means that Black plays pawn to f5 and White answers with pawn to e4. Black then pushes pawn to g5 and White mates with queen to h5.
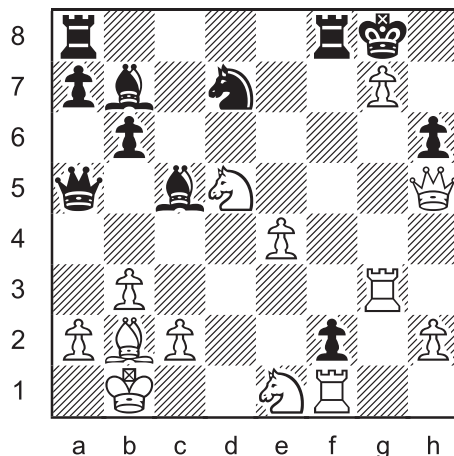
Helpmate 02

Helpmate in 1

*Black plays first. Find the move that
lets White play mate in one.*

Hyperlink Express. For a quick trip to the solution section, click on the underlined title above the diagrams. To return to the puzzle, click on the title above the solution diagram.
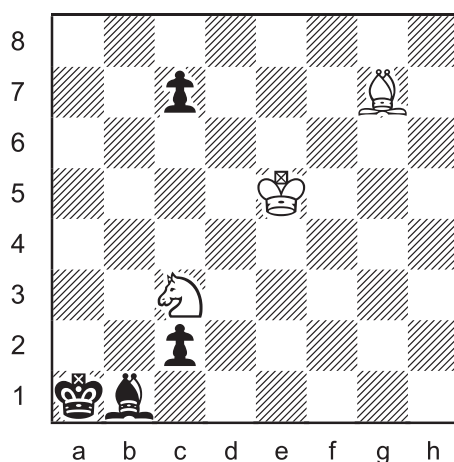
Helpmate 03

Helpmate in 1

*Black plays first. Find the move that
lets White play mate in one.*

The puzzles so far have been *game-like positions*, with lots of distractors. They are meant to be fun and quick exercises in chess vision.

We now shift to *problem-like positions* with longer solutions. Their purpose is to test your power of calculation.

The following three problems are *helpmates in two*. Black moves, White moves, Black moves, White mates. Not so easy. It's amazing how much can be hidden at a depth of 4-ply when both sides are working together.
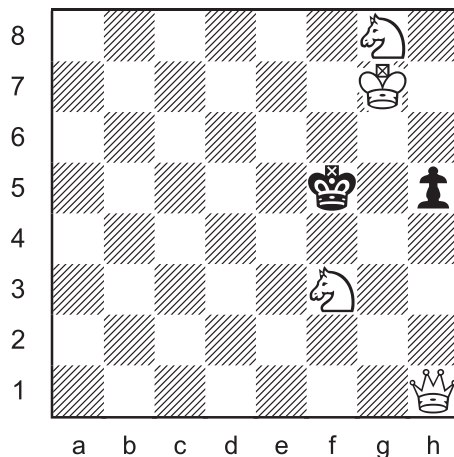
Helpmate 04

Helpmate in 2

*Black plays first. Find the sequence of moves
that lets White mate on their second turn.*

Are you ready for a serious problem? It's one of "Benko's Bafflers". That's the name of a *Chess Life* column written since 1967 by American/Hungarian grandmaster Pal Benko. It was the place I first saw a helpmate.
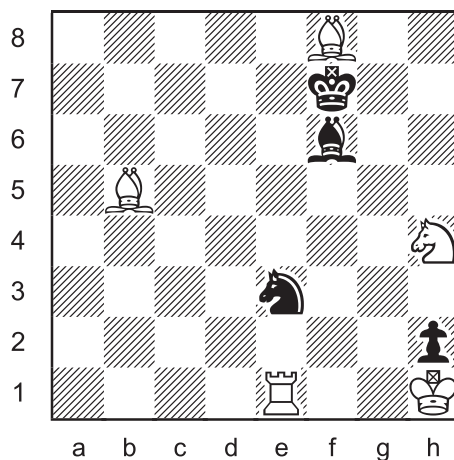
Helpmate 05

Helpmate in 2

Black plays first. Find the sequence of moves that lets White mate on their second turn.

That problem may have stumped some players. The next one will probably catch a few more. It's a "tough nut to crack" by Croatian composer Sveto Stambuk (1932-).

Helpmate 06

Helpmate in 2

Black plays first. Find the sequence of moves that lets White mate on their second turn.
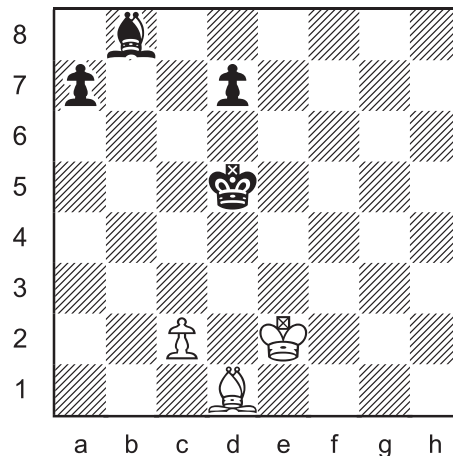
Origin of the Helpmate

The *helpmate* was proposed as a new type of chess problem in 1854 by German master Max Lange (1832-1899). He compared the goal of the puzzle to the idea of always doing good, even towards your enemy.

Max Lange

This problem is a version of the position that Lange used to illustrate his concept in the magazine *Schachzeitung*.
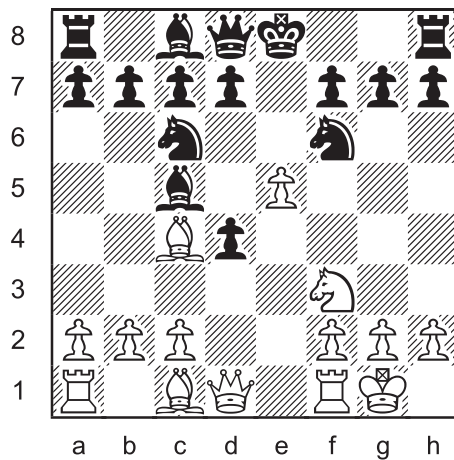
Helpmate 07

Helpmate in 3

*Black plays first. Find the sequence of moves
that lets White mate on their third turn.*
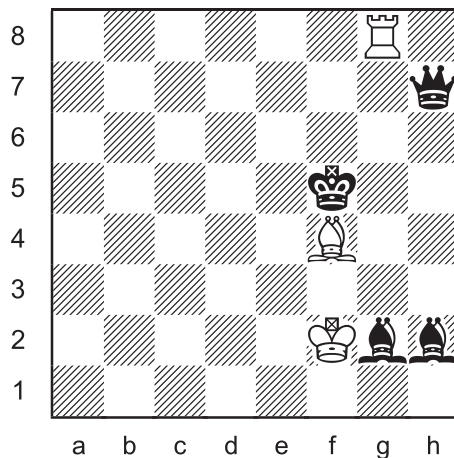
Besides being one of the top players in Europe, Max Lange was also a chess writer, composer, and organizer. He is most famous for the opening that bears his name, the *Max Lange Attack*, a sharp line which can arise from the Two Knights Defence or the Scotch Game. 1.e4 e5 2.Nf3 Nc6 3.Bc4 Nf6 4.d4 exd4 5.0-0 Bc5 6.e5 or 3.d4 exd4 4.Bc4 Bc5 5.0-0 Nf6 6.e5. See diagram next page.

Like the Ruy Lopez (1.e4 e5 2.Nf3 Nc6 3.Bb5), his first name is always included. Nobody ever says "the Lange Attack". I wonder why it isn't the Henry Bird Opening (1.f4) and the Pal Benko Gambit (1.d4 Nf6 2.c4 c5 3.d5 b5). Or how about the Horatio Caro - Marcus Kann Defence!? (1.e4 c6).

The first problem "properly" posed as a helpmate was by Samuel Loyd in 1860. Unfortunately, it was later cooked when a dual solution was discovered. Here is a corrected version of the helpmate's grand debut.
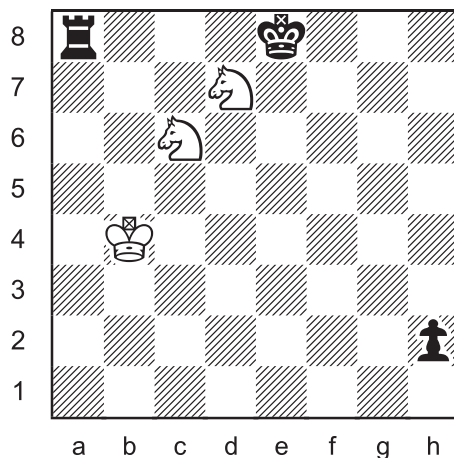
Helpmate 08

Helpmate in 3

Black plays first. Find the sequence of moves
that lets White mate on their third turn.

For a long time, there was no accepted name for this kind of problem. The term "helpmate" was first used in 1897 by Thomas B. Rowland and Frideswide F. Rowland in their book *The Problem Art*.

Interest in helpmates continued to grow, and by the 1920s, it was firmly established as a problem-type. Here is a clever miniature from 1928 by Czech composer Josef Jána.
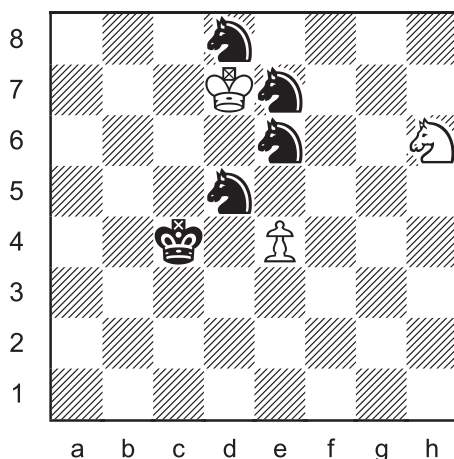
Helpmate 09

Helpmate in 3

Black plays first. Find the sequence of moves
that lets White mate on their third turn.

About half of all helpmates are two-movers. Another quarter are three-movers. Except for the occasional helpmate in one, the rest are *multi-movers* with four or more moves per side.

The *stump potential* of longer helpmates is sometimes "off the scale". But our final puzzle is the lightweight variety. We'll save the heavy stuff for another day.

Helpmate 10

Helpmate in 5

Black plays first. Find the sequence of moves
that lets White mate on their fifth turn.

FOUR WEEKS and counting!
The deadline for the *Chess Cafe Puzzlers Cup* is midnight Hawaiian time (Greenwich -10) on October 31. Yes, we will be staying up that late to receive your winning entry!
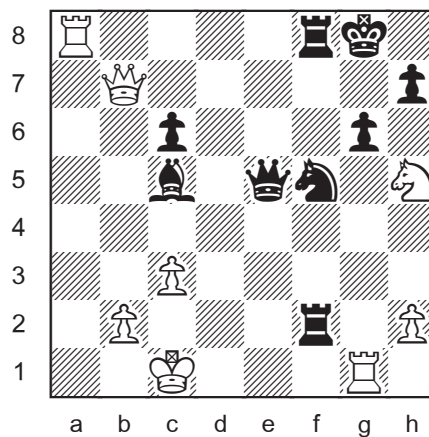
SOLUTIONS

PDF hyperlinks. You can advance to the solution of any puzzle by clicking on the underlined title above the diagram. To return to the puzzle, click on the title above the solution diagram.

Helpmate 01

J. Coakley 2006
Winning Chess Puzzles For Kids

In helpmate notation, the black move is always written first, immediately after the move number. Like so ...

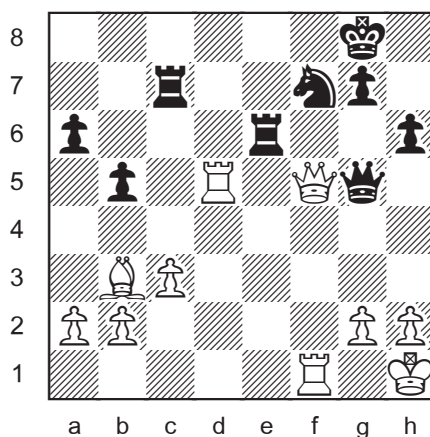|	BLACK	WHITE
1.	Qh8	Qb3#

An "unstrategic retreat" by the black queen obstructs h8 and eliminates the possibility of blocking a check along the a2-g8 diagonal.

Helpmate 02

J. Coakley 2006
Scholar's Mate 81
Winning Chess Puzzles For Kids

BLACK   WHITE
1.   Rf6   Rd8#

The black rook obstructs the black queen's defence of d8 and partially clears the a2-g8 diagonal. When the white rook also leaves that diagonal, another defender of d8, the black knight on f7, is pinned by the white bishop on b3. A lot of tactics for a one-mover!

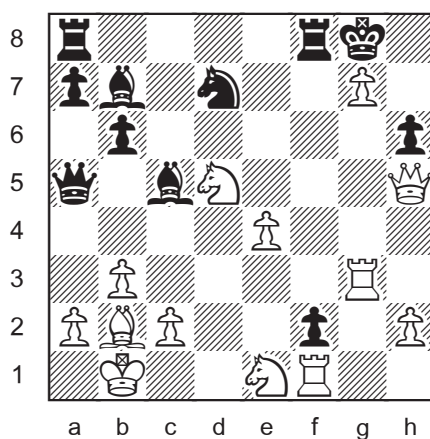# Helpmate 03

J. Coakley 2000
Scholar's Mate 51
Winning Chess Puzzles For Kids (2006)
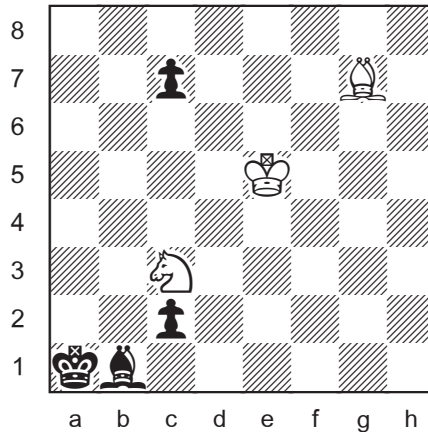version *ChessCafe.com* (*2013*)

BLACK   WHITE
1. fxe1=N   gxf8=N#

The crowd-pleasing double knight promotion! An old theme that never quite wears out.

Helpmate 04

J. Coakley 1977

version *ChessCafe.com* (*2013*)

	BLACK	WHITE
1.	Ba2	Nb1
2.	cxb1=B	Kf4#

A rare *lone bishop* mate. Without the black pawn on c7, White could also play Kd6#. Maybe the puzzle is better that way!?

I didn't make many problems way back then, but this unpublished helpmate was composed in 1977. Let's not count the years.

Here is an updated version, built up to three moves.

Helpmate 04b

Helpmate in 3

	BLACK	WHITE
1.	b1=B	Bxh8
2.	Ba2	Nb1
3.	cxb1=B	Kf4#

Two bishop promos on the same square!?

Helpmate 05

Pal Benko 1976
The Problemist

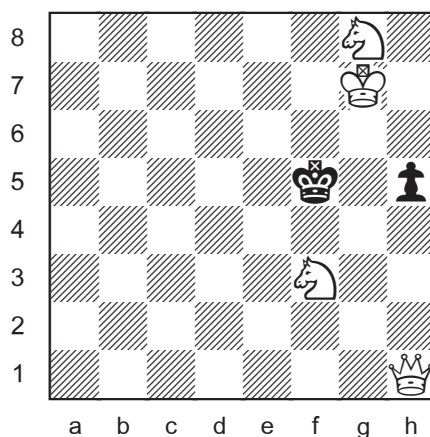|	BLACK	WHITE
1.	Kg4	Qxh5+
2.	Kxh5	Nf6#

An awesome queen sack followed by a classic KNN vs. K checkmate.

I don't know if this helpmate ever appeared in Pal Benko's *Chess Life* column. But it certainly is a baffler!

An interesting feature of the problem is that it can also be solved as a **helpmate in 1.5**. White plays first, and Black replies with a move that allows White to mate the black king.

This "puzzle within a puzzle", with White to move first instead of Black, is known as *set play*. It is intentionally added to a problem by the composer to enhance its aesthetic appeal.

Set Play

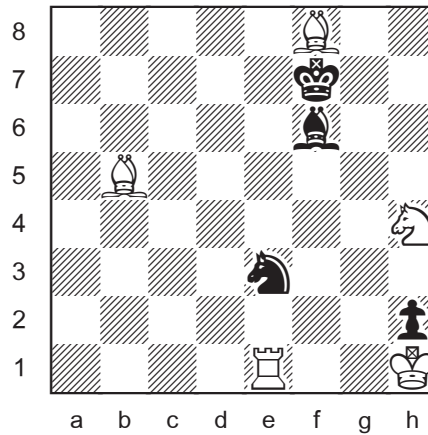|	BLACK	WHITE
1.	. . .	Kf8
2.	Kg6	Qb1#

An inspired retreat by the white king.

Notice that even in *set play*, with White going first, helpmate notation still puts the black moves immediately after the move number. White played 1...Kf8!
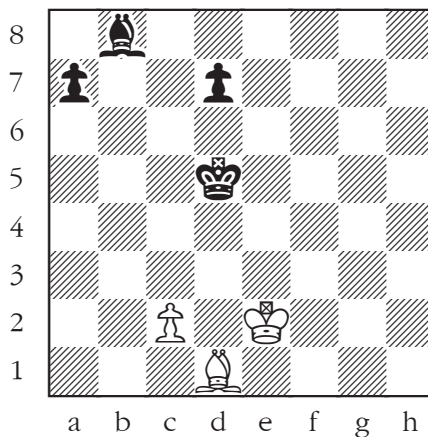
Helpmate 06

Sveto Stambuk 1951
Sahovski Vjesnik

	BLACK	WHITE
1.	Nc2	Bh6
2.	Na1	Bc4#

The mating pattern with Bh6 and Bc4# is not hard to see. The tricky thing is to find a hiding place for the black knight! With two turns, the knight can reach twenty-one different squares, but the corner a1 is the only spot that doesn't interfere with the mate. A remarkable concept.

Helpmate 07

Max Lange 1854
Schachzeitung
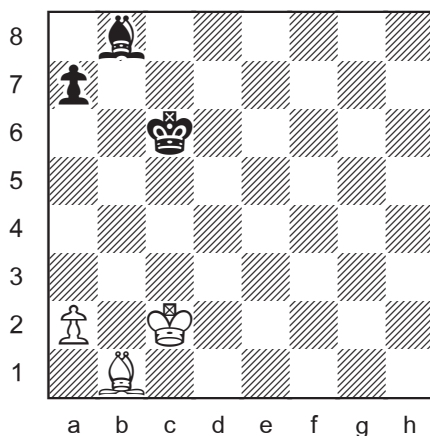*version* J. Coakley, *ChessCafe.com 2013*

	BLACK	WHITE
1.	Kc6	c3
2.	Kb7	Bb3
3.	Ka8	Bd5#

The diagram below shows the original position given by Max Lange. It is White to play, so the problem is actually a *helpmate in 2.5* moves.

Helpmate 07b

Max Lange 1854
Schachzeitung

Helpmate in 2.5
White to play

The problem is cooked because there are 92 solutions, starting with any first move by White. Lange gave this line (in standard notation).

	WHITE	BLACK
1.	a3	Kb7
2.	Ba2	Ka8
3.	Bd5#	

Two leading authorities on helpmates, Hilmar Ebert and Hans Gruber, discuss this problem at length in their excellent book called *Early Helpmates* (German 2001). They point out that the Lange position can be converted into a sound *helpmate in two* by placing the white pawn on d3 instead of a2. The solution is then 1.Kb7 Ba2 2.Ka8 Bd5#.

Puzzling Side of Helpmates, part A

Isn't it odd that almost all helpmates have an *integral* number of moves (2, 3, 4, etc.)? What's wrong with *mixed numbers* like 1.5 or 2.5? Such helpmates are obviously possible, as shown by the original Lange position and the *set play* in the problem by Pal Benko.
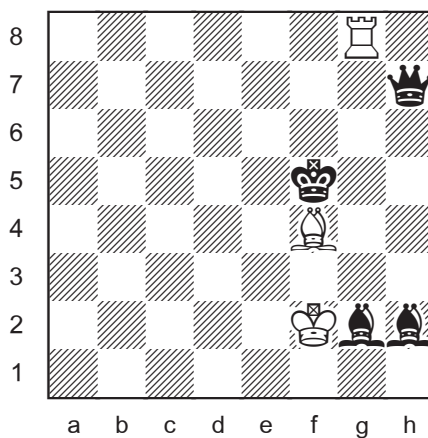
Perhaps the most economical setting for some helpmate themes is a mixed number of moves!?

Helpmate 08

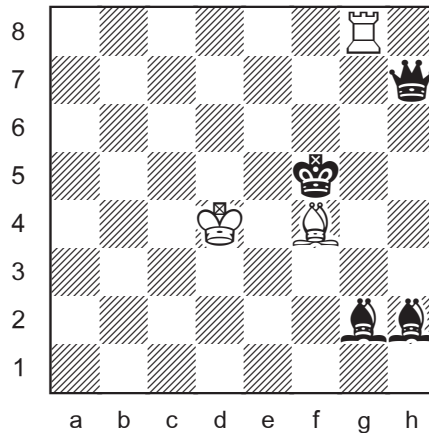|	BLACK	WHITE
1.	Kf6	Ra8
2.	Kg7	Bb8
3.	Kh8	Be5#

White's first two moves set up a double check ambush. In the mating position, both checkers are under attack by black bishops and both checks are blockable by the black queen. One goal of the problem is to demonstrate the full tactical power of a double check.

Loyd's helpmate in the *Chess Monthly* was accompanied by a story called *The Sin of the Nuns*, an elaborate tale about a chess game between two nuns in sixteenth century Portugal. Sister Maria, who usually won their games, was playing poorly. Her mental abilities had been diminished by eating an apple, the forbidden fruit. Nevertheless, a clever "stratagem" assured her victory. She offered her opponent an apple! At first Sister Anna declined, but she didn't resist for long. After she ate the apple, her chess skill suffered so badly that Sister Maria mated her in three moves. "How did she do it?"

It is not known if the story was written by Sam Loyd or by Willard Fiske, the editor of *Chess Monthly*. Perhaps it was a collaboration.

Here is Loyd's original problem.
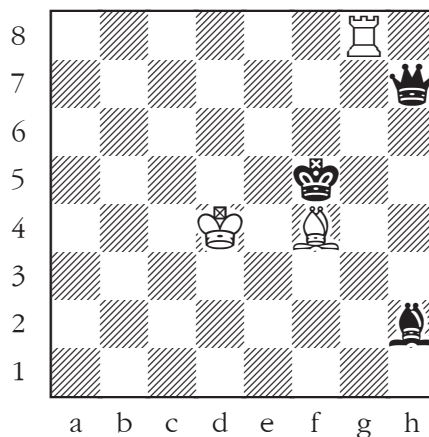
Sam Loyd 1860
Chess Monthly

It is cooked because of this second solution:

	BLACK	WHITE
1.	Bf3	Kc3 (or Kc4)
2.	Ke4	Rd8
3.	Qf5	Rd4#

Sam Loyd later repaired the position by removing the black bishop on g2. This eliminates the second solution.

Sam Loyd 1878
Chess Strategy

The fix works, but the double check is now less impressive without an attack on the rook at a8. I preferred to uncook the problem by placing the white king on f2 rather than d4, thereby preserving both black bishops.

It has been noted by many commentators that the bishop on h2 is not necessary in this position. The problem is still sound without it.

Puzzling Side of Helpmates, part B

Why is there a special kind of notation for helpmates? Standard notation would work fine.

Writing the black move first is unnatural. Many players, including me sometimes, find it confusing.

When Max Lange, the "inventor of the helpmate", gave a solution to Loyd's problem in his *Handbuch der Schachaufgaben* (1862), it was written like this: 1...Bf3 2.Kc4 Ke4 3.Rd8 Qf5 4.Rd4#. That is the same way that computer programs show the moves when a helpmate position is entered. It's also the same way that we write solutions for tactical exercises with Black to play.
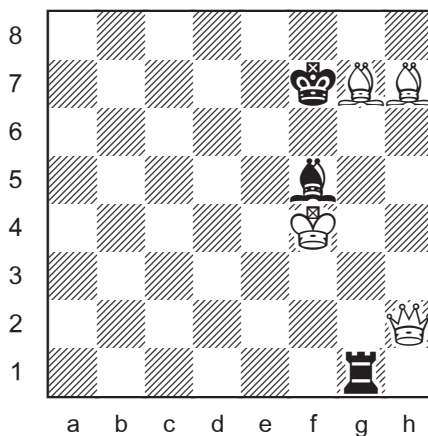
I don't see the plus side of helpmate notation. The only good argument in its favour is that it's been the convention for over a century!

Puzzling Side of Helpmates, part C

Why does Black move first in helpmates? In all other types of chess problems, White goes first.

The precedent was set by Sam Loyd in 1860. In the first helpmate ever published, the stipulation was "Black to play". But it could have been different. Take a look at this *reverse perspective* of the game between Sisters Anna and Maria.

Helpmate 08*

Helpmate in 3

*White plays first. Find the sequence of moves
that lets Black mate on their third turn.*

	WHITE	BLACK
1.	Kf3	Ra1
2.	Kg2	Bb1
3.	Kh1	Be4#

Consider the *selfmate,* another common type of problem. White moves first and **forces** Black to checkmate the white king.

A helpmate is essentially an *unforced selfmate*. One side moves first and the other side **assists** with mating the first side's king.
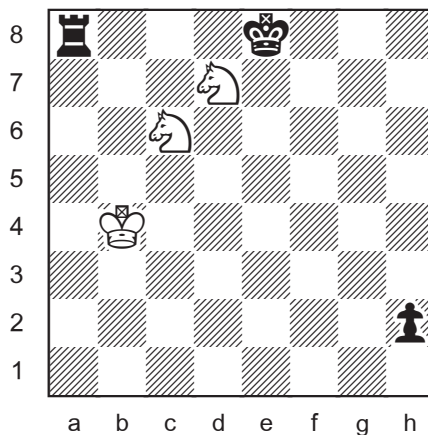
If helpmates were colour-coordinated with selfmates, then White would move first in helpmates and Black would assist with checkmating the white king. As a bonus, there would be no reason for special notation.

Of course, with 100,000 helpmates already in the books, it's a little late to change things now.

Helpmate 09

Josef Jána 1928
Neues Grazer Tagblatt

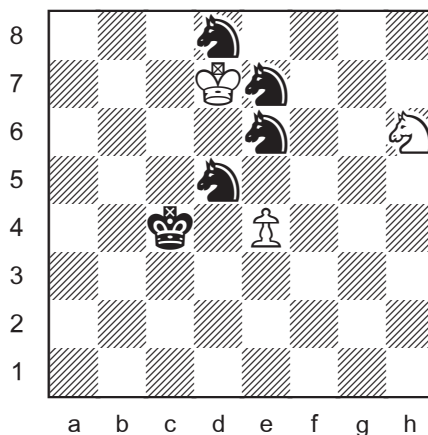|	BLACK	WHITE
1.	h1=B	Ncb8
2.	Bb7	Na6
3.	0-0-0	Nb6#

Underpromotion, castling, and nimble knights. Who could ask for more?

Castling is allowed in chess problems unless it can be proven that the king or rook moved previously.

Helpmate 10

J. Coakley 2013

ChessCafe.com

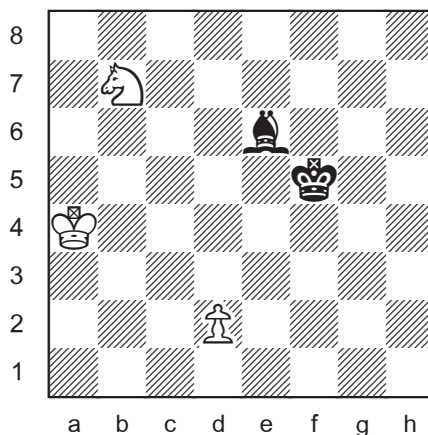|	BLACK	WHITE
1.	Kd4	exd5
2.	Ke5	d6
3.	Kf6	dxe7
4.	Kg7	exd8=N
5.	Kf8	Nxe6#

A trail of fallen knights leads to the coveted KNN vs. K mate. The trickiest thing in this puzzle is realizing that the black king must journey across the board to f8.

Do you have time for one more?

Helpmate 10b

Alexandru Nagy 1931

Revista Româna de Sah

Helpmate in 6

This minimalist masterpiece is by Romanian composer Alexandru Nagy (1915- ?). He was sixteen years old when this problem was published.

	BLACK	WHITE
1.	Bc8	d4
2.	Ke6	d5+
3.	Kd7	d6
4.	Kc6	d7
5.	Kb6	dxc8=N+
6.	Ka6	Nc5#

The white pawn marches from its starting square to the last rank in five consecutive moves, the *Excelsior* theme. It was so named by Sam Loyd after a poem by Henry Wadsworth Longfellow. The first verse is given below. 'Excelsior' is the Latin word for 'higher'.
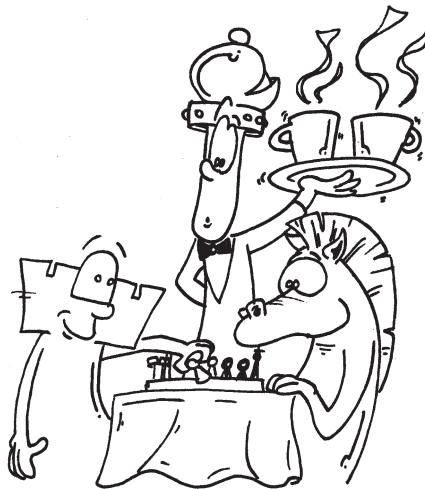
The shades of night were falling fast,
As through an Alpine village passed
A youth, who bore, 'mid snow and ice,
A banner with the strange device,
Excelsior!

Another poem called *Excelsior* begins ...

Who has gone farthest? For I would go farther.

Walt Whitman [1856]

A great motto for an adventurous pawn.

Until next time!