Sliding Block Puzzle

a.k.a. Fifteen Block Puzzle, 1-2-3 Puzzle, ABC Puzzle, Tenderfoot's Caution, Countdown
S. S. Adams Co., Asbury Park, NJ., "PAT. APP'D FOR 1927".
(6.4 inches square by 5/8 inches thick cardboard box with 15 3/8 thick wood pieces; directions are on the inside of the box top shown on the right above; most of the right side of the box top edge is missing)

Start with the position shown above and slide the blocks to end with 1 and 3 exchanged and block 2 in its original position. Described on pages 14-15 of the Filipiak book (where a 262 move solution is presented). Hordern's book presents a 136 rectilinear move solution (135 straight-line moves) and a 148 rectilinear move solution (146 straight line moves) to the harder problem of a final position where 1 and 3 are exchanged and all other pieces are in their original positions (Hordern lists the number of straight-line moves as 1 and 2 more respectively because he starts with the leftmost yellow block one unit down). Both of Hordern's solutions begin with the same 72 rectilinear moves; the following three pages show these common moves and then the remaining moves for each solution.

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Sliding Block Puzzle Directions

SLIDING BLOCK PUZZLE

STARTING.—Before starting take the blocks out of the box and note the diagram in the bottom which shows the position in which the blocks should be placed.

OBJECT.—The object of this puzzle is to make the No. 1 block and the No. 3 block change places. No block must be turned or lifted from the box; all the other blocks must be in the same position at the finish as at the start.

DIRECTIONS. To make it easy for you to understand this puzzle, a few of the moves are illustrated. The following characters stand for the various blocks as follows:—

1 2 3 designate the red blocks.

| | designates the blue blocks.

* * designates the yellow blocks.

0 = designates the empty space.

The diagrams below illustrate the start and the first eight moves.

Start    1   2   3   4   5   6   7   8

1 3    1 3    1 3    1 3    1 3    1 3    1 3    1 3

2 2    2 2    2 2    2 2    2 2    2 2    2 2    2 2

* 3    * 3    0 3    0 3    0 3    0 3    0 3    0 3

The first move This consists of sliding the number two block to the left, moving the upper yellow block with it. The position is now shown in diagram No. 1.

2nd Move—This move consists in sliding the blue block under the empty space UP. (See diagram No. 2.)

3rd Move—Slide the three blocks on the left of the open space to the RIGHT. (See diagram No. 3.)

4th Move—Slide the two yellow blocks DOWN.

5th Move—Slide the two blocks to the right of the open space to the LEFT.

6th Move—Slide the blue block under the open space UP.

7th Move—Slide the two blue blocks to the left of the space RIGHT.

8th Move—This is a double move and consists in sliding the lower yellow block to the RIGHT and UP. (See diagram)

Now that you thoroughly understand the method we will leave you to your own devices for a while.

Along at the 18th move the position is shown in diagram 18. Note that the No. 1 block is starting its journey downward and that the No. 3 block has started up.

18 30 59 10 0 150 181 182 183 184

The No. 50 diagram shows the position after that number of moves. Note that the No. 3 block is right next to its final destination.

For fear that we will make the solution too easy for you, we are going to show only one more diagram.

With a thorough knowledge of the proper method, the final solution will be easy and in the meantime will afford you some fascinating entertainment. Perhaps you may even discover some short cuts and save a number of moves.

If you will mail a stamped envelope to the manufacturers, the S. S. Adams Company of Asbury Park, N. J., they will mail you a complete solution on January first.

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Common Portion of Hordern's Two Solutions

For both of Hordern's solutions, here are moves 0, 2, 9, 12, 19, 21, 27, 30, 37, 44, 47, 50, 53, 55, 62, 65, 72; these are all of the moves of the 2x2 pieces plus move 37:
Remaining Moves For Hordern's First Solution

For the remainder of Hordern's first solution, here are moves 72, 79, 86, 93, 100, 104, 107, 110, 113, 115, 120, 123, 130 for the 2x2 pieces:
Remaining Moves For Hordern's Second Solution

For the remainder of Hordern's second solution, here are moves 72, 74, 77, 80, 83, 90, 93, 102, 105, 111, 114, 117, 120, 129, 132, 139, 140 for the 2x2 pieces: