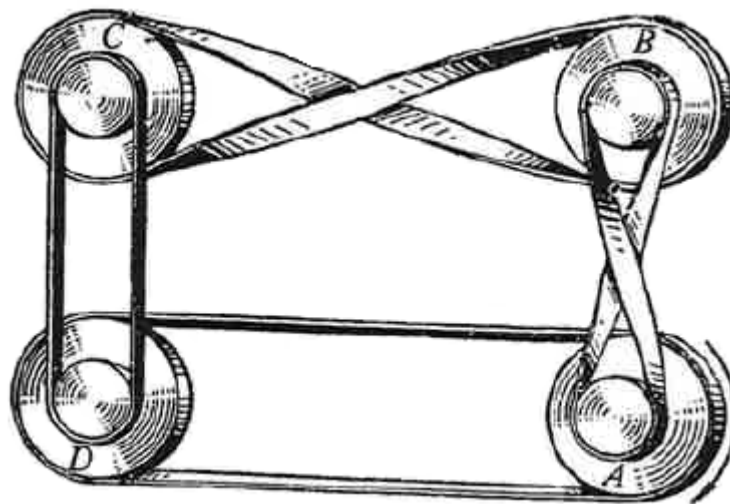




Puzzle provided by Kordemsky: *The Moscow Puzzles* (Dover)

Wheels  $A$ ,  $B$ ,  $C$ , and  $D$  are connected with belts as shown. If wheel  $A$  starts to rotate clockwise as the arrow indicates, can all 4 wheels rotate? If so, which way does each wheel rotate?  
Can all the wheels turn if all 4 belts are crossed?  
If 1 or 3 belts are crossed?





**Solution:** Yes, *C* and *D* turn clockwise and *B* turns counterclockwise. The wheels can also turn if all 4 belts are crossed, but not if 1 or 3 belts are.