

State 1

attached by spring
↓
Start / $A \leftrightarrow B$

$A \leftrightarrow B \Leftrightarrow B$ in 1. state, attached cells
↓
 $A \rightarrow B$

Thread #1

1. Pick up A

2. detach $A \leftrightarrow B$

3. detach B from A

State 2 $A \leftarrow B$

Thread #2

4. Pick up B

5. attach $A \leftrightarrow B$ (no check yet for attachment)

6. attach $A \leftarrow B$ ← skipped as we are in State 2

7. attach $A \rightarrow B$

$A \leftrightarrow B$ State 3

8. detach A from B

$A \rightarrow B$

State 4