

state

0	0	2	2
0	0	2	4
0	0	8	8
0	4	8	16

right



after state

0	0	0	4
0	0	2	4
0	0	2	16
0	4	8	16

input



state

0	2	0	4
0	0	2	4
0	0	2	16
0	4	8	16