CLAIMS

1. A bed apparatus comprising,

a frame;

a first section disposed on the frame, the first section including a first depression which is disposed in a central portion of the first section with respect to a width direction of a top surface of the first section while leaving flat edge areas on left and right sides with respect to the width direction of the top surface of the first section and a second depression;

a second section disposed on the frame, the second section including a third depression which is disposed in a central portion of the second section with respect to a width direction of a top surface of the second section while leaving flat edge areas on left and right sides with respect to the width direction of the top surface of the second section, the third depression being formed so as to support user's hips in order not to move the user's hips when one side of the first section raises, a width of the third depression in a first direction being shorter than a width of the second depression in the first direction, the first direction being a direction from the left side towards the right side; and

a third section disposed between the first section and the second section.

2. The bed apparatus according to claim 1, wherein a depth of the third depression is larger than a depth of the first depression.

3. The bed apparatus according to claim 1 or 2, wherein the first to third sections being composed of same material.

4. The bed apparatus according to any one of the claims 1 to 3, wherein a plurality of holes are disposed in the first depression, the holes including a first hole and a second hole, a size of the first hole being different from a size of the second hole.

5. A bed apparatus comprising,

a frame;

a first section disposed on the frame, the first section including a first depression which is disposed in a central portion of the first section with respect to a width direction of a top surface of the first section while leaving flat edge areas on left and right sides with respect to the width direction of the top surface of the first section and a second depression;

a second section disposed on the frame, the second section including a third depression which is disposed in a central portion of the second section with respect to a width direction of a top surface of the second section while leaving flat edge areas on

left and right sides with respect to the width direction of the top surface of the second section, a depth of the third depression is larger than a depth of the first depression, a width of the third depression in a first direction being shorter than a width of the second depression in the first direction, the first direction being a direction from the left side towards the right side; and

a third section disposed between the first section and the second section, part of the third section being overlapped with and slidably contacted to the second depression of the first section, wherein

the third depression is formed so as to support user's hips in order not to move the user's hips when one side of the first section raises.

6. The bed apparatus according to claim 5, wherein the first to third sections being composed of same material.

7. The bed apparatus according to claim 5 or 6, wherein a plurality of holes are disposed in the first depression, the holes including a first hole and a second hole, a size of the first hole being different from a size of the second hole.

8. A bottom for a bed apparatus, in which a depressed portion

is formed on the bottom by hollowing out a central part of the bottom with respect to a width direction of a top surface of the bottom while leaving flat edge areas on left and right sides with respect to the width direction of the top surface, and a plurality of passage holes are formed from the top surface to an undersurface of the bottom,

wherein

the bottom has parts corresponding to a hip bottom, the hip bottom being formed with the depressed portion,

the bed apparatus has a top frame configured by arranging a pair of frame members at left and right sides with respect to the bed apparatus,

the bottom has parts corresponding to a back bottom, the back bottom being formed with the depressed portion, a width of the depressed portion of the hip bottom in a first direction being shorter than a width of the depressed portion of the back bottom in the first direction, the first direction being a direction from the left side towards the right side,

the hip bottom is mounted on the top frame, wherein the hip bottom having flat edge areas on left and right sides with respect to a width direction of the hip bottom is arranged so as to be positioned on the left and right sides frame members, and

the depressed portion of the hip bottom is formed so as to

hold user’s hips in order not to move the user’s hips when a back-raising is carried out.

9. A bottom for a bed apparatus, in which a depressed portion is formed on the bottom by hollowing out a central part of the bottom with respect to a width direction of a top surface of the bottom while leaving flat edge areas on left and right sides with respect to the width direction of the top surface, and a plurality of passage holes are formed from the top surface to an undersurface of the bottom,

wherein

the depressed portion is formed in a dimension corresponding to a width of a user body, leaving flat edge areas in a head side, a foot side, and both of the left and right sides in the width direction, of the entire bottom,

the bottom has a part corresponding to a hip bottom, the hip bottom being formed with the depressed portion,

the bottom has parts corresponding to a back bottom, the back bottom being formed with the depressed portion, a width of the depressed portion of the hip bottom in a first direction being shorter than a width of the depressed portion of the back bottom in the first direction, the first direction being a direction from the left side towards the right side, and

the depressed portion of the hip bottom in the bottom is formed so as to hold user’s hips in order not to move the user’s hips when a back-raising is carried out.

10. A bottom for a bed apparatus, in which a depressed portion is formed on the bottom by hollowing out a central part of the bottom with respect to a width direction of a top surface of the bottom while leaving flat edge areas on left and right sides with respect to the width direction of the top surface, and a plurality of passage holes are formed from the top surface to an undersurface of the bottom,

wherein

the bottom has parts corresponding to a hip bottom, a knee bottom and a foot bottom, each bottom of the parts being formed with the depressed portion,

the depressed portion of the hip bottom is the deepest, and the depressed portion of the knee bottom is the second deepest, and

the depressed portion of the hip bottom is formed so as to hold user’s hips in order not to move the user’s hips when a back-raising is carried out.

11. A bottom for a bed apparatus, which is height adjustable and

is mounted on the top of a bed apparatus, comprising:

a plurality of parts each formed of a resin plate having a thickness,

wherein

essential parts among the plurality of parts are joined by connecting parts, and the connecting parts are formed to be thinner than the essential parts,

a depressed portion is formed on the bottom by hollowing out a central part of the bottom with respect to a width direction of a top surface of the bottom while leaving flat edge areas on left and right sides with respect to the width direction of the top surface, and a plurality of passage holes are formed from the top surface to an undersurface of the bottom,

the essential parts of the bottom are a hip bottom, a knee bottom, a foot bottom and a back bottom, each essential part being formed with the depressed portion,

a flexing part as the connecting part is extended from the hip bottom, overlapping the back bottom, and flexibly joined to the back bottom so as to slide along the back bottom when a back-raising operation is carried out,

a width of the depressed portion of the hip bottom in a first direction being shorter than a width of the depressed portion of the back bottom in the first direction, the first direction being

a direction from the left side towards the right side, and

the depressed portion of the hip bottom is formed so as to hold user’s hips in order not to move the user’s hips when the back-raising is carried out.

12. The bottom for a bed apparatus according to any one of Claims 8 to 11, wherein the sum of widths of the flat edge areas on the left and right sides with respect to the width direction of the top surface is within a width ranging from one half to one fifths of the width of the bottom.

13. A bed apparatus comprising the bottom according to any one of Claims 8 to 12.