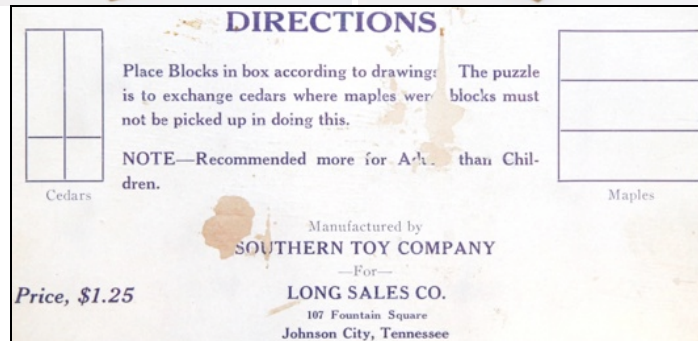
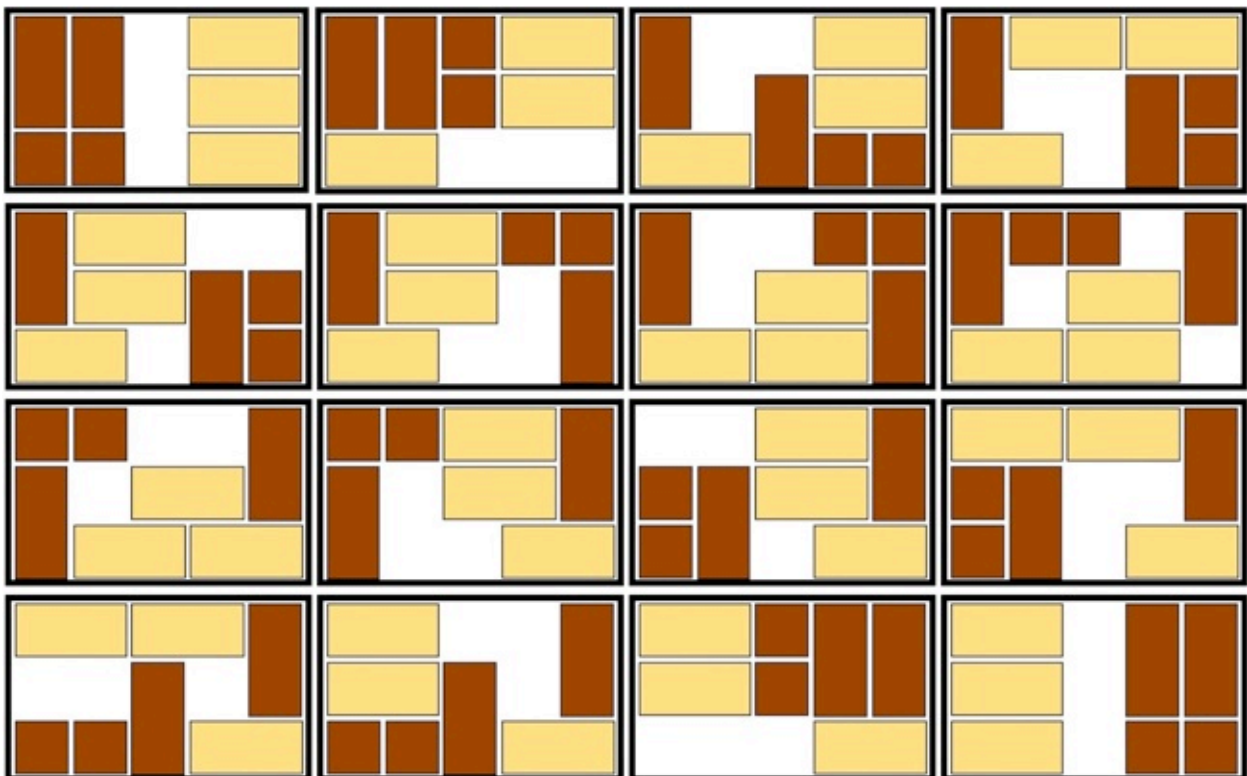


Johnson City Puzzle



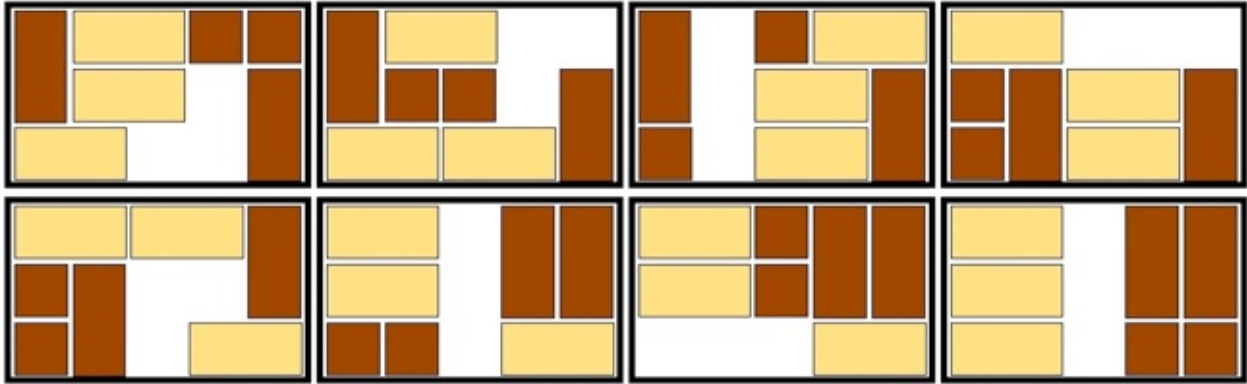
Southern Toy Co. for Long Sales Co., Johnson City, TN, circa 1930's?
 (wood box that looks like a book and 7 wood pieces, 8.5" x 6" x 5/8")

Exchange the dark and light pieces; here are selected positions of a not minimal 42 rectilinear moves solution (59 straight-line moves):



Johnson City Solutions

Starting with move 15 of the solution of the previous page (step 5 of the selected steps shown), here are different additional steps that can be taken to achieve a 39 rectilinear moves solution:



Here is the full 39 moves rectilinear move solution (59 straight-line moves):

A B 1 1	A B Y 1 1	A B Y 1 1	A B Y 1 1	A B Y 1 1	A B 1 1	A 1 1	A 1 1
A B 2 2	A B 2 2	A B X 2 2	A B X 2 2	A B 2 2	A B 2 2	A B 2 2	A B 2 2
X Y 3 3	X 3 3	3 3	3 3	X 3 3	Y X 3 3	B Y X 3 3	B Y X 3 3
A 1 1 2 2	A 1 1 2 2	A 1 1 2 2	A 2 2	A 2 2	A 2 2 Y	A 2 2 Y X	A 2 2 Y X
A B	A B Y	A B Y	A 1 1 B Y	A 1 1 B Y	A 1 1 B	A 1 1 B	A 1 1 B
3 3 B Y X	3 3 B X	3 3 B X	3 3 B X	3 3 B X	3 3 B X	3 3 B	3 3 B
A 2 2 Y X	A 2 2 X	A 2 2	A 2 2	A X 2 2	A X 2 2	A X 2 2	A X 2 2
A B A Y	B A Y X	B A Y X	B A Y X	B A Y	B A Y	B A Y 1 1 B	B A Y 1 1 B
3 3 1 1 B	3 3 1 1 B	3 3 1 1 B	3 3 1 1 B	3 3 1 1 B	3 3 1 1 B	3 3 B	3 3 B
X 2 2	2 2	2 2	2 2	2 2 B	2 2 1 1 B	2 2 1 1 B	2 2 1 1 B
A 1 1 B	X A 1 1 B	X A 1 1 B	X A 1 1 B	X A B	X A B	X A B	X A B
Y A 3 3 B	Y A 3 3 B	Y A 3 3 B	Y A 3 3	Y A 3 3	Y A 3 3	Y A 3 3	Y A 3 3
2 2 1 1 B	B 1 1	B 1 1	A B 1 1	X A B 1 1	X A B 1 1	X A B 1 1	X A B 1 1
2 2 A B	2 2 A B	2 2 A B	2 2 A B	2 2 Y A B	2 2 Y A B	2 2 Y A B	2 2 A B
Y X A 3 3	Y X A 3 3	Y X 3 3	Y 3 3	3 3	3 3	3 3	3 3 X Y

Here is a 58 straight-line moves solution (41 rectilinear moves):

A B 1 1	A B 1 1	A B Y 1 1	A B Y 1 1	A B Y 1 1	A B Y 1 1	A B Y 1 1	A B Y 1 1
A B 2 2	A B 2 2	A B 2 2	A B 2 2	A B X 2 2	A B X 2 2	A B X 2 2	A B 2 2
X Y 3 3	X Y 3 3	X 3 3	X 3 3	X 3 3	3 3	3 3	3 3 X
A B 1 1	A B 1 1	A B 1 1	A B 1 1	A 1 1	A 1 1	A 1 1 2 2	A 1 1 2 2
A B 2 2	A B 2 2	A B 2 2	A B 2 2	A B 2 2	A B 2 2	A B	A B Y
3 3 Y X	3 3 Y X	3 3 Y X	3 3 B Y X	3 3 B Y X	3 3 B Y X	3 3 B Y X	3 3 B X
A 1 1 2 2	A 2 2	A 2 2	A 2 2 B	A 2 2 B	A 2 2 B	A 2 2 B	A 2 2 X B
A B Y	A 1 1 B Y	A 1 1 B Y	A 1 1 B Y	A 1 1 B Y	A 1 1 B	A 1 1 B	A 1 1 B
3 3 B X	3 3 B X	3 3 B X	3 3 X	3 3 X	3 3 X Y	3 3 X Y	3 3 Y
A 2 2 X B	A 2 2 X B	A 2 2 X B	2 2 X B	2 2 X B	X B X	X B X	B X Y B
A 1 1 B	A 1 1 Y B	A 1 1 Y B	A 1 1 Y B	A Y B	A 2 2 Y B	A 2 2 Y B	A 2 2 B
3 3 Y	3 3	3 3 A	3 3 A	A 1 1 3 3	A 1 1 3 3	A 1 1 3 3	A 1 1 3 3
X Y B X Y	B X Y	B X Y 2 2 B	X Y 2 2 B	X Y 2 2 B	X Y 2 2 B	X Y 2 2 B	Y 2 2 B
A 2 2 B A	2 2 B A	B A 1 1	B A 1 1	B A 1 1 B	A 1 1 B	A 1 1 B	A 1 1 B
A 1 1 3 3	A 1 1 3 3	A 1 1 3 3	A 3 3	A 3 3	A 3 3	X A 3 3	X A 3 3
2 2 B	2 2 B	2 2 1 1 B	2 2 1 1 B	2 2 1 1 B	2 2 1 1 B	1 1 B	1 1 B
Y A 1 1 B	Y A 1 1 B	Y A B	Y A B	Y A B	2 2 A B	2 2 A B	2 2 A B
X A 3 3	X A 3 3	X A 3 3	X A 3 3	X A 3 3	X Y A 3 3	X Y A 3 3	X Y A 3 3
1 1 A B	1 1 A B	1 1 A B	1 1 Y A B	1 1 Y A B	1 1 Y A B	1 1 Y A B	1 1 Y A B
2 2 A B	2 2 A B	2 2 A B	2 2 A B	2 2 A B	2 2 X A B	2 2 X A B	2 2 A B
X Y 3 3	X Y 3 3	X Y 3 3	X 3 3	X 3 3	3 3	3 3	3 3 X
1 1 Y A B	1 1 A B	1 1 A B					
2 2 A B	2 2 A B	2 2 A B					
3 3 X	3 3 Y X	3 3 Y X					