## Happy Couple

## with Ten Block and The Hughes Puzzle



Made in Japan by Hanabishi, circa 1985.
(cardboard box, wood tray, 2 keepers and 16 wood pieces, $4.75 \times 9 \times 5 / 8$ inches)
A $4 \times 3$ portion on the left and a $4 \times 5$ portion on the right with a 2 unit high opening between; remove keepers and slide the pieces to make the $2 \times 2$ pieces meet. The right side is the Ushi puzzle, but solving is easier by making use of extra space on the left. Here are every 4th position of a 32 rectilinear ( 46 straight-line) moves solution that ends with the couple meeting along a unit long portion of their edges:


## A Solution To Meet Along A Full Edge

To meet on a full edge, here are 10 positions of a 39 rectilinear ( 64 straight-line) moves solution:


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## Another Solution To Meet Along A Full Edge

To meet on a full edge, here are 10 positions of a 39 rectilinear ( 59 straight-line) moves solution:


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## Other Puzzles With The Happy Couple

With the supply of extra pieces on the left, any of the Dad's Family puzzles can be played on the right (Dad's Puzzler, Traffic Jam, Red Donkey, Century, Hole In One, Ushi, etc.). Puzzles with two $2 \times 2$ pieces and puzzles played in a 4 by 3 area are also possible.
Ten Block: Presented in the 1942 Filipiak book (a.k.a. Trans-Atlantic Puzzle, Traffic Cop Tangle), the problem is to exchange the two $2 \times 2$ pieces; below are all of the steps that move a $2 \times 2$ piece in a solution of 47 rectilinear moves ( 55 straight-line moves) that is presented in Hordern's book (pieces are numbered the same as in that solution with $M, W$ instead of $A, B$ ):


Hughes Puzzle: The Hordern book describes the Hughes Puzzle as having been submitted to Amateur Handicraft Magazine USA by F. Clark Hughes in 1947. The problem is to move the 2 x 1 piece from the upper left to the lower right; here are every 6 steps of a solution of 23 rectilinear moves ( 27 straight-line moves) that is presented by Hordern:


## Home Made Happy Couple Puzzles

Boxes with an aspect ratio of about two to one are relatively common. The thickness of an inside liner and the thickness of the left to right dividers can be adjusted to make the $4: 3$ and $4: 5$ aspect ratios of the left and right sides exact.


Made by J. A. Storer, 2007.
(wood box, 2 plexiglass keepers, and 16 wood pieces, 5.1 by 9.6 by 1.25 inches; box originally for an old Starrett Micrometer; underside of lid has directions drawn)


Made by J. A. Storer, 2007.
(wood box, 2 plexiglass keepers, and 16 wood pieces, 3.9 by 7.75 by 1.1 inches; box box originally for some Yema Tostada - a Spanish dessert)

## A Longer Solution That Came With The Happy Couple

Here are the directions from the back of the box and the solution sheet．It shows the couple meeting along a full edge，with the meeting edge to the left of the center bar．The 32 －move solution for them to meet on a 1－unit portion needs to have the meeting edge to the right of the bar（otherwise it takes 35 moves），whereas the 39 move solution works either way（depending on the choice for steps 38 and 39）．

## パスルの遊び方

空所を利用して，駒を箱の中ですべらせて移動し，左右の大きな駒を下図のように，お互いにくつつけて下さい。 （彼とあなた，彼女とあなたの運だめし）


## Further Reading，Baxter＇s Sliding Block Pages，from：

（Main）http：／／www．johnrausch．com／SlidingBlockPuzzles
（Happy Couple）http：／／www．puzzleworld．org／SlidingBlockPuzzles／happyCouple．htm
（Ten Block）http：／／www．johnrausch．com／SlidingBlockPuzzles／10block．htm
（Hughes）http：／／www．johnrausch．com／SlidingBlockPuzzles／hughes．htm

