Feb. 7, 1967 W. E. BERNE ETAL 3,302,641

LUMBAR TRACTION TABLE

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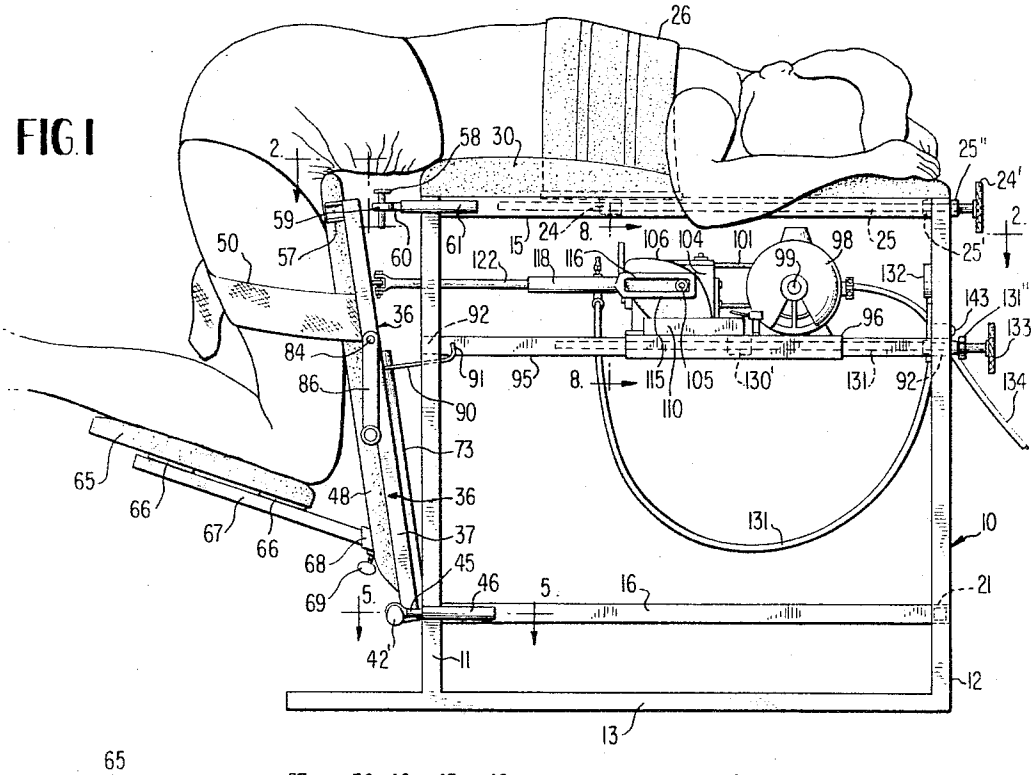
FIG. 1



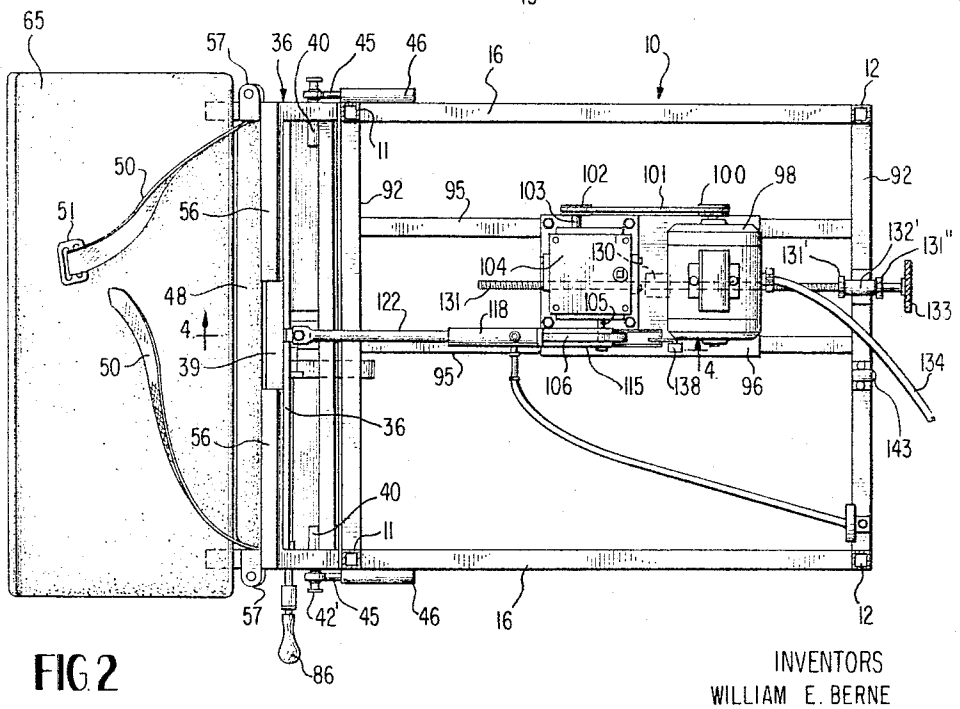


FIG. 2

INVENTORS
WILLIAM E. BERNE
JOHN NEBERA

BY Baldwin & Wight
ATTORNEYS

Feb. 7, 1967 W. E. BERNE ETAL 3,302,641

LUMBAR TRACTION TABLE

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FIG. 3

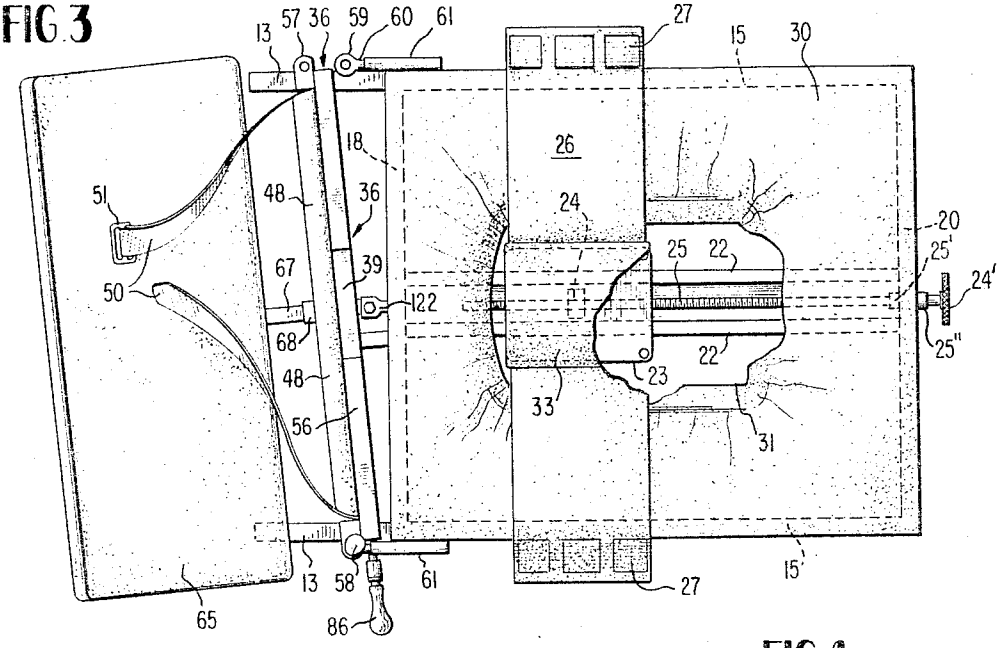


FIG. 4

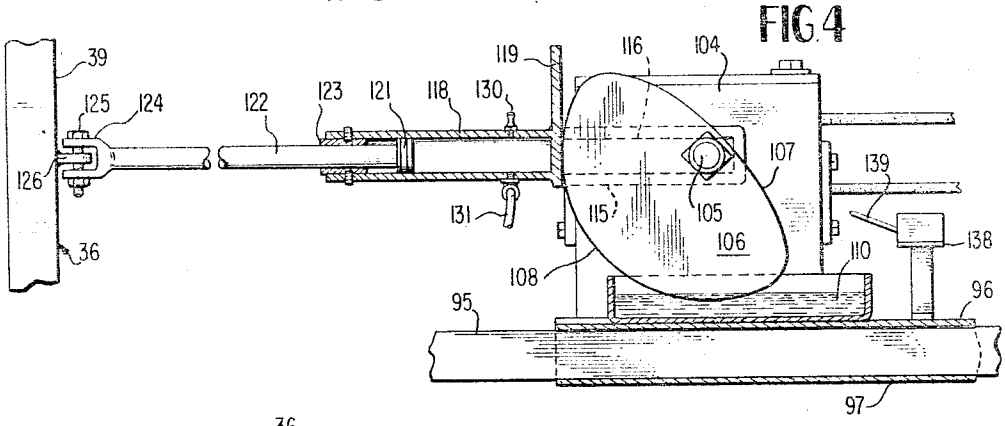
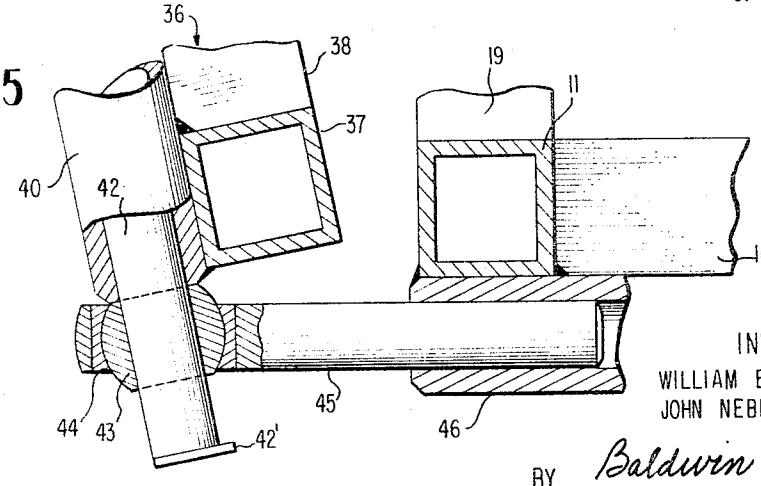


FIG. 5



INVENTORS
WILLIAM E. BERNE
JOHN NEBERA

BY Baldwin & Wright
ATTORNEYS

Feb. 7, 1967 W. E. BERNE ETAL 3,302,641

LUMBAR TRACTION TABLE

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FIG. 6

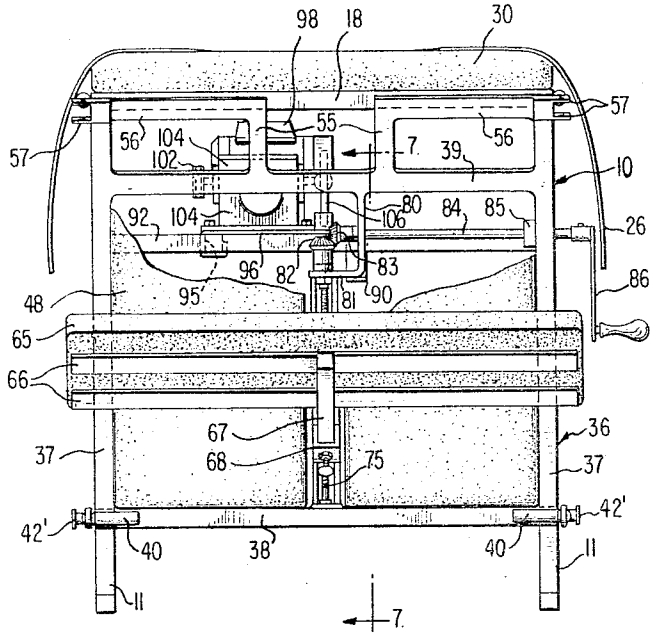


FIG. 10

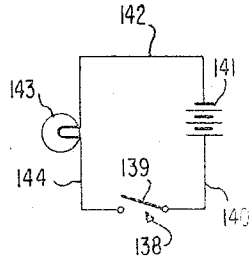


FIG. 7

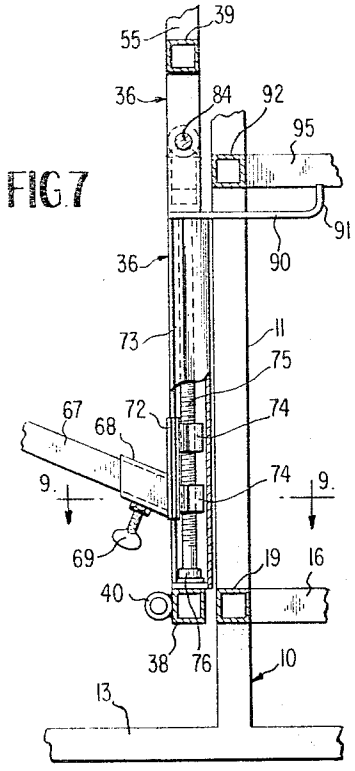
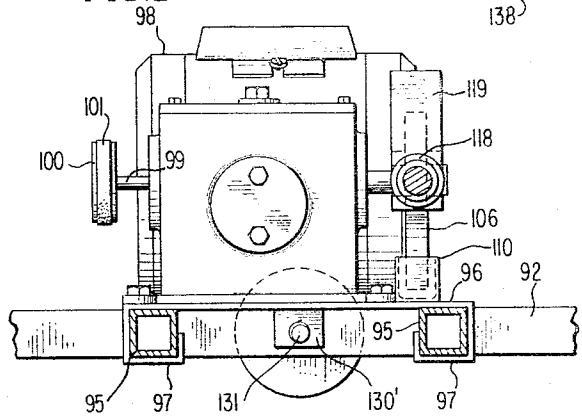


FIG. 8



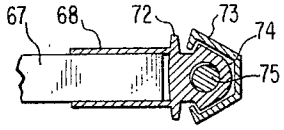


FIG. 9

INVENTORS
WILLIAM E. BERNE
JOHN NEBERA

BY Baldwin & Wight
ATTORNEYS

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3,302,641

LUMBAR TRACTION TABLE

William E. Berne, Columbia, S.C., and John Nebera, Charlotte, N.C., assignors to La Berne Manufacturing Company, Inc., Columbia, S.C., a corporation of South Carolina

Filed Nov. 4, 1964, Ser. No. 408,883
16 Claims. (Cl. 128—71)

This invention relates to a lumbar traction table.

It is the common practice to place patients in a supine position to subject them to traction for the treatment of various ailments such as lumbar-sacral strain, sciatica, chronic back ailments, disc conditions, and post laminectomies. Treatments for back conditions, thus administered, usually are very uncomfortable and frequently quite painful.

On important object of the present invention is to provide a lumbar traction table wherein the patient is placed, in effect, in a kneeling position with the upper body supported face down on a table and with traction force applied at the end of the table against the thighs of the patient, clinical tests under such conditions having shown good results with the elimination of much of the pain and discomfort suffered by the patient in the present method of treatment.

A further object is to provide such a table wherein a force-applying unit engages the fronts of the thighs of the patient while his upper body is clamped to the table, the force-applying unit applying most of its force to the upper leg regions adjacent the abdomen to apply traction forces through the hips to the spine.

A further object is to provide novel means for transmitting force to the force-applying unit in such a manner that force is alternately applied for a predetermined period and then relieved for a predetermined period, the alternate application and relieving of force being adjustable according to the condition being treated, the type of treatment, etc.

A further object is to provide such a therapeutic table wherein the force-applying unit is adapted to swing selectively on predetermined horizontal or vertical axes depending on whether the force is to be applied uniformly from side to side of the patient, or whether all force is to be applied to one leg and the corresponding side of the back than to the other leg.

A further object is to provide adjustable means carried by the force-applying unit, the structure on which the patient kneels being vertically adjustable according to the height of the patient to support him in position for the application of force at the proper point or points to place the spine under traction.

A further object is to provide novel cam-operated means for transmitting force to the force-applying unit, the cam means being driven from a prime mover through speed reduction gearing, so that rotation of the cam means provides the desired cycle of operation in applying and relieving pressure to and from the patient.

A further object is to provide a novel means for indicating the application of force to the patient through the force-applying unit to facilitate adjustment of such force.

A further object is to provide such a mechanism wherein force is transmitted from the cam means to the force-applying means through a body of hydraulic fluid, and wherein the indicating means is a pressure gauge subject to pressure in the body of hydraulic fluid as static pressure therein varies according to the transmitting of force to the force-applying means.

A further object is to provide a visual signal operative during the application of traction forces to the patient

to assist in the adjustment of the mechanism to determine the maximum traction forces to be applied.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawings we have shown one embodiment of the invention. In this showing:

FIGURE 1 is a side elevation of the apparatus showing a patient in position to be treated;

FIGURE 2 is a horizontal section taken substantially on line 2—2 of FIGURE 1;

FIGURE 3 is a plan view of the apparatus, parts being broken away;

FIGURE 4 is a vertical fragmentary sectional view taken on line 4—4 of FIGURE 2.

FIGURE 5 is an enlarged detail sectional view on line 5—5 of FIGURE 1;

FIGURE 6 is an end elevation of the apparatus looking from the left-hand thereof in FIGURE 1, parts being broken away;

FIGURE 7 is an enlarged fragmentary section taken substantially on line 7—7 of FIGURE 6, parts being broken away;

FIGURE 8 is an enlarged fragmentary transverse sectional view on line 8—8 of FIGURE 1;

FIGURE 9 is a fragmentary detail section on line 9—9 of FIGURE 7; and

FIGURE 10 is a simple form of electrical circuit for operating the signal light.

Referring to the drawings, the numeral 10 designates a frame of the table as a whole comprising legs 11 at one end and similar legs 12 at the opposite end. The lower ends of these legs are connected to horizontal floor-engaging elements 13. The legs at opposite ends of the table are connected by structural elements 15 at the tops of the legs, and by structural elements 16 spaced above the lower ends of the legs.

Preferably in the horizontal planes of the structural elements 15 and 16, the legs 11 are connected by transverse structural elements 18 and 19. The legs 12 are similarly connected by upper and lower transverse structural elements 20 (FIGURE 3) and 21 (FIGURE 1). All of the structural elements of the frame of the table thus far described may be made of square closed-section stock smooth welded together.

The transverse members 18 and 20 are connected by parallel structural elements 22 (FIGURE 3) spaced from each other and forming trackways for slidably supporting a cross-head plate 23 having a depending nut 24. A threaded rod 25, held captive by collars 25' and 25'', passes through this nut and through the transverse member 20 and is operable by a preferably knurled knob 24' beyond the right-hand end of the table as viewed in FIGURE 3. Broad body clamping straps 26 are suitably connected to the plate 23 and are provided with any suitable means 27 for securing the strap around the back of a patient, beneath his shoulders, as shown in FIGURE 1. A padded top 30 rests on the top of the frame 10 and extends over the area thereof and is provided with a central longitudinally elongated opening 31 to provide for the movement of the cross-head plate 23 longitudinally of the table when the knob 24' is rotated. The plate 23 has the top thereof padded as at 33 for the comfort of a patient being treated, the strap 26 holding the patient tightly against the pad 33 for a reason which will become apparent.

A movable unit 36 is arranged at the left-hand end of the apparatus as viewed in FIGURES 1, 2 and 3. This unit has a frame comprising uprights 37 at opposite sides of the apparatus connected by a lower cross member 38. The uprights 37 are further connected near the tops there-

of by a transverse structural member 39. Horizontally aligned sleeves 40 are welded to the uprights 37 and to the adjacent ends of the cross member 38, as shown in detail in FIGURE 5. A pin 42 is slidable in each sleeve 40, and each pin is provided at its outer end with a finger piece 42' to facilitate its insertion into and removal from an operative position. Each pin 42 is slidable through a ball 43 mounted in a socket 44 carried by the forward or left-hand end of a pin 45 (FIGURE 5) and the right-hand end of each such pin is slidable in a sleeve 46 welded to the adjacent leg 11 and the adjacent end of the associated frame member 16. The frame of the unit 36 has secured thereagainst a cushion 48 against which the fronts of the legs of the patient are adapted to engage as shown in FIGURE 1. To each upright 37 is secured one end of a strap 50, and the free end of one of said straps is provided with a buckle 51 so that the straps may extend around and behind the legs of the patient as shown in FIGURE 1 to hold him firmly against the cushion 48.

The frame of the unit 36 further comprises spaced uprights 55 (FIGURE 6) preferably formed integral at their lower ends with the cross member 39 and connected to upper horizontal frame members 56, the outer ends of which are suitably welded or otherwise secured to the upper ends of the uprights 37. The latter members are provided at their upper ends with ears 57 apertured for the reception under certain conditions of pins 58 (FIGURES 1 and 3). Each of these pins is insertable in an eye 59 carried by a rod 60 slidable in a sleeve 61. These sleeves are respectively welded against the outer faces of the upper ends of the legs 11 and against the adjacent faces of the frame members 15. It will become apparent that the removal of one of the pins 58 and the corresponding pin 42 therebeneath will permit the frame 36 to swing at one end away from the table as shown in FIGURE 3. It further will become apparent that the removal of both pins 58 with the pins 42 both remaining in operative position, will permit the top of the frame 36 to swing directly away from the table as shown in FIGURES 1 and 2.

A kneeling pad 65 for the patient may be arranged as shown in FIGURE 1, and it may be pointed out at this time that the pad 65 and cushions 48 and 30 may be of any desired construction including backing plates and preferably foam rubber pads to achieve as high a degree of comfort as possible for the patient. The pad 65 is supported on cross members 66 (FIGURES 1 and 6). These cross members are of metal and have preferably welded thereto a relatively heavy central arm 67, the end of which, toward the table, is arranged in a supporting socket 68 and held in position by a thumb screw 69. The socket 68, in turn, is carried by a cross-head 72 (shown in FIGURE 7 and in section in FIGURE 9), slidable in a flanged guideway 73. The portions 74 of the cross-head 72 lying within the guideway are formed as nuts (FIGURE 7) through which extends a threaded rod 75 rotatable at its lower end in a bearing 76 carried by the cross member 38.

Referring to FIGURE 6, the numeral 80 designates a depending arm carried by the cross member 39 and provided at its lower end with a horizontal arm 81. The latter arm forms a bearing for the upper end of the threaded rod 75 and the upper end of such rod carries a bevel gear 82. This gear meshes with a similar bevel gear 83 carried by a shaft 84 journalled in the depending arm 80 and in a bearing 85 carried by one of the uprights 37. The outer end of the shaft 84 carries an operating crank 86. It will be apparent that rotation of the shaft 84 by the crank 86 rotates the threaded rod 75 to raise and lower the cross-head 72 and thus adjust the pad 65 upwardly or downwardly according to the height of the patient.

It is desirable to limit swinging movement of the upper end of the frame 36 away from the table (FIGURE 1). To this end, an arm 90 is welded to the arm 81 (FIGURE 6) and carries at its inner end a stop hook 91 engageable with a cross member 92 (FIGURES 1 and 6) forming a part of the main frame of the table. A cross member identical with the cross member 92 and also indicated by the same numeral, extends between the legs 12 of the table.

Spaced parallel longitudinal rails 95 are connected between and supported by the cross members 92. The rails 95 (FIGURE 8) slidably support a plate 96 having ends 97 bent around the respective rails to guide the plate 96 for movement longitudinally of the frame. The plate 96 supports an electric motor 98, the shaft 99 of which carries a pulley 100 around which passes a belt 101. This belt also passes around a pulley 102 on the input shaft 103 of a reduction gearing 104. The output shaft 105 of the reduction gearing 104 carries a cam 106 having a relatively low portion 107 and a relatively high portion 108 concentric with the axis of the shaft 105. The high portion of the cam 106 operates in a lubricant trough 110 to keep the cam lubricated.

The cam 106 operates between the arms of a yoke 115. Such arms are longitudinally slotted as at 116 (FIGURE 1), and the shaft 115 projects through and is slidable in the slots 116 and supports the yoke 115. Such yoke carries a preferably integral cylinder 118 (FIGURE 4) provided at one end with a bearing plate 119 engageable with the cam 106, to move the cylinder 118 to the left in FIGURE 4 when the semicircular cam portion 108 engages the plate 119. A piston 121 is slidable in the cylinder 118 and is carried by a rod 122 operating through a bearing bushing 123 in the cylinder 118. The end of the piston rod 122 opposite the piston is provided with a yoke 124 carrying a bolt 125 which passes through an ear 126 carried by the cross member 39.

It will be apparent that the cylinder 118 is filled with hydraulic fluid, and accordingly, pressure exerted against the plate 119 by the cam 106 is transmitted hydraulically to the piston 121 to thus effect movement of the ear 126 away from the table, as further described below. The cylinder 118 is provided with a liquid filler and air bleed cock 130. A flexible hydraulic line 131 is tapped into the cylinder 118 and leads to a pressure gauge 132 (FIGURE 1), the dial of which is visible from the end of the table opposite the movable unit 36.

As shown in FIGURE 8 and in dotted lines in FIGURE 1, the plate 96 is provided with a depending ear 130' through which extends a threaded rod 131. This rod is journalled in a bearing 132' (FIGURE 2) and carries a preferably knurled wheel 133 at its free end. The rod 131 is held against longitudinal movement by collars 131' and 131'' engaging opposite ends of the bearing 132'. Rotation of the wheel 133 adjusts the plate 96 along the rails 95 to adjust the motor 98 and reduction gearing 104 longitudinally of the table. Since the motor 98 changes position, it is supplied with current through a flexible cable 134.

Since the mechanism supported on the rails 95 is not visible, signal means is preferably provided for indicating when the cam 106 is operative for transmitting force through the rod 122 to the unit 36. A microswitch 138 is provided with an operating arm 139 in the path of travel of the cam 106, and this switch is biased to closing position. One terminal of the switch (FIGURE 10) is connected by a wire 140 to a current source 141, the second terminal of which is connected by a wire 142 to a light 143 or other visible signal. The second terminal of the signal is connected by a wire 144 to the other terminal of the switch. The signal light 143 is shown in FIGURES 1 and 2, being supported at one of the cross members 92.

Operation

As is well known, patients are usually placed in traction while in a supine position. This usually results in substantial discomfort and pain. The use of the present

traction table is far more comfortable to the patient and is superior in its therapeutic effects to conventional methods.

The patient kneels on the pad **65** (FIGURE 1) and the crank handle **86** is turned to rotate the shaft **84** (FIGURES 6 and 7) to rotate the threaded shaft **75** through the bevel gears **82** and **83**. Thus the nuts **74** are moved upwardly or downwardly to adjust the height of the pad **65** so that the cushion **48** of the movable unit **36** will engage the fronts of the legs close to the abdomen, as shown in FIGURE 1. The straps **50** are then secured around the patient's thighs.

According to the height of the patient, the wheel **24'** is turned to adjust the longitudinal position of the plate **23** (FIGURE 3) and the straps **26**. These straps are then fastened tightly around the patient's body, and the operation of the table is ready to proceed.

Ordinarily, the pins **58** are removed and the unit **36** is free to swing about the common horizontal axis of the lower pins **42**. With the force generating and transmitting mechanism suitably adjusted, as further described below, the motor **98** is started. Upon each rotation of the cam **106**, force is transmitted to the plate **119** between the low portion **107** of the cam and the beginning of the concentric portion **108**. During this build-up in pressure against the plate **119**, the cylinder **118** will be moved to the left in FIGURE 4 and the incompressible hydraulic fluid in the cylinder transmits force to the piston **121** and through the rod **122** to the swinging unit **36**, causing it to move away from the table and thus exert force against the fronts of the legs of the patient and transmit traction to the back to place the spine under tension. This traction force is uniformly maintained throughout engagement of the cam portion **108** with the plate **119**, thus exerting a steady pull on the lower portion of the spine. This steady traction may be maintained for any desired length of time, for example, twelve seconds. When the other end of the cam portion **108** passes out of engagement with the plate **119**, there will be progressive releasing of the traction forces, and such forces will be fully released while the cam portion **107** passes the plate **119**.

Traction forces expressed in p.s.i. are indicated on the gauge **132**. As the pressure build-up in the cylinder **118** increases, this pressure is transmitted through the flexible line **131** to the gauge **132**, and throughout the operation of the cam portion **108**, a steady maximum pressure will be indicated on the gauge. This pressure may be varied by operation of the hand wheel **133** to vary the longitudinal position of the cam relative to the table. This pressure is smoothly variable from 0 up to 100 pounds, for example. The maximum pressure is decreased by adjusting the plate **96** toward the right in FIGURE 1 and increased by adjusting this plate to the left.

The operation just described provides an effective traction longitudinally of the spine of the patient. If some lateral pull is desired, one of the upper pins **58** will be installed together with the corresponding lower pin **42**. When force is transmitted to the unit **36**, therefore, the pivot axis for the unit will be vertical, passing through the installed upper pin **58**, for example, the pin shown in operative position in FIGURE 3, and through the center of the lower corresponding ball **43** (FIGURE 5). With such adjustment, movement of the unit **36** takes place as in FIGURE 3, in which case, maximum pull will be transmitted to the left side of the patient. Obviously, the upper pin **58** as viewed in FIGURE 3 may be left in position and the pin **58** nearer the observer may be removed from FIGURE 3, together with the corresponding lower pin **42**, in which case, the angle of the unit **36** will be reversed from that shown in FIGURE 3 to transmit a pull predominantly to the right side of the patient's spine.

As previously stated, the switch **138** is biased to closed position and is thus closed when the cam portion **108** is engaging the plate **119** to transmit traction forces. It is during this period that it is desirable to adjust the maximum forces. With the light in operation, therefore, the wheel **133** will be turned to adjust the plate **96** along the rails **95** until the gauge **132** shows the desired maximum pressure. When the signal light is "off," the attendant is, in effect, informed that the cam is not in contact with the follower plate **119**, and that accordingly the position of the plate **96** and the mechanism which is carries should not be adjusted. It will be apparent that if the position of the plate **96** were adjusted to exert a predetermined pressure with the low portion **107** of the cam **96** positioned to engage the follower plate **119**, subsequent operation of the cam **96** bringing the high part **108** to bear on the follower plate **119** would cause excessive pressure to be exerted on the patient with danger of injury.

Clinical tests have shown good results in the treatment of lumbar-sacral strain, sciatica, common back ailments, disc conditions, and post-laminectomies, and a reduction in the time and number of treatments necessary. The average treatment time is fifteen minutes, and the average number of treatments required varies from three to six treatments per patient at intervals of two to four days apart. As previously stated, treatments are carried out with much less pain and discomfort as well as with increased effectiveness.

The mechanism disclosed embodies the invention in a preferred form, but it is intended that the disclosure be illustrative rather than definitive, the invention being defined in the claims.

We claim:

1. A therapeutic traction table comprising an upper support for the torso of a patient, a movable unit extending downwardly from one end of said support, a kneeling pad extending outwardly from the lower end of said unit and being of sufficient extent to accommodate the knees and adjacent portions of the shins of a patient and support the patient's weight, means for supporting said unit for movement toward and away from said support in engagement with the fronts of the thighs of the patient kneeling on said kneeling pad, a force-transmitting device connected to said unit, and power means for alternately applying a force to said force-transmitting device and releasing force therefrom to alternately move said unit toward and away from said support to alternately apply a traction force to the spine of the patient and to release such traction force.

2. A therapeutic traction table comprising an upper support for the torso of a patient, a movable unit extending downwardly from one end of said support, a kneeling pad extending outwardly from the lower end of said unit and being of sufficient extent to accommodate the knees and adjacent portions of the shins of a patient and support the patient's weight, means for supporting said unit for turning movement on a predetermined axis for movement of said unit toward and away from said support, a force-transmitting device connected to said unit, and power means for applying force to said force-transmitting means alternately in opposite directions to thereby swing said unit back and forth about said axis to subject the patient to spinal traction.

3. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit for turning movement on a predetermined axis for movement of said unit away from said support, a force-transmitting device connected to said unit at a point spaced from said axis, and power means for alternately applying a force to said force-transmitting device and releasing force therefrom to alternately swing said unit about said axis toward and away from said sup-

port to alternately apply a traction force to the spine of the patient and to release such traction force.

4. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling paid at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit selectively for turning movement on a horizontal axis adjacent the bottom thereof and a substantially vertical axis adjacent one side thereof, and means for applying a force to said unit at a point spaced from both of said axes to effect swinging movement of said unit to apply traction to the spine of the patient.

5. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit selectively for turning movement on a horizontal axis adjacent the bottom thereof and a substantially vertical axis adjacent one side thereof, a force-transmitting device connected at one end to said unit at a point spaced from both of said axes, and power means for applying force to the other end of said force-transmitting device to swing said unit away from said support to subject the spine of the patient to traction.

6. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit selectively for turning movement on a horizontal axis adjacent the bottom thereof and a substantially vertical axis adjacent one side thereof, a force-transmitting device connected at one end to said unit at a point spaced from both of said axes, and power means for alternately applying force to and releasing it from the other end of said force-transmitting device to alternately swing said unit toward and away from said support to alternately subject the spine of the patient to traction and to release such traction.

7. A therapeutic table according to claim 6 wherein said power means comprises a rotating cam engaging the other end of said force-transmitting device and having a high portion concentric with the axis of rotation of said cam whereby, when force is applied to said other end of said force-transmitting device by said cam, such force is maintained throughout the length of said concentric cam portion.

8. A therapeutic table according to claim 7 wherein said cam is provided with a low portion opposite said concentric portion and is provided between said low portion and said concentric portion with graduated portions whereby force delivered to said other end of said force-transmitting device is progressively increased and decreased at the respective ends of said concentric cam portion.

9. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit for turning movement on a predetermined axis toward and away from said support, a piston rod connected at one of its ends to said unit at a point spaced from said axis, force-applying means at the other end of said piston rod, such means comprising a pair of elements one of which is a cylinder and the other of which is a piston and one of which elements is connected to the other end of said piston rod, the end of said cylinder opposite said piston being closed and said cylinder containing a body of hydraulic fluid, and means for applying a force to the other of said elements to generate pressure in the body of hydraulic fluid to move said piston rod and swing said unit away from said support to subject the patient to spinal traction.

10. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit for turning movement on a predetermined axis toward and away from said support, a piston rod connected at one of its ends to said unit at a point spaced from said axis, force-applying means at the other end of said piston rod, such means comprising a pair of elements one of which is a cylinder and the other of which is a piston and one of which elements is connected to the other end of said piston rod, the end of said cylinder opposite said piston being closed and said cylinder containing a body of hydraulic fluid, a power-driven rotatable cam having a high portion concentric with the axis of rotation of said cam and engaging said other element to transmit sustained pressure thereto and through said body of hydraluic fluid to said piston rod, said cam having a low portion opposite said concentric portion and intermediate portions between said concentric and low portions at the respective ends of said concentric portion, rotation of said cam maintaining force against said other element uniformly when said concentric cam portion engages said other element to subject the patient to spinal traction, continued rotation of said cam applying and releasing forces to and from said other element.

11. A therapeutic table according to claim 9 provided with a pressure gauge connected to said body of hydraulic fluid to indicate pressures delivered from said cam to said other element.

12. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, means for supporting said unit selectively for turning movement on a horizontal axis adjacent the bottom thereof and a substantially vertical axis adjacent one side thereof, a force-transmitting device connected at one end to said unit at a point spaced from both of said axes, a rotating cam engaging the other end of said force-transmitting device and having a high portion concentric with the axis of rotation of said cam whereby, when force is applied by said cam to said other end of said force-transmitting device, such force is maintained throughout the length of said concentric cam portion, said cam being provided with a low portion opposite said concentric portion and being provided between said low and concentric portions with graduated portions whereby force delivered to said other end of said force-transmitting device is progressively increased and decreased at the respective ends of said concentric cam portion, means for adjusting said cam relative to said force-transmitting device to vary the force transmitted to the latter by said cam, and means for indicating such force.

13. A therapeutic table according to claim 12 provided with means for indicating when said concentric cam portion engages said other end of said force-transmitting device.

14. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling paid to said support, means for supporting said unit for turning movement on a predetermined axis toward and away from said support, a piston rod connected at one of its ends to said unit at a point spaced from said axis, force-applying means at the other end of said piston rod, such means comprising a pair of elements one of which is a cylinder and the other of which is a piston and one of which elements is connected to the other end of said piston rod, the end of said cylinder opposite said piston being closed and said cylinder containing a body of hydraulic fluid, a rotatable cam having a high portion concentric with the axis of rotation of said cam and engaging said other element and a low portion opposite said concentric portion, a pressure gauge connected to said cylinder to indicate the pressure in said body of hydraulic fluid and thus indicate the relative pressure delivered through said body of hydraulic fluid

to said piston rod, means for adjusting said cam toward and away from said cylinder to determine the maximum pressure in said body of hydraulic fluid when said concentric cam portion engages said other element, and visible means for indicating when said concentric cam portion is in engagement with said other element.

15. A therapeutic traction table comprising an upper support for the torso of a patient, a kneeling pad at one end of and below said support, a movable unit extending upwardly from said kneeling pad to said support, removable vertical pivot pins at opposite sides of the top of said movable unit, pin-supporting means at opposite sides of the bottom of said movable unit each comprising a ball and socket device, a horizontal removable pivot pin passing through the ball of said ball and socket device and connected to said movable unit whereby, when said vertical pins are removed, said movable unit is supported for swinging movement on the common axis of said horizontal pins, and when the vertical and horizontal pins at one side of said movable unit are removed, said unit is supported for swinging movement about the vertical axis of the other vertical pin, which axis passes through the center of the corresponding ball, and means for transmitting a force to said movable unit at a point spaced from both of said axes to swing said unit away from said support to subject the patient to spinal traction.

16. A traction table according to claim 15 wherein said force-transmitting means comprises a body of hydraulic fluid forming the sole means for delivering force to said unit.

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ROBERT E. MORGAN, *Acting Primary Examiner.*

RICHARD A. GAUDET, *Examiner.*

J. W. HINEY, *Assistant Examiner.*