

[54] **TOGGLE BAR FOR BRACHIATION IN PLACE BY THE UPPER LIMBS**

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[58] Field of Search 272/54, 57 R, 60, 62, 63, 272/79 R; 211/113, 115, 116, 171; 248/215, 340, 341

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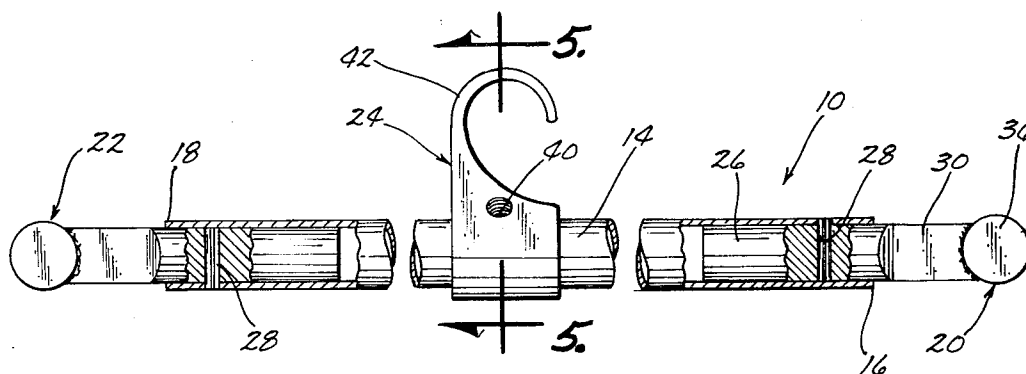
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ABSTRACT

A toggle bar for brachiation in place by the upper limbs is disclosed herein and comprises an elongated tubular bar having T-shaped handles at the opposite ends thereof. A support is secured to the bar intermediate the ends thereof and has a hook shaped portion extending upwardly therefrom which is adapted to be detachably mounted on a suspended support whereby the bar is pivotally movable with respect thereto.

1 Claim, 5 Drawing Figures



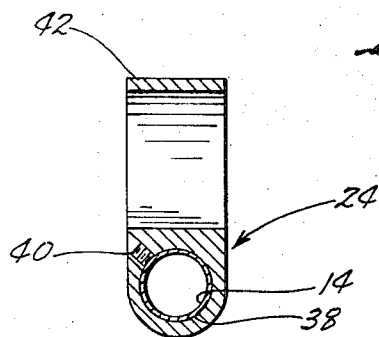
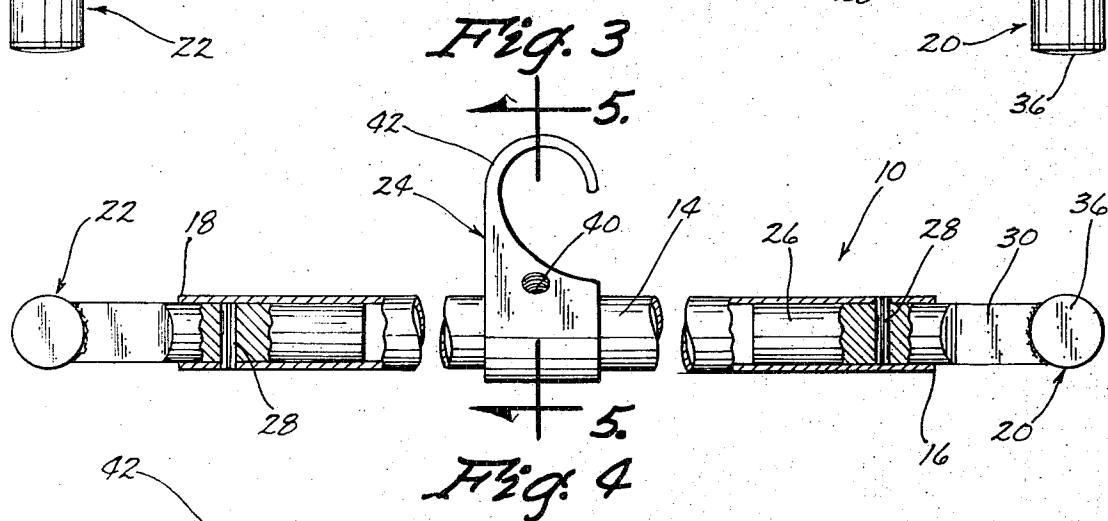
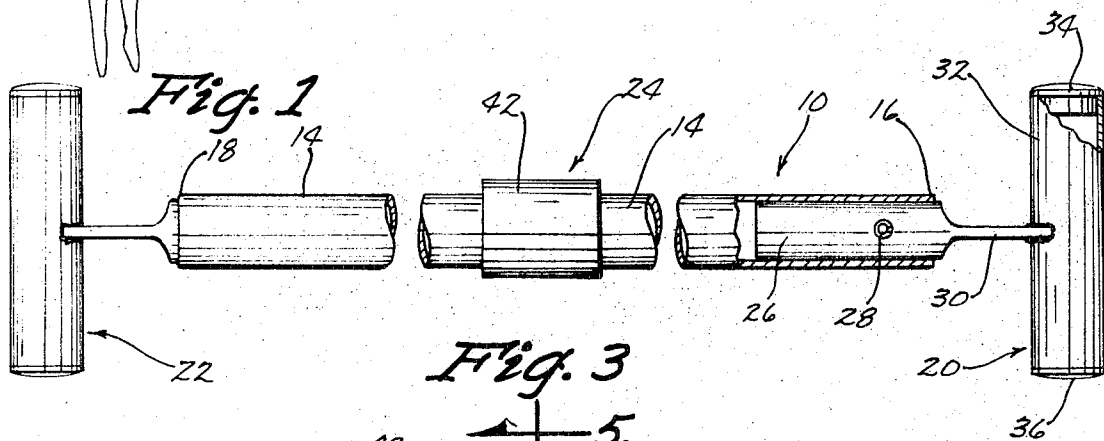
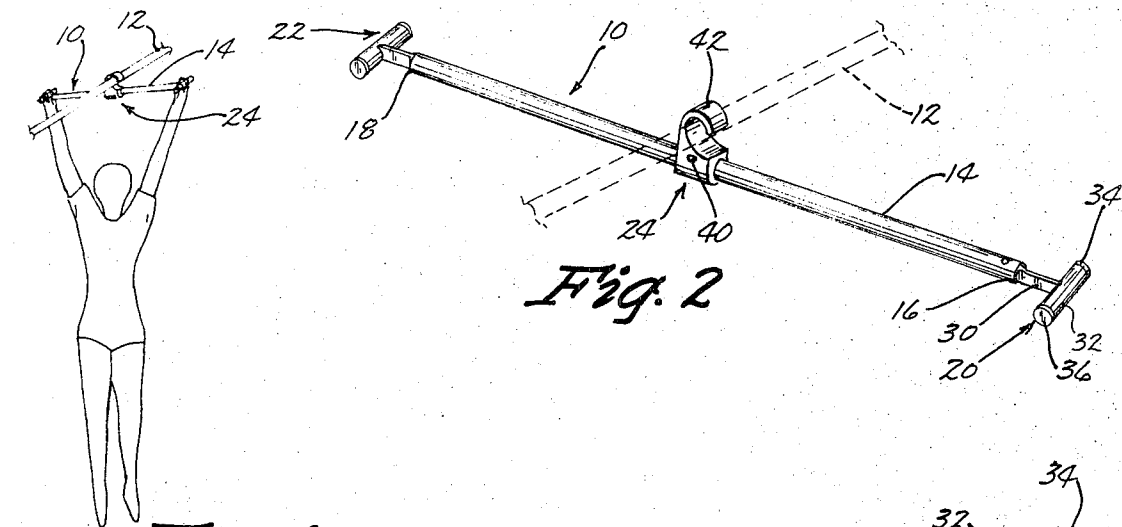


Fig. 5

TOGGLE BAR FOR BRACHIATION IN PLACE BY THE UPPER LIMBS

This is a continuation, of application Ser. No. 177,797, filed Sept. 3, 1971, now abandoned.

Brachiation is defined as locomotion in place by hanging the body suspended from its limb or limbs and alternately shifting the weight from one hand to the other. Suspending the body by the hands while the arms are extended over the head is one of the most primitive exercises. It is thought by some to have been the major cause for man to be able to stand erect. This exercise is certainly one of the most important exercises to practice in therapeutic and corrective exercise. Brachiation by the upper limbs (arms) will do much to elongate the body and to bring it to its maximum length. Pulling the body load through the long axis when in the vertical position will aid in eliminating the postural debt that is being built up in our bodies daily by sitting and standing and lying on the horizontal. Postural exchange is imperative if we are to have maximum angles and lines of stress vectors playing upon the body. Only with sufficient exchange of postures will direction of tissue flow and pressure alterations on the joints meet the physiological requirements of the body. Postural change through brachiation will aid in separating the vertebrae, elongate the spine and relieve the pressure on the facets, respective intervertebral disc, sacroiliac and lumbo-sacral joints. Directing the stress in a non-duplicating manner allows for more space to develop between the vertebrae and allied joints thereby giving the intervertebral disc more room to operate in and react against compression. With such stress practices, the wedging of the bodies of the vertebrae, thinning of the joint spaces and the disc will resolve themselves better to the decompression and compression forces. This type of over-all action has the most beneficial influence through its exchange of force thereby aiding in deforming the tissues to a more ideal homeostasis of tissue and organic health.

Brachiation by the upper limbs (arms) is possible by simply performing chin-ups or the like from a suspended bar. However, chin-ups do not fully provide the needed exercise.

Therefore, a principal object of this invention is to provide a toggle bar for brachiation by the upper limbs.

A further object of this invention is to provide a toggle bar for brachiation by the upper limbs which causes the torso to be torqued thereby helping to straighten the lateral (scoliosis) weight-bearing curvatures of the spine.

A further object of this invention is to provide a toggle bar for brachiation of the upper limbs which is conveniently mounted on a suspended support.

A further object of this invention is to provide a toggle bar for brachiation by the upper limbs which permits pressure to be alternately applied to and removed from certain joints of the body.

A further object of this invention is to provide a toggle bar for brachiation by the upper limbs which is easy to use.

These and other objects will be apparent to those skilled in the art.

This invention consists in the construction, arrangements, and combination of the various parts of the device, whereby the objects contemplated are attained as

hereinafter more fully set forth, specifically pointed out in the claims, and illustrated in the accompanying drawings in which:

FIG. 1 is a partial perspective view illustrating the manner in which the toggle bar of this invention is used:

FIG. 2 is a perspective view of the toggle bar:

FIG. 3 is a fragmentary top view of the toggle bar with portions thereof cut away to more fully illustrate the invention:

FIG. 4 is a fragmentary side view of the toggle bar with portions thereof cut away to more fully illustrate the invention; and

FIG. 5 is a sectional view seen along lines 5-5 of FIG. 4.

The toggle bar of this invention is referred to generally by the reference numeral 10 with the numeral 12 referring to a tubular suspended support such as a pipe or the like. Toggle bar 10 comprises an elongated tubular bar means 14 having opposite ends 16 and 18, handles 20 and 22, and support 24.

Inasmuch as the handles 20 and 22 are identical, only handle 20 will be described in detail. Handle 20 includes a tubular portion 26 which is received in end 16 of bar means 14 and which is maintained therein by means of a spring pin 28 as seen in FIG. 4. The tubular portion 26 is provided with an outer end portion 30 which is secured to tubular portion 32 by welding or the like as illustrated in FIGS. 3 and 4. Plugs 34 and 36 are inserted into the opposite ends of tubular portion 32 as seen in FIG. 3.

Support 24 is provided with a bore 38 which extends therethrough and which receives the bar means 14 therein as illustrated in FIG. 5. The support 24 is maintained on the bar means 14 by means of a set screw 40 to prevent rotation of the bar means 14 with respect to the support 24 and to prevent slidable movement of the bar means 14 with respect to the support 24. Support 24 is provided with an arcuate hook member which extends upwardly therefrom as best illustrated in FIG. 4. The hook member 42 defines an opening 44 which is adapted to receive the suspended support 12 as illustrated in FIG. 2 whereby the toggle bar 10 can be pivotally moved with respect thereto. As seen in FIG. 2, the bar means 14 is disposed at a right angle with respect to the suspended support 12 and that the toggle bar is pivotally movable in a vertical plane with suspended support 12 serving as a horizontal axis.

The toggle bar 10 is used as follows. The support 24 is positioned on the suspended support 12 as illustrated in FIG. 2. The person then grasps the handles 20 and 22 as illustrated in FIG. 1 and supports himself therefrom. The person then draws one end of the toggle bar downwardly by bending the elbow and allowing the other arm to push and extend its end of the bar upward as high as possible. The stress is exchanged by alternately raising and lowering respectively the ends of the bar. The handles 20 and 22 provide a convenient means for gripping the toggle bar but it should be understood that a person could simply grasp the ends of the bar means 14 if so desired. The toggle bar when used as described brings the shoulders into stressful over-head use. The altered side-to-side traction helps to elevate and develop the rib cage. The torquing of the torso in this exercise helps greatly to straighten the lateral (scoliosis) weight-bearing curvatures of the spine. The weight-bearing is away from the joint spaces in this

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exercise. In order to have full joint play there must not only be compression for the health of the joint physiology but separation of the joint. Joint physiology requires "joint milking," pressure on and pressure off, of the joint and the toggle bar of this invention permits and provides such full joint play. 5

Thus it can be seen that a novel toggle bar has been provided which permits brachiation by the upper limbs. Thus, the toggle bar accomplishes at least all of its stated objectives. 10

I claim:

1. A toggle bar for brachiation in place by the upper limbs comprising,
 a suspended support,
 a single elongated tubular bar means having opposite 15
 ends,
 grip means on the opposite ends of said bar means to enable a person to grip said bar means,
 each of said grip means comprising a T-shaped handle in alignment with and in the same horizontal 20
 plane as the elongated tubular bar means,
 each of said T-shaped handles comprising a first tubular portion and a second tubular portion trans-

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versely secured at one end to said first tubular portion at the center of the length thereof,
 each of said second tubular portions being received by and secured to one end of said tubular bar means, said first tubular portions of each of said handles being horizontally disposed when said bar means is supported on said suspended support,
 a support means secured to said bar means intermediate the ends thereof pivotally supporting said bar means from the suspended support, and
 said support means comprising a unitary body portion having a bore extending therethrough and an arcuate hook portion extending upwardly therefrom, said tubular bar means extending through said bore, said hook portion having an opening formed therein adapted to receive the suspended support, said opening being formed in said support means so that said bar means may be selectively pivotally moved about a horizontal axis which is disposed transversely to the longitudinal axis of said bar means.

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