CLAIMS

1. A massage apparatus comprising:

a massage section having a stationary massage member and a movable massage member arranged so as to hold a to-be-treated body area in sandwich style;

a rotary shaft disposed so as to pass through a base end of the movable massage member of said massage section;

a driving section for rotatably driving said rotary shaft;

a pair of right-hand and left-hand changer sections for changing a rotational force exerted by said rotary shaft into an action of movement of the movable massage member toward and away from said stationary massage member; and

a breadth adjustment mechanism capable of positioning movement of said stationary massage member in directions toward and away from the movable massage member.

2. The massage apparatus according to claim 1,

wherein there is disposed a pair of said massage sections arranged side by side in a horizontal direction,

wherein said breadth adjustment mechanism includes a breadth adjustment rotary shaft which is placed with its axis pointing in the horizontal direction and is free to rotate forward and backward, said breadth adjustment rotary shaft passing through the stationary massage member mounted in the right-hand

massage section and the stationary massage member mounted in the left-hand massage section while threadedly engaging each of threadedly engagement portions disposed in the stationary massage members, respectively,

and wherein, in terms of screw threading, there is an inverse relationship between the threadedly engagement portion of the stationary massage member disposed in the right-hand massage section and the threadedly engagement portion of the stationary massage member disposed in the left-hand massage section.

3. The massage apparatus according to claim 1 or 2,

wherein said stationary massage member is provided with an indicator member for indicating the amounts of travel toward and away from the movable massage member.

4. The massage apparatus according to any one of claims 1 to 3,

wherein a support member is disposed between said stationary massage member and said movable massage member so as to be situated at the side of the base ends of the massage members, for supporting the to-be-treated area, the support member being placed out of a range of positioning movement of the stationary massage member, yet placed near the positioning movement range.

5. The massage apparatus according to any one of claims 1 to 4,

wherein said changer section comprises:

a rotary boss portion which is secured to an axial midpoint of the rotary shaft and has formed in its periphery of the rotary boss portion an endless cam face inclined to the rotary shaft;

a housing portion formed in a pierced area of said movable massage member so as to be fitted slidably in the periphery of the rotary boss portion; and

a restraining portion for restraining the housing portion from rotating dependently with a rotation of said rotary boss portion.

6. The massage apparatus according to any one of claims 1 to 5,

wherein said rotary shaft passes through the stationary massage member and is retained for free rotation relative to the stationary massage member.

7. The massage apparatus according to any one of claims 1 to 6,

wherein there is disposed a pair of said massage sections arranged side by side in the horizontal direction,

and wherein, in said paired right-hand and left-hand

massage sections, their stationary massage members are arranged on a horizontally inward side of the apparatus, whereas their movable massage members are arranged on a horizontally outward side of the apparatus.

8. The massage apparatus according to any one of claims 1 to 7,

wherein said stationary massage member and said movable massage member are each made of a plate material which is elastically deformable in a thickness-wise direction.

9. The massage apparatus according to any one of claims 1 to 8,

wherein said to-be-treated area is defined as a lower leg including a foot and a calf,

and wherein said movable massage member is composed of separate components, namely a lower movable body placed in a position for massaging the foot and an upper movable body placed above the lower movable body for massaging the calf.

10. The massage apparatus according to any one of claims 1 to 9,

wherein said stationary massage member is formed in one-piece structure having a size large enough to put pressure on the lower leg between the foot and calf regions.

11. The massage apparatus according to any one of claims 2 to 9,

wherein the breadth adjustment rotary shaft of said breadth adjustment mechanism is constructed of a unitary shaft body.

CLAIMS

1. A massage apparatus comprising:

a pair of massage sections arranged side by side in a horizontal direction, each of said massage sections having a stationary massage member and a movable massage member arranged so as to hold a to-be-treated body area in sandwich style and made of a plate material which is elastically deformable in a thickness-wise direction;

a rotary shaft disposed so as to pass through a base end of the movable massage member of said massage section, said rotary shaft being placed with its axis pointing in the horizontal direction;

a driving section for rotatably driving said rotary shaft;

a pair of right-hand and left-hand changer sections for changing a rotational force exerted by said rotary shaft into an action of movement of the movable massage member toward and away from said stationary massage member; and

a breadth adjustment mechanism capable of positioning movement of said stationary massage member in directions toward and away from the movable massage member,

wherein said rotary shaft passes through a base end of the stationary massage member so as to be freely rotatable and

said stationary massage member is freely slidable in an axial direction of said rotary shaft,

wherein said breadth adjustment mechanism includes a breadth adjustment rotary shaft which is placed with its axis pointing in the horizontal direction and is free to rotate forward and backward,

wherein said breadth adjustment rotary shaft passes through portions of the stationary massage member mounted in the right-hand massage section and the stationary massage member mounted in the left-hand massage section different from a portion through which said rotary shaft passes while said breadth adjustment rotary shaft threadedly engages a threadedly engagement portion disposed in each of the stationary massage members,

and wherein, in terms of screw threading, there is an inverse relationship between the threadedly engagement portion of the stationary massage member disposed in the right-hand massage section and the threadedly engagement portion of the stationary massage member disposed in the left-hand massage section.

2. The massage apparatus according to claim 1,

wherein said stationary massage member is provided with an indicator member for indicating the amounts of travel toward and away from the movable massage member.

3. The massage apparatus according to any one of claims 1 to 2,

wherein a support member is disposed between said stationary massage member and said movable massage member so as to be situated at the side of the base ends of the massage members, for supporting the to-be-treated area, the support member being placed out of a range of positioning movement of the stationary massage member, yet placed near the positioning movement range.

4. The massage apparatus according to any one of claims 1 to 3,

wherein said changer section comprises:

a rotary boss portion which is secured to an axial midpoint of the rotary shaft and has formed in its periphery of the rotary boss portion an endless cam face inclined to the rotary shaft;

a housing portion formed in a pierced area of said movable massage member so as to be fitted slidably in the periphery of the rotary boss portion; and

a restraining portion for restraining the housing portion from rotating dependently with a rotation of said rotary boss portion.

5. The massage apparatus according to any one of claims 1

to 4,

wherein there is disposed a pair of said massage sections arranged side by side in the horizontal direction,

and wherein, in said paired right-hand and left-hand massage sections, their stationary massage members are arranged on a horizontally inward side of the apparatus, whereas their movable massage members are arranged on a horizontally outward side of the apparatus.

6. The massage apparatus according to any one of claims 1 to 5,

wherein said to-be-treated area is defined as a lower leg including a foot and a calf,

and wherein said movable massage member is composed of separate components, namely a lower movable body placed in a position for massaging the foot and an upper movable body placed above the lower movable body for massaging the calf.

7. The massage apparatus according to any one of claims 1 to 6,

wherein said stationary massage member is formed in one-piece structure having a size large enough to put pressure on the lower leg between the foot and calf regions.

8. The massage apparatus according to any one of claims 1

to 7,

wherein the breadth adjustment rotary shaft of said breadth adjustment mechanism is constructed of a unitary shaft body.