## 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 $153 / 8$ 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.

## 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 unde'stand this puzzle, a few of the moves are illustrated. The following characters stand for the various blocks as follows:-
10 designate the red blocks.

The dagrams below illust ate the start and the first eight moves.

with it $\because$ ve-This covists of tiving the number tac block to the left, mioving the-upper yellow blockwith it The position is now shown in diagram No. I.

2 n ! Move - This move consists in sl ding the blie 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 blo ks DOWN.
5 th Move. - Slide the two blocks to the right of the open space to the LEFT.
6th Move-Slide the blue block under the o en space UP.
7th Move.-Slide the two blue blocks to the le't 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 thorgughly un Serstand the method we will leave you to your own devices for a while.
flong at the 18th move the rosition is rhown in diagram 18. Note that the No. I block is starting its jou ney cownward and that the No. 3 block has started up.


At the 30 th move the position is again shown Note that there has been another double shift of the yellow blocks, also that blocks $I$ and 3 have both advanced in the general direction in which they are to go.

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.

Fo- fear that we will make the solution too easy for you, we are going to show only one more diagram. This dagram shows the 100 th move, note that the No 1 blo $k$ is in its final position where it should remain r.ght to the finish

The lowest number of moves in which a final solution has been reached is 184 . The five final moves
shown in diagram. are shown in diagram.

With a thorough knowledge of the poper metho ' the final solution w 11 be easy and in the meantime
w 11 affo d you some fascinat'ng entertainment. Perhaps you may even discover some short cuts and save a number of moves.

If you w 11 me'l n etamped envelope to the manuta-tu-ers, the $S$ S. Adams Company of Asbury Park, N. J., they will ma'l you a complete solution on Jan ary first.

## 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 $2 \times 2$ pieces plus move 37 :


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## 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 $2 \times 2$ 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 $2 \times 2$ pieces:


