

CLAIMS

1. A leg massage device comprising:

an outer treatment member formed so as to cover an outer part of a foot;

a front-pressing treatment member disposed above said outer treatment member, for pressing a front of a calf while moving in a vertical direction;

an inner treatment member opposed to said outer treatment member and said front-pressing treatment member in a horizontal direction, which is a vertically elongated member extending along a leg region from an inner part of a calf to an inner part of a foot;

a rotary shaft disposed so as to pass through base-end sides of said inner treatment member and said outer treatment member in the horizontal direction;

a driving section for rotatably driving said rotary shaft; and

a conversion section for converting rotational drive force of said rotary shaft into massage actions of said inner treatment member and said outer treatment member to hold legs in sandwich-style.

2. The leg massage device according to claim 1,

wherein said opposed inner treatment member and outer

treatment member are arranged in pairs in the horizontal direction,

and wherein an inner wall of said inner treatment member is composed of a first treatment section opposed to said front-pressing treatment member and a second treatment section opposed to said outer treatment member.

3. The leg massage device according to claim 2,
wherein said inner treatment member is constituted by forming integrally over said first treatment section and said second treatment section and has a boot-like shape as viewed from a side.

4. The leg massage device according to claim 3,
wherein an outer wall of said inner treatment member is fitted with a long reinforcing member extending continuously from a position corresponding to said first treatment section to a position corresponding to said second treatment section.

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

wherein said conversion section is located centrally of a lower part of each of said inner treatment member and said outer treatment member in a front-rear direction.

6. The leg massage device according to claim 5,
wherein said conversion section comprises:
a rotary boss portion secured to an axial midpoint of the
rotary shaft with inclination to said rotary shaft for unitary
rotation with the rotary shaft;
a housing portion disposed in said outer treatment member
and said inner treatment member, to which is externally fitted
said rotary boss portion for free relative rotation; and
a restraint portion for restraining the housing portion
from rotating in response to a rotation of said rotary boss
portion.
7. The leg massage device according to claim 6,
wherein two or more bearing tools are mounted in the rotary
boss portion of the conversion section provided in said inner
treatment member.
8. The leg massage device according to claim 5,
wherein said conversion section converts rotational drive
force of said rotary shaft into a massage action that causes
a front side of said second treatment section and a front side
of said outer treatment member to approach each other and causes
an upper part of the first treatment section to approach the
front-pressing treatment member, and also a massage action that
causes the upper part of said first treatment section to move

away from the front-pressing treatment member and causes the front side of the second treatment section to move away from the outer treatment member.

CLAIMS

1. A leg massage device comprising:
 - an outer treatment member formed so as to cover an outer part of foot;
 - a front-pressing treatment member disposed above said outer treatment member, for pressing a front of a calf while moving in a vertical direction;
 - an inner treatment member opposed to said outer treatment member and said front-pressing treatment member in a horizontal direction, which is a vertically elongated member extending along a leg region from an inner part of a calf to an inner part of a foot;
 - a rotary shaft disposed so as to pass through base-end sides of said inner treatment member and said outer treatment member in the horizontal direction;
 - a driving section for rotatably driving said rotary shaft; and
 - a conversion section for converting rotational drive force of said rotary shaft into massage actions of said inner treatment member and said outer treatment member to hold legs in sandwich-style;
 - wherein said conversion section is located centrally of a lower part of each of said inner treatment member and said outer treatment member in a front-near direction,
 - wherein said conversion section comprises:
 - a rotary boss portion secured to an axial midpoint of the rotary shaft with inclination to said rotary shaft for unitary rotation with the rotary shaft;
 - a housing portion disposed in said outer treatment member and said inner treatment member, to which is externally fitted said rotary boss portion for free relative rotation; and
 - a restraint portion for restraining the housing portion from rotating in response to a rotation of said rotary boss portion.
2. The leg massage device according to claim 1,
 - wherein said opposed inner treatment member and outer treatment member are arranged in pairs in the horizontal direction,

and wherein an inner wall of said inner treatment member is composed of a first treatment section opposed to said front-pressing treatment member and a second treatment section opposed to said outer treatment member.

3. The leg message device according to claim 2,
wherein said inner treatment member is constituted by forming integrally over said first treatment section and said second treatment section and has a shape of a human lower limb from a knee to the foot in a neutral position as viewed from a side.

4. The leg message device according to claim 3,
wherein an outer wall of said inner treatment member is fitted with a long reinforcing member extending continuously from a position corresponding to said first treatment section to a position corresponding to said second treatment section.

5. The leg message device according to claim 1,
wherein two or more bearing tools are mounted in the rotary boss portion of the conversion section provided in said inner treatment member.

6. The leg message device according to claim 1,
wherein said conversion section converts rotational drive force of said rotary shaft into a massage action that causes a front side of said second treatment section and a front side of said outer treatment member to approach each other and cause an upper part of the first treatment section to approach the front-pressing treatment member, and also a massage action that causes the upper part of said first treatment section to move away from the front-pressing treatment member and causes the front side of the second treatment section to move away from the outer treatment member.