



US 20250120513A1

(19) **United States**

(12) **Patent Application Publication**  
**Jaden**

(10) **Pub. No.: US 2025/0120513 A1**

(43) **Pub. Date: Apr. 17, 2025**

(54) **LEG BOLSTER ELEVATION WEDGE**

(52) **U.S. Cl.**

CPC ..... *A47C 20/021* (2013.01)

(71) Applicant: **Gregg Jaden**, Manhattan Beach, CA  
(US)

(57)

**ABSTRACT**

(72) Inventor: **Gregg Jaden**, Manhattan Beach, CA  
(US)

A leg bolster elevation wedge includes: a main body, which includes a bottom surface, a top surface, a front end surface, a rear end surface, a left end surface, and a right end surface. The left end surface is arranged at an angle of 60° and has a first predetermined length. A rounded support portion is arranged between the left end surface and the top surface. The top surface is arranged at an angle of 30° and has a second predetermined length. The left end surface, the rounded support portion, and the top surface are positionable to contact and support a user's hips, thigh rears, knee pits, and shank rears in order to relax and decompress the user's lumbar spine, thoracic spine, vertebra and pelvis area, muscles, and ligaments. The angle between the left end surface and the top surface helps distribute weight in an ergonomic manner.

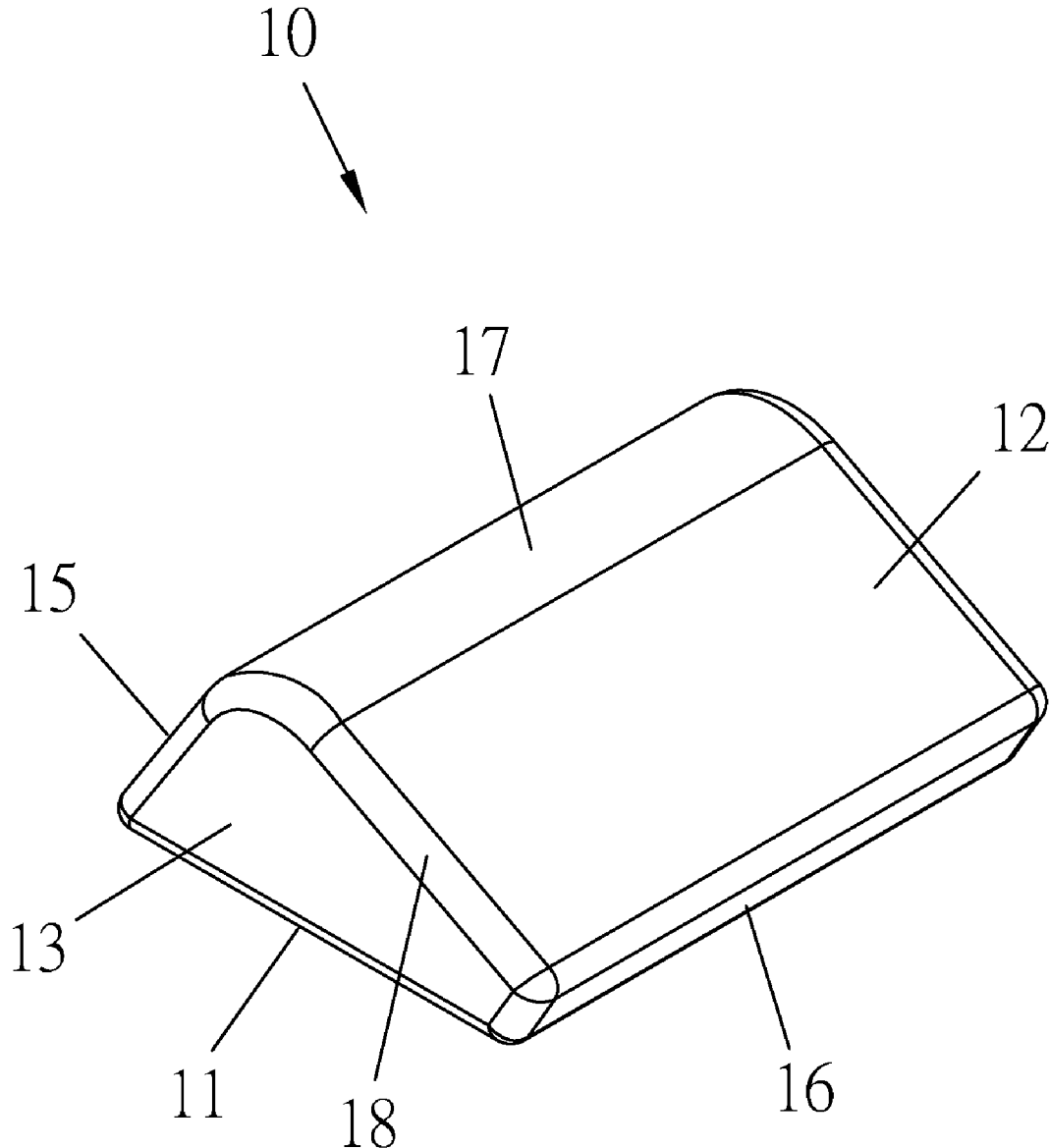
(21) Appl. No.: **18/484,464**

(22) Filed: **Oct. 11, 2023**

**Publication Classification**

(51) **Int. Cl.**

*A47C 20/00* (2006.01)



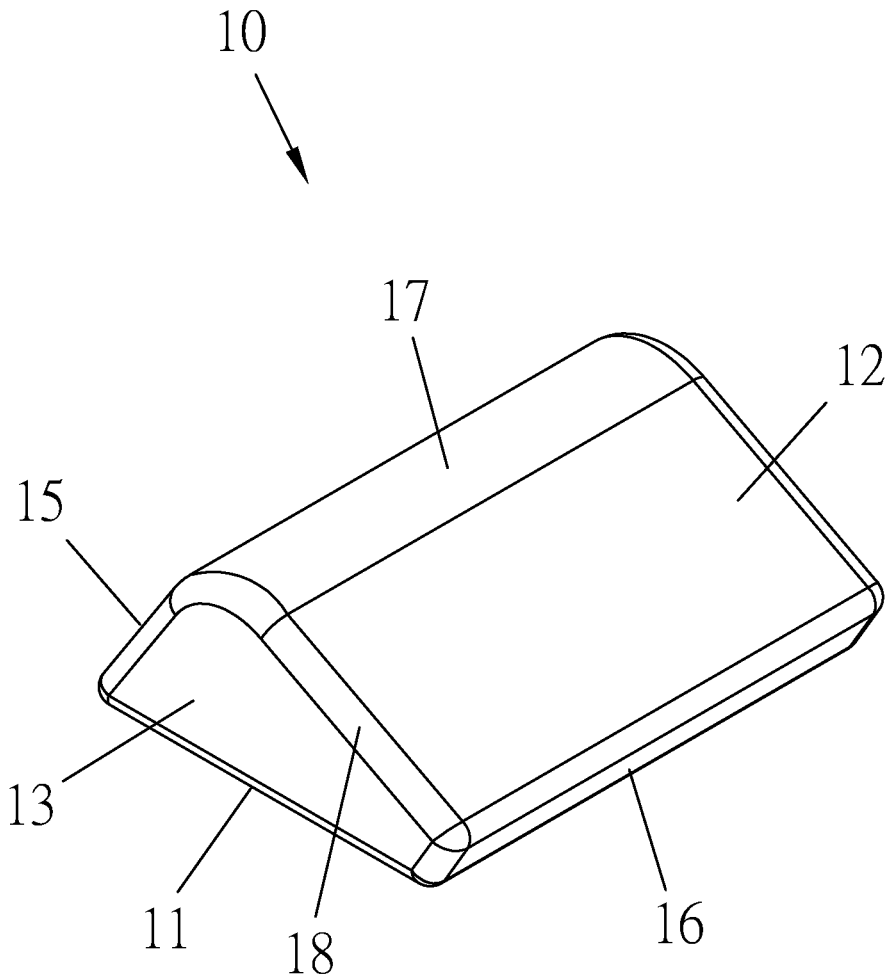


FIG. 1

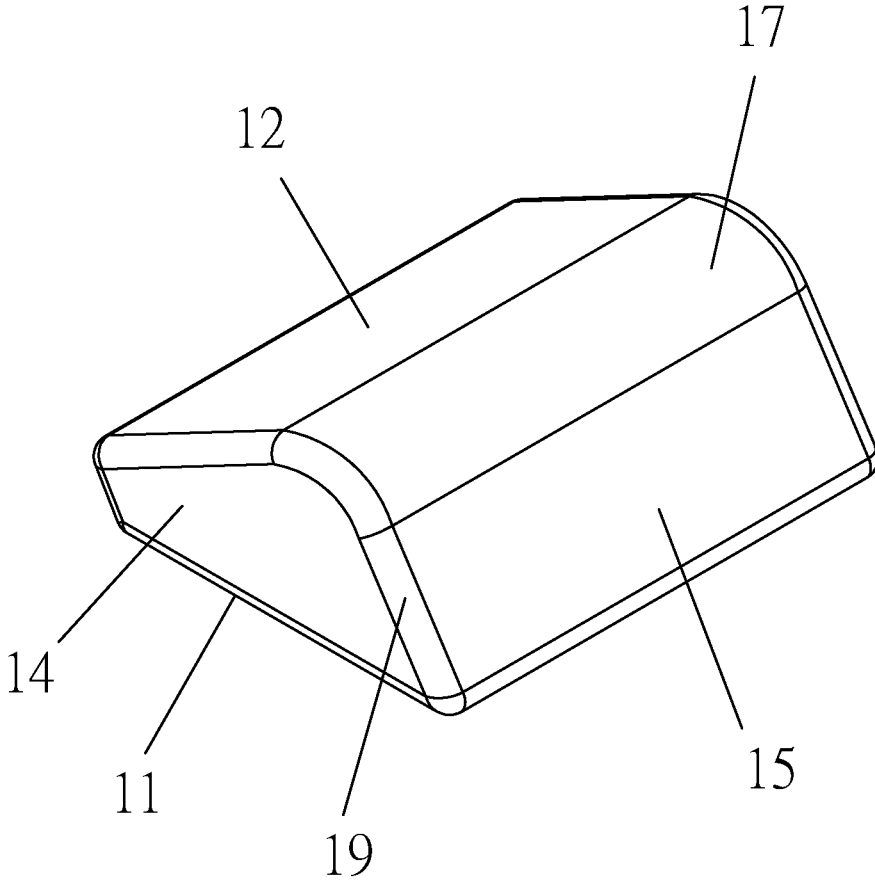


FIG. 2

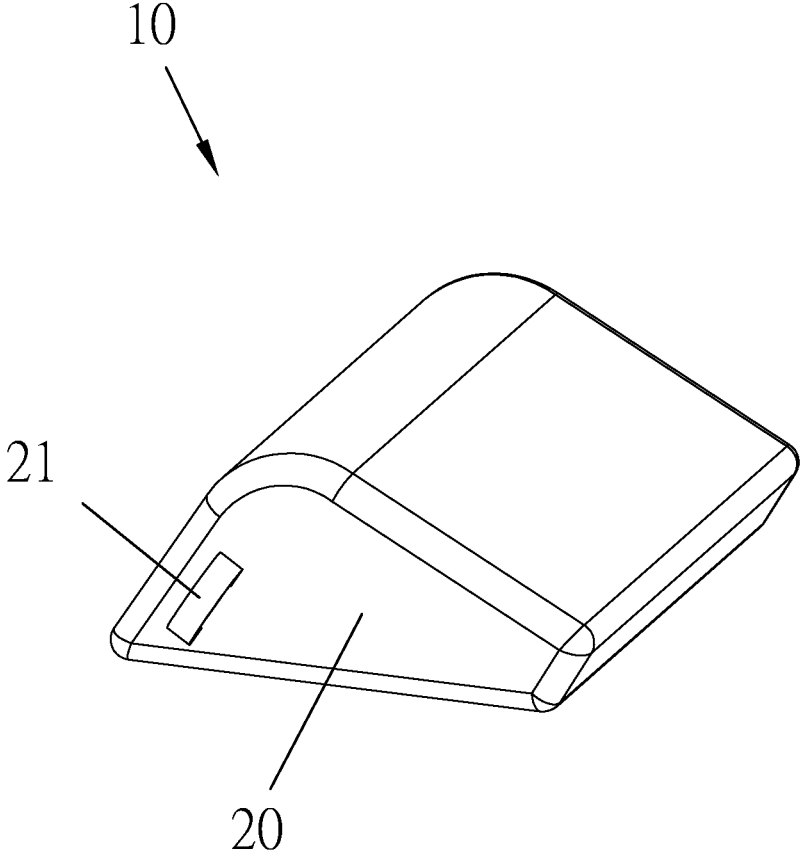


FIG. 3

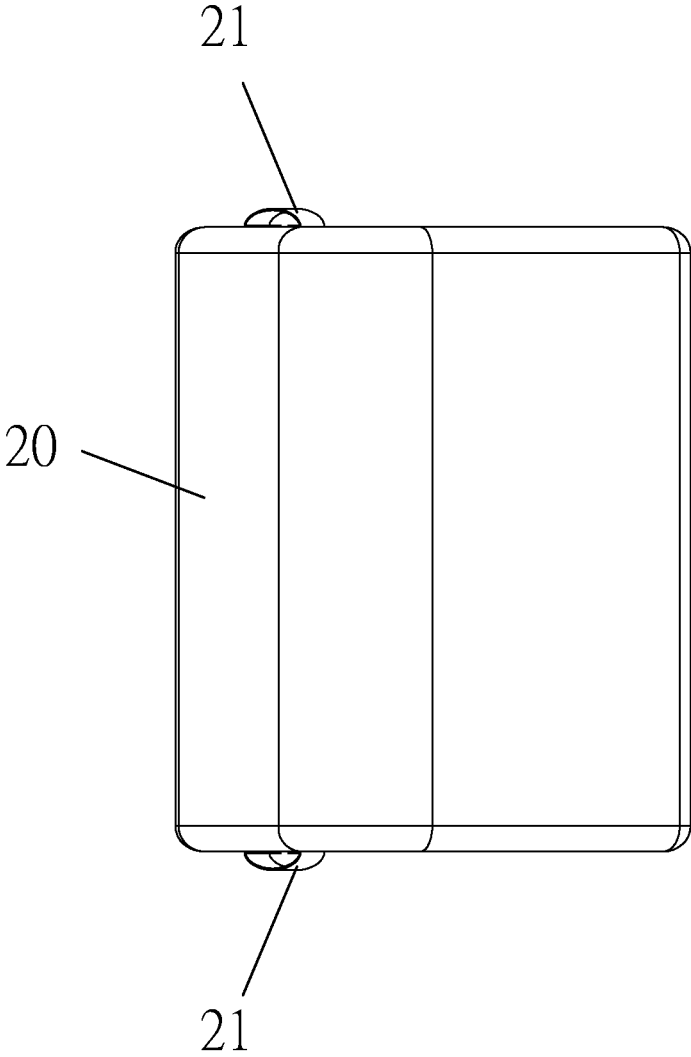


FIG. 4

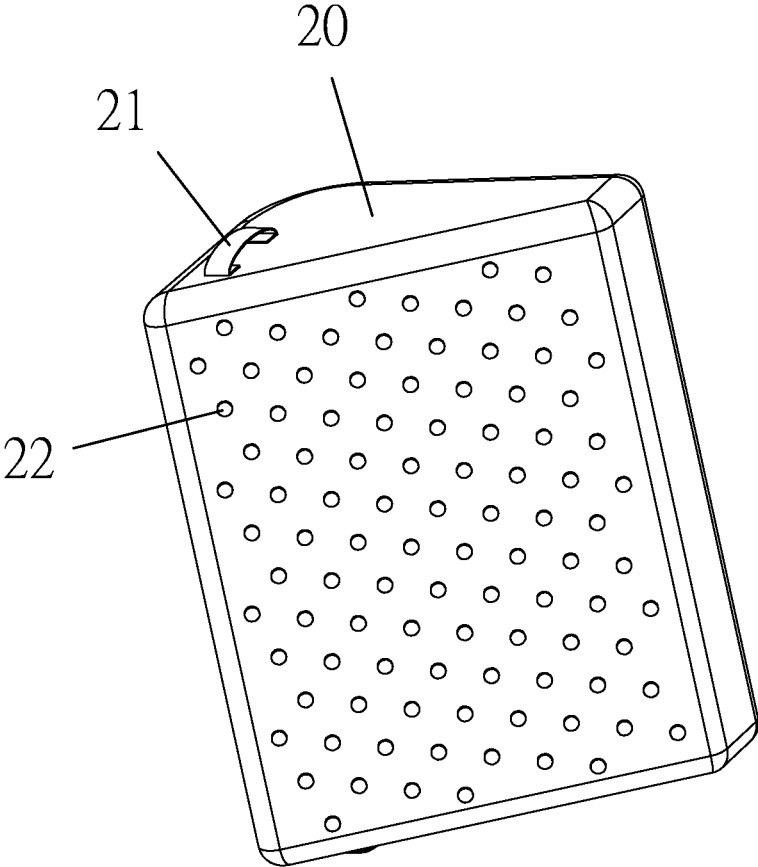


FIG. 5

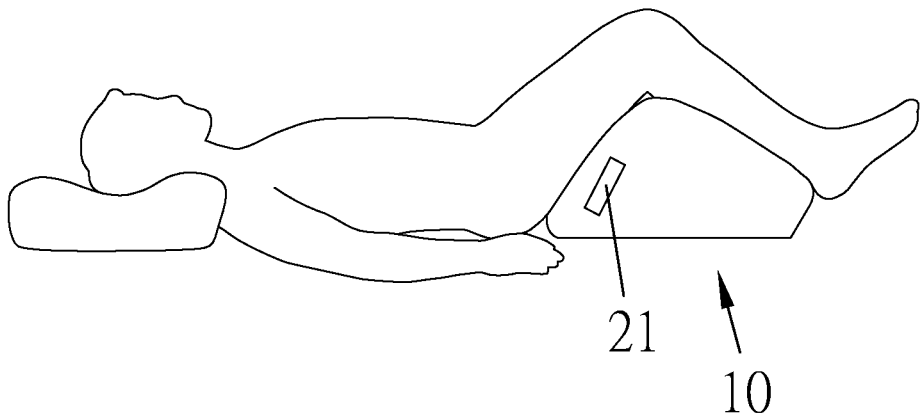


FIG. 6

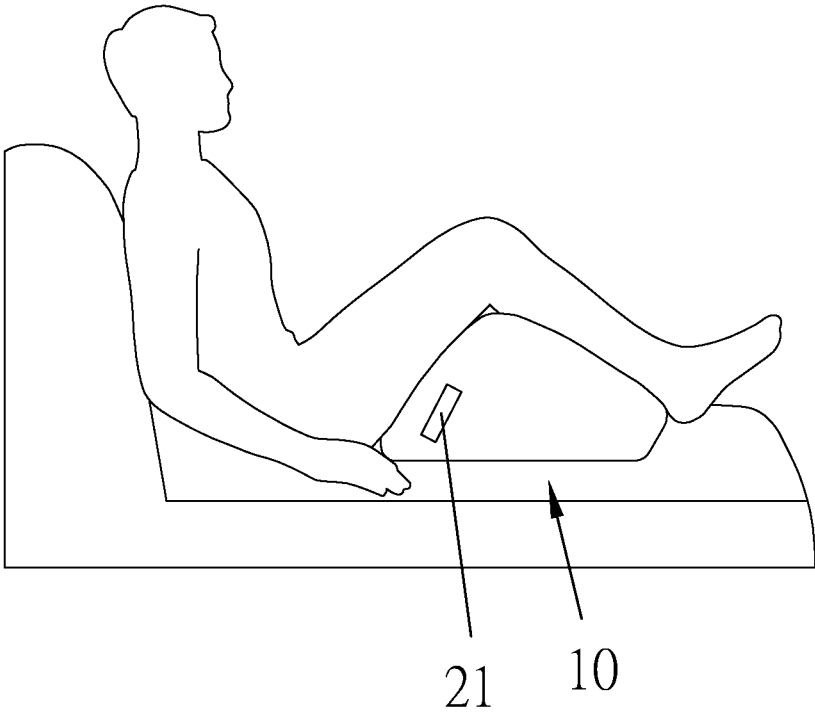


FIG. 7

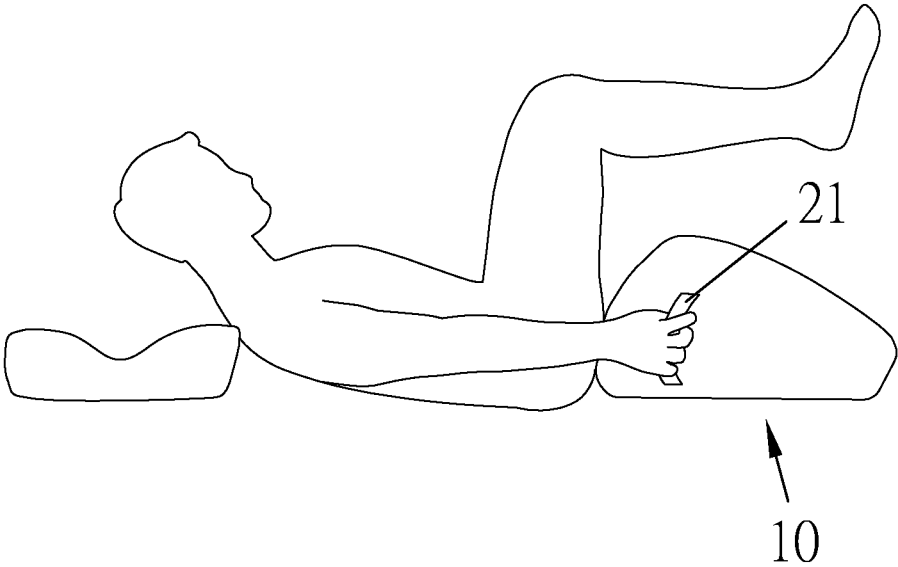


FIG. 8

**LEG BOLSTER ELEVATION WEDGE****BACKGROUND OF THE INVENTION****(a) Technical Field of the Invention**

**[0001]** The present invention relates to a support device, and more particularly to a leg bolster elevation wedge that supports the hips and legs of the human body in order to achieve effects of relief and decompression for the lumbar spine, thoracic spine, vertebra and pelvis area, muscles, and ligaments.

**(b) Description of the Prior Art**

**[0002]** Quick propagation of information science and fast evolution of modern technology make the living rhythm and pace of modern people fast and tense. Without proper relaxation and relief of human body and tension, negative and undesirable influence may easily occur for physical and mental health. Various kinds of health-care equipment currently available in the market, such as massage chairs and fascia guns, are good for the general consumers to purchase and operate in home for massaging and relaxation, yet such kinds of health-care equipment are generally expensive and consequently, not popular for the public.

**[0003]** Among others, bolsters and mats that are made for the purposes of helping sleep are emerging to suit the needs, but are still not good enough to meet most people's needs.

**[0004]** In view of the above, the present invention is made to alleviate the deficiency of the prior art.

**SUMMARY OF THE INVENTION**

**[0005]** In view of the above deficiency, the present invention provides a leg bolster elevation wedge, which comprises: a main body, which comprises a bottom surface, a top surface, a front end surface, a rear end surface, a left end surface, and a right end surface, the left end surface being arranged at an angle of 60° and having a first predetermined length, a rounded support portion being arranged between the left end surface and the top surface, the top surface being arranged at an angle of 30° and having a second predetermined length, wherein the left end surface, the rounded support portion, and the top surface are positionable to contact and support a user's hips, thigh rears, knee pits, and shank rears in order to relax and decompress the user's lumbar spine, thoracic spine, vertebra and pelvis area, muscles, and ligaments, and the angle between the left end surface and the top surface helps distribute weight in an ergonomic manner.

**BRIEF DESCRIPTION OF THE DRAWINGS**

**[0006]** FIG. 1 is a perspective view of the present invention.

**[0007]** FIG. 2 is a perspective view continuing from FIG. 1 but taken from a different view angle.

**[0008]** FIG. 3 is a perspective view of the present invention, with a protective cover mounted.

**[0009]** FIG. 4 is a top plan view continuing from FIG. 3.

**[0010]** FIG. 5 is a bottom view, in a perspective form, continuing from FIG. 3.

**[0011]** FIG. 6 is a schematic view showing a supine posture of using the present invention in a supine state.

**[0012]** FIG. 7 is a schematic view showing a sitting posture of using the present invention.

**[0013]** FIG. 8 is a schematic view showing a state of using handgrips of the present invention.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

**[0014]** To expound the contents of the present invention, as well as the advantages achieved thereby, a preferred embodiment will be described with reference to the drawings. Reference is now made to FIGS. 1 and 2, which show a leg bolster elevation wedge according to the present invention, comprising:

**[0015]** a main body 10, which comprises a bottom surface 11, a top surface 12, a front end surface 13, a rear end surface 14, a left end surface 15, and a right end surface 16, the left end surface being arranged at an angle of 60° and having a first predetermined length, a rounded support portion 17 being arranged between the left end surface 15 and the top surface 12, the top surface 12 being arranged at an angle of 30° and having a second predetermined length; the right end surface 16 being arranged at an angle of 120°, the right end surface 16 having a height of 4 inches to 8 inches.

**[0016]** A first round corner 18 is arranged between a circumferential edge of the front end surface 13 and the bottom surface 11, the top surface 12, the left end surface 15, and the right end surface 16; and a second round corner 19 is arranged between a circumferential edge of the rear end surface 14 and the bottom surface 11, the top surface 12, the left end surface 15, and the right end surface 16.

**[0017]** In the instant embodiment, the main body 10 is made of high-density foam, and the main body 10 has a load capacity of 200 pounds to 400 pounds.

**[0018]** Referring to FIGS. 3-5, a protective cover 20 made of polyester fabric is arranged to removably enclose an outside of the main body 10. The protective cover 20 is provided with a plurality of handgrips 21. The handgrips 21 are arranged to respectively correspond to the front end surface 13 and the rear end surface 14, and each of the handgrips 21 is arranged parallel to the left end surface 15.

**[0019]** A bottom surface of the protective cover 20 is provided with a plurality of raised dots 22 or raised patterns, and the raised dots 22 or the raised patterns help increase friction to achieve an effect of skidding resistance.

**[0020]** Referring to FIGS. 6 and 7, the main body 10 may use the left end surface 15, the rounded support portion 17, and the top surface 12 to provide support to the hips, the thigh rears, the knee pits, and the shank rears of a user, so as to make the user's foot soles suspended in the air to relax and decompress the user's lumbar spine, thoracic spine, vertebra and pelvis area, muscles, and ligaments. Further, the angle between the left end surface 15 and the top surface 12 helps distribute weight in an ergonomic manner. The main body 10 can tenderly lift up the user's shanks and is particularly suitable for people having pain in the knees, the hips, or the back.

**[0021]** When the user lies supine, the main body 10 helps promote blood circulation and provides gentle stretch to the lower back to help relax muscles and ligaments. The present invention has dual functions of promoting relaxation and spine relief, and the present invention is advantageous for people seeking relief of generalized unwellness and muscle tautness and people wishing to have peaceful and calm experience in relaxation or sleep time.

**[0022]** The angle between the left end surface **15** and the top surface **12** of the main body **10**, when positioned against the hips and supporting the shanks, helps promote blood circulation and also provides gentle stretching to the lower back. This helps relax the muscles and ligaments and also enhance tender spinal traction. Further, the angle and the height of the right end surface **16** make the legs suspended in the air, leaving away from the ground and inducing perception of weightlessness, so as to help increase blood flow rate and also provide gentle stretching of the lower waist and help the thoracic spine to get more blood flow thereby resulting in relaxation of the muscles and relief of the ligaments and slight traction along the spinal column.

**[0023]** Referring to FIG. **8**, each of the handgrips **21** is provided for holding and pulling by the user in order to have the left end surface of the main body **10** tightly positioned against the user's hips, thigh rears, knee pits, and shank rears.

**[0024]** The above provide a detailed description to a feasible embodiment of the present invention; however, the embodiment is not intended to limit the scope of the claims of the present invention. Equivalent implementation or modifications that do not depart from the technical spirit of the present invention are considering falling in the scope of the claims.

I claim:

**1.** A leg bolster elevation wedge, comprising:

a main body, which comprises a bottom surface, a top surface, a front end surface, a rear end surface, a left end surface, and a right end surface, the left end surface being arranged at an angle of 60° and having a first predetermined length, a rounded support portion being arranged between the left end surface and the top surface, the top surface being arranged at an angle of 30° and having a second predetermined length, wherein the left end surface, the rounded support portion, and the top surface are positionable to contact and support a user's hips, thigh rears, knee pits, and shank rears in order to relax and decompress the user's lumbar spine, thoracic spine, vertebra and pelvis area, muscles, and ligaments.

**2.** The leg bolster elevation wedge according to claim **1**, wherein a first round corner is formed between a circumferential edge of the front end surface and the bottom surface, the top surface, the left end surface, and the right end surface; and a second round corner is formed between a circumferential edge of the rear end surface and the bottom surface, the top surface, the left end surface, and the right end surface.

**3.** The leg bolster elevation wedge according to claim **2**, wherein the front end surface and the rear end surface are each provided with a handgrip, and each of the handgrips is arranged parallel to the left end surface.

**4.** The leg bolster elevation wedge according to claim **3**, wherein a protective cover removably encloses an outside of the main body, and the handgrips are mounted on the protective cover.

**5.** The leg bolster elevation wedge according to claim **4**, wherein a bottom surface of the protective cover is provided with a plurality of raised dots or raised patterns, such that the raised dots or raised patterns help increase friction.

**6.** The leg bolster elevation wedge according to claim **5**, wherein the protective cover is made of polyester fabric.

**7.** The leg bolster elevation wedge according to claim **2**, wherein the right end surface is arranged at an angle of 120°, and the right end surface has a height of 4 inches to 8 inches.

**8.** The leg bolster elevation wedge according to claim **3**, wherein each of the handgrips is provided for holding and pulling by the user in order to have the left end surface of the main body tightly positioned against the user's hips, thigh rears, knee pits, and shank rears.

**9.** The leg bolster elevation wedge according to claim **4**, wherein each of the handgrips is provided for holding and pulling by the user in order to have the left end surface of the main body tightly positioned against the user's hips, thigh rears, knee pits, and shank rears.

**10.** The leg bolster elevation wedge according to claim **1**, wherein the main body is made of high-density foam and the main body has a load capacity of 200 pounds to 400 pounds.

\* \* \* \* \*