CLAIMS

1. A blood component separator for use in centrifugal separation of blood, comprising:

a blood storage vessel including a first storage part and a second storage part;

a slider movable from the first storage part to the second storage part; and

a flow path for communicating an inside and an outside of the storage vessel, wherein

when the slider is in the first storage part, the first storage part and the second storage part are in communication with each other,

when the slider is inserted into the second storage part, a liquid-tight seal is formed between the slider and an inner peripheral surface of the second storage part and the communication between the first storage part and the second storage part is blocked by the slider,

the slider is movable in the second storage part while maintaining the liquid-tight seal between the slider and the inner peripheral surface of the second storage part, and

as the slider enters into the second storage part, a blood component in the second storage part is pushed out of the storage vessel through the flow path.

2. The blood component separator according to claim 1, further comprising:

a first rod holding the slider and led out of the storage vessel, wherein

the flow path is provided in the first rod.

3. The blood component separator according to claim 1 or 2, further comprising:

a first locking mechanism that restricts movement of the slider in the first storage part toward the second storage part.

4. The blood component separator according to any one of claims 1 to 3, wherein

the second storage part includes a cylinder part disposed adjacent to the first storage part, and

the liquid-tight seal is formed between an inner peripheral surface of the cylinder part and the slider.

5. The blood component separator according to claim 4, wherein

the inner peripheral surface of the cylinder part is a cylindrical surface.

6. The blood component separator according to claim 4 or 5, wherein

the second storage part includes an auxiliary storage part communicating with the first

storage part through the cylinder part, and

the auxiliary storage part has an inner diameter larger than that of the cylinder part.

7. The blood component separator according to any one of claims 4 to 6, wherein

the second storage part includes an auxiliary storage part communicating with the first storage part through the cylinder part, and

a blocking member that can block communication between the cylinder part and the auxiliary storage part is provided in the second storage part.

8. The blood component separator according to claim 7, wherein

the blocking member is movable in the auxiliary storage part,

when the blocking member is in the auxiliary storage part, the cylinder part and the auxiliary storage part are in communication with each other, and

when the blocking member is fitted into an opening on an auxiliary storage part side of the cylinder part, the communication between the cylinder part and the auxiliary storage part is blocked by the blocking member.

9. The blood component separator according to claim 7 or 8, further comprising:

a second rod holding the blocking member and led out of the storage vessel, wherein

the flow path is provided in the second rod.

10. The blood component separator according to any one of claims 7 to 9, further comprising:

a second locking mechanism for maintaining a state where the blocking member blocks the communication between the cylinder part and the auxiliary storage part.

11. The blood component separator according to any one of claims 1 to 10, further comprising:

a vent port for communicating the first storage part and the outside of the storage vessel.

12. The blood component separator according to any one of claims 1 to 11, wherein

the second storage part is provided with a volume adjusting mechanism that can adjust a volume of the storage vessel.

13. The blood component separator according to any one of claims 1 to 12, further comprising:

a blood component recovery device configured to recover the blood component pushed out of the storage vessel through the flow path, wherein

the recovery device includes a first container, a second container, and a switching mechanism configured to selectively communicate the flow path with either the first container or the second container.

14. A blood component separator for use in centrifugal separation of blood, comprising:

a blood storage vessel including a first storage part and a second storage part;

a slider movable from the first storage part to the second storage part;

a flow path for communicating an inside and an outside of the storage vessel, and

a volume adjusting mechanism that can adjust a volume of the second storage part, wherein

when the slider is in the first storage part, the first storage part and the second storage part are in communication with each other,

when the slider is inserted into the second storage part, a liquid-tight seal is formed between the slider and an inner peripheral surface of the second storage part and the communication between the first storage part and the second storage part is blocked by the slider, and

when the volume adjusting mechanism reduces the volume of the second storage part in a state where the slider blocks the communication between the first storage part and the second storage part, a blood component in the second storage part is pushed out of the storage vessel through the flow path.