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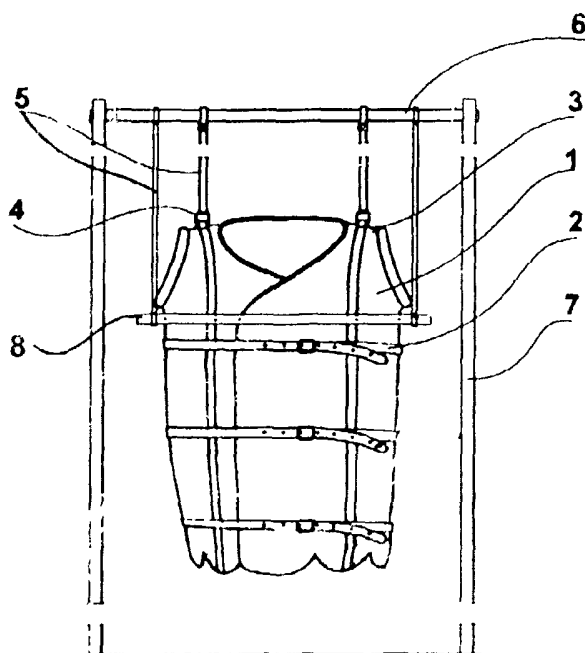
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- (71) Applicant: XAVIER, Mauro [BR/BR]; BR 040 KM 705, Barbacena, MG (BR).
- (74) Agent: DA SILVA RODRIGUES, Marconni; R. Araguari, 358, Loja 07, Barro Preto, CEP-30190-110 Belo Horizonte, MG (BR).
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(54) Title: STRETCHING LUMBAR-SACRAL FLOATING (SLSF) VEST



(57) Abstract: The present invention, a lumbar-sacral vest ("floating back stretcher"), furnishes professionals in the exercise field (physical therapists) with a new instrument, providing a more facilitating traction alternative for the lumbar region (vertebral decompression), which is very practical and functional and can be used at several levels, depending on the professional's experience. The vest (1) contains transversal belts (2), at the level that would be occupied by normal buttons, with rings (3 and 4) on the shoulders, and is, in practice, strapped onto the patient (at the thoracic-abdominal region) and suspended by the rings, through the use of lifters (5), girdles or chains on a bar (6) or hooks fastened to the ceiling, at the discretion of the therapist, in addition to a bar (8) at the thoracic level, sustained by fixed lifters also on the transversal bar (6), allowing for greater stability of the patient's body and for the performance of exercises with arms and legs. In this manner, the patient remains orthostatic (suspended) by the vest, and lumbar traction will be achieved, due to the force of gravity, by his or her body weight. Extra weights may be added to both ankles, in order to optimize traction.

WO 2004/014279 A2

## “STRETCHING LUMBAR-SACRAL FLOATING (SLSF) VEST”

The present invention patent, which pertains to the medical and hospital equipment industry, refers to a vest developed to help patients who need, mainly, algetic relief caused by spinal compression or sliding, due to pathologies which affect the spine, especially the lumbar and sacral regions.

At the present state-of-the-art, there are three methods and devices for stretching and distending the lumbar region in patients with vertebral problems. One of them is the traction table, where the patient is secured by the trunk and hip, and stretching is carried out mechanically through manual or computerized means. The second method uses boots with hooks that are attached to a pulley that raises the patient by his or her feet, turning him or her upside-down (in a process called “hang-up”). In the third method, the patient is placed on a float and keeps his or her legs submerged in water, while exercising (called “water jogging”). The latter two originated in the United States. As may be inferred, these are radical treatments, which expose the patient to great suffering.

The present invention, however, presents a method and a device capable of carrying out this treatment in a gentler and less radical way. It is a lumbar-sacral vest (“floating back stretcher”), which furnishes professionals in the exercise field (physical therapists) with a new instrument, providing a more facilitating traction alternative for the lumbar region (vertebral decompression), which is very practical and functional and can be used at several levels, depending on the professional’s experience.

The vest contains transversal belts, at the level that would be occupied by normal buttons, with rings on the shoulders, and is, in practice, strapped onto the patient (at the thoracic-abdominal region) and suspended by the rings, through the use of girdles or chains, using a bar or hooks fastened to the ceiling, at the discretion of the therapist. A bar at the thoracic level, sustained by girdles or chains on the bar, hooks or ceiling, completes the vest, allowing for greater stability of the body and the performance of exercises with arms and legs.

In this manner, the patient remains orthostatic (suspended) by the vest, and lumbar traction will be achieved, due to the force of gravity, by his or her body weight. Extra weights may be added to both ankles, in order to optimize traction.

The present invention can be better understood by looking at the attached figures, listed below, which accompany and are an integral part of the present descriptive report. They also contain numerical references that complement the detailed description which follows, without, however, restricting its configuration to the original configuration of the vest, in what concerns form, dimensions, and proportions, in addition to optional types of finishing that may comprise the vest's manufacture.

Figure 1 is a frontal view of the vest.

Figures 2 and 3 are frontal views of the vest being used by a patient, suspended on an elevated bar and performing exercises with legs and arms.

According to these figures and their numerical references, the present invention refers to a vest for providing relief to patients who suffer excessive pains in the skeletal (lumbar-sacral) muscle, comprising a vest proper (1) made of plain leather, napa leather, or some other resistant fabric, containing belts with buckles (2), sewn in parallel to adjustable spaces that follow the breadth of the vest and handles (3) with rings (4) attached to the shoulders for inserting lifters (5), supported by a transversal bar (6), sustained by columns (7) or hooks attached to the ceiling.

Furthermore, it contains a bar (8) set out at the level of the thorax and sustained by lifters, also fixed on the transversal bar (6). This helps in stabilizing the patient's body and allows for the execution of complementary exercises with the arms and legs.

In effect, a patient wearing the vest (1) and fastening the belts with the buckles (2) is suspended from the ground through the use of hooks (4), contained in the handles (3) of the vest's (1) shoulders, at the discretion of the physical therapist, on a transversal bar or using hooks attached to the ceiling, remaining in orthostatic position for treatment in algetic relief of pains caused by vertebral compression or sliding, due to pathologies which affect the spine, especially the lumbar region, through the effect of gravity on body weight. The possibility of adding weights to the patient's ankles, in order to optimize treatment, is also contemplated.

## CLAIMS

1) "STRETCHING LUMBAR-SACRAL FLOATING (SLSF) VEST", a vest developed to help patients who need, mainly, algetic relief caused by spinal compression or sliding, due to pathologies which affect the spine, especially the lumbar and sacral regions, characterized by a vest proper (1) made of plain leather, napa leather, or some other resistant fabric, containing belts with buckles (2), sewn in parallel to adjustable spaces that follow the breadth of the vest, and handles (3) with rings (4) attached to the shoulders for inserting lifters (5), supported by a transversal bar (6), sustained by columns (7) or hooks attached to the ceiling.

2) "STRETCHING LUMBAR-SACRAL FLOATING (SLSF) VEST", according to Claim 1, characterized by allowing a patient wearing the vest (1) and fastening the belts with the buckles (2), to be suspended from the ground through the use of hooks (4), contained in the handles (3) of the vest's (1) shoulders, at the discretion of the physical therapist, on a transversal bar or hooks attached to the ceiling, remaining in orthostatic position for treatment in algetic relief of pains caused by vertebral compression or sliding, due to pathologies which affect the spine, especially the lumbar region, through the effect of gravity on body weight. The possibility of adding weights to the patient's ankles, in order to optimize treatment, is also contemplated.

3), in accordance with Claim 1, characterized by containing, additionally, a bar (8), attached at the thoracic level and sustained by lifters also attached to the transversal bar (6), to help stabilize the patient's body and to allow for the performance of complementary exercises with arms and legs.

FIG.-1

