Claims

1. An assistance device that assists a care receiver in standing up, the device comprising:

a base;

a first arm extending upward from the base;

a second arm provided at a distal end of the first arm and configured to swing around a horizontal axis;

a support member provided on the second arm and configured to support an upper half body of the care receiver;

a first cover provided on the first arm and configured to cover at least a part of the first arm;

a second cover provided on the second arm and configured to cover at least a part of the second arm; and

a third cover supported, when the first arm or the first cover is defined as a first member and the second arm or the second cover is defined as a second member, so as to be swingable around a horizontal axis with respect to a first one of the first and second members and provided so as to be slidably movable with respect to a second one of the first and second members,

wherein the third cover is provided between the first cover and the second cover and is formed in a shape that closes a gap between the first cover and the second cover.

2. The assistance device according to claim 1,

wherein a guide groove is formed on the third cover, and a guide pin is provided on the first member and configured to move along the guide groove such that the third cover is slidably movable with respect to the first member.

3. The assistance device according to claim 1,

wherein the guide groove is formed on the first member, and a guide pin is provided on the third cover and configured to move along the guide groove such that the third cover is slidably movable with respect to the first member.

4. The assistance device according to any one of claims 1 to 3,

wherein in an entire swing range of the second arm with respect to the first arm,

the first and third covers are maintained in a partially overlapping state and a gap is not generated in a direction orthogonal to an overlapping direction, and

the second and third covers are maintained in a partially overlapping state and a gap is not generated in a direction orthogonal to an overlapping direction.

5. The assistance device according to any one of claims 1 to 4,

wherein the third cover is disposed on an inner surface side of the first and second covers.

6. The assistance device according to claim 5,

wherein a separation distance between places where the first and second covers do not overlap with each other is a specified distance when the first and second covers are closest to each other with the swing of the second arm.

7. The assistance device according to any one of claims 1 to 6, further comprising:

an actuator configured to drive the swing of the second arm and provided behind the first arm,

wherein the third cover is configured to cover at least a rear side of the first arm and the actuator.

8. The assistance device according to claim 7,

wherein the actuator is a linear motion actuator bridged between a base point of the first arm and a drive point of the second arm and is configured to expand and contract, and

the third cover is supported so as to be swingable around a horizontal axis passing through the drive point of the second arm and is provided so as to be slidably movable with respect to the first member.

9. The assistance device according to claim 8,

wherein a slide movement direction of the third cover is along an expansion and contraction direction of the linear motion actuator.

10. The assistance device according to any one of claims 1 to 9,

wherein the first arm is provided so as to be swingable around a horizontal axis with respect to the base, and

the first cover is configured to swing integrally with the first arm with respect to the base, with the swing of the first arm.

11. The assistance device according to claim 10, further comprising:

a driving source configured to drive the swing of the first arm and provided behind the first arm, and an actuator configured to drive the swing of the second arm and provided behind the first arm,

wherein the third cover is configured to cover at least a rear side of the first arm and the actuator.

12. The assistance device according to any one of claims 1 to 6,

wherein the first arm is provided so as to be swingable around a horizontal axis with respect to the base,

the assistance device further comprises an overall driving source and a link mechanism configured to drive the swing of the first arm and the swing of the second arm, behind the first arm, and

the third cover is configured to cover at least a rear side of the first arm and the link mechanism.

13. The assistance device according to any one of claims 1 to 12,

wherein the first member is the first arm and the second member is the second arm.