Dustin Puzzle

Patented by F. G. Dustin 1935
Made by Diniar Namdarian 2019; sleeves made by J. A. Storer.
(laser cut plastic, left 5.25" x 4.75" x 3/8", right 4.75" x 4.75" x 1/4")

Looks like the Fifteen puzzle at first, but except for 15, pieces are joined together in pairs. The blue puzzle on the left is the original described on page 151 of Hordern's book; the problem is to reverse the numbers, and it can be easily solved except for the 13-14 piece ending upside down, and then finishing as shown in the Dustin patent (below). The red puzzle has a slightly smaller interior space so as to not allow the Dustin solution (1,6,14,13,15 won't fit the diagonal); a 50 step solution of the puzzle maker to turn the numbers 90 degrees is on the following two pages.
Dustin Puzzle Tight Version Solution

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Dustin Puzzle Tight Version Solution, Continued

Further Reading
Dustin Patent, from: www.uspto.gov - patent no. 1,993,211

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