

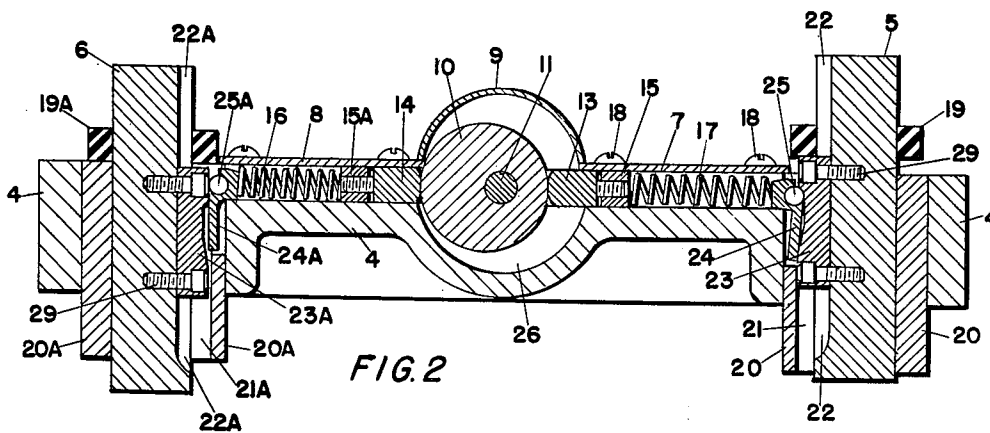
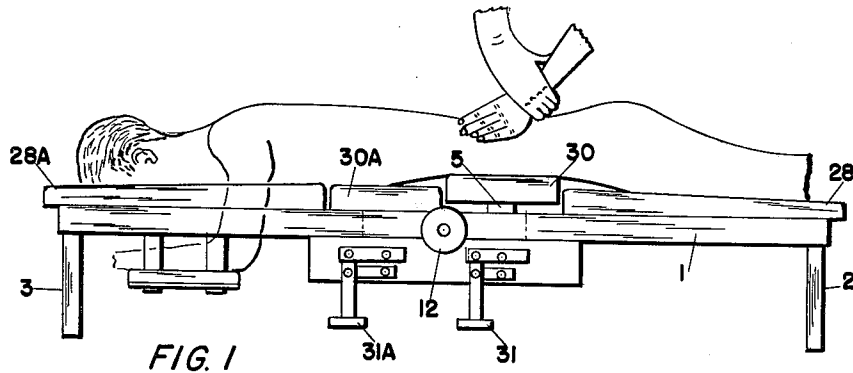
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CHIROPRACTIC TABLE

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Filed Feb. 16, 1960

2 Sheets-Sheet 1



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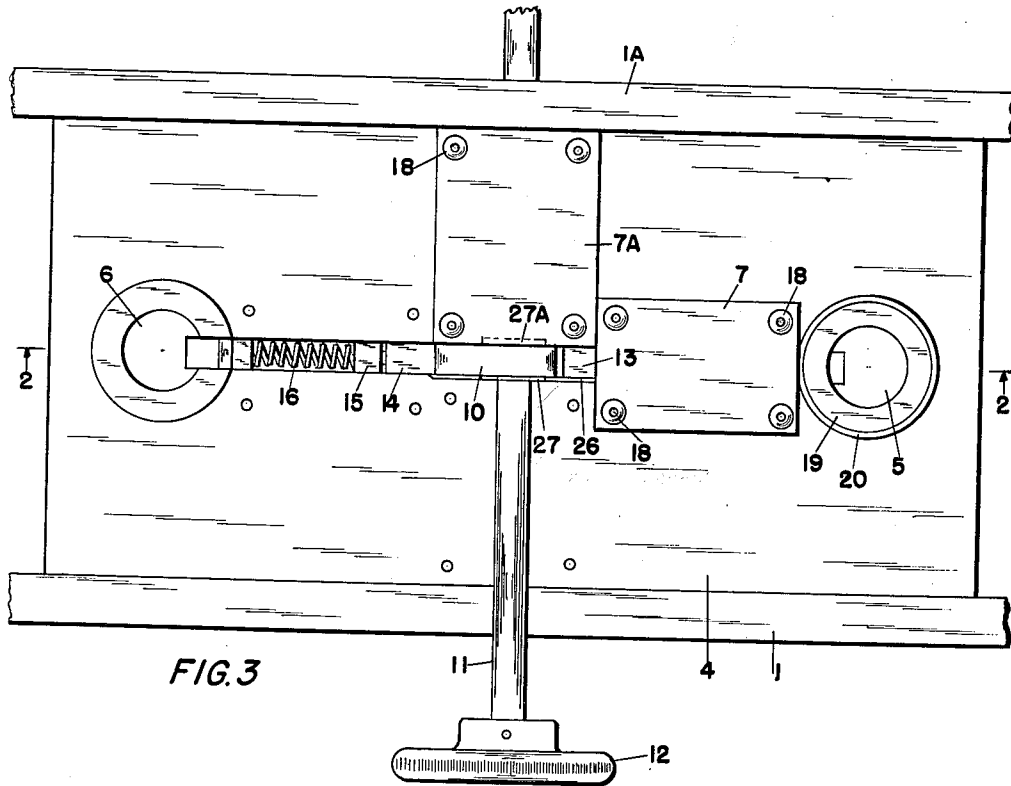


FIG. 3

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3,092,102

CHIROPRACTIC TABLE

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My invention relates to tables for the use of chiropractors in administering adjustments of the human spine to correct subluxations of the vertebrae therein or other spinal ailments.

In the use of my former chiropractic tables shown in Pat. No. 2,926,660, great difficulties arose by reason of the friction that arose and was often produced by the dragging and disintegrating contact of the bottom of the gauge bar 21 as it was moved along the bottom of the horizontal bore of the base plate under the weight of heavier patients and the thrust of the chiropractor's hands in administering a treatment. This not only caused pain to the patient, but the body-rest might not yield to the thrust of the doctor's hands and the reaction thereon would often cause great discomfort and pain to his hands, arms and shoulders.

The benefits of my improvement of the table not only included improved effectiveness of the treatments administered therewith, but also included reducing pain and discomfort to the patients and pain and discomfort to the chiropractor caused when the frictional resistance was heavy enough to react to the thrust and also limit or prevent free downward movement.

The objects of my invention are:

(1) To provide new, improved means whereby any one of a plurality of body areas along the spinal column below the cervical area of the spine of a patient lying in horizontal position upon a chiropractic table may be placed in upraised position and held in suspension until moved downwardly a limited distance by force applied by hand by a doctor of chiropractic to adjust a predetermined misplacement or subluxation of one or more of the vertebrae or other parts in the affected area;

(2) To provide separate cushions by which either or both of two adjoining areas of the body between the neck and the knees of a patient lying on a chiropractic table may be held in a raised position or lowered to rest at the normal table level;

(3) To provide separate manually adjustable means to maintain such cushions in upraised position;

(4) To provide separate cushioned sections of a chiropractic table between head and leg sections thereof and mounted upon separate vertical columns with spring actuated detents bearing against the columns to hold them in raised positions, and a manually operable vertical cam arranged to increase or decrease the pressure of the detents upon the columns.

I accomplish these objects by the means shown in the accompanying drawings, in which:

FIGURE 1 is a side elevation of a chiropractic table with a patient lying face down thereon with one of the intermediate sections in raised position;

FIGURE 2 is a sectional elevation of the central part of a table frame and the vertical columns to support the movable intermediate sections on the line 2—2 of FIGURE 3;

FIGURE 3 is a top or plan view showing part of the middle section of the base plate and the middle part of the frame but with the cover of the cam and covers of the spring 16 and of the shaft 11 omitted.

Similar numerals refer to similar parts in the several figures.

When one of the body-rests is in its highest position, the head of the vertical brake bar member 24 is moved

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to travel horizontally and bring the roller 25 into contact with the vertical body of the gauge block 23 when the spring 17 will produce sufficient pressure thereon to retain the column 5 and the body-rest thereon in their highest position. When the body-rest is lowered by the force of the hands of the chiropractor in adjusting a subluxation, the roller 25A and head of vertical brake bar member 24A will be forced outwardly by the sloping face of the gauge block 23A in its descent bearing against the roller 25A.

My table is formed with metal side bars 1 and 1A having united thereto a cast metal base member 4 which extends through the middle one-third of the table but has a concavity at the middle thereof to accommodate a cam 10 rigidly keyed upon a transverse shaft 11 mounted in suitable bearings in the side bars 1—1A.

The table is supported on legs 2—3 of any suitable form.

The table is fitted with cushioned head and leg supporting sections 28—28A. Between the head and foot sections two intermediate cushioned sections 30—30A are mounted upon the top of vertical columns 5—6. These columns are slidably mounted in vertical bushings 20—20A rigidly secured in the base member 4. Longitudinal grooves or channels 22—22A are cut in the columns and similar grooves 21—21A are cut in the bushings.

Extending inwardly from the columns are rectangular grooves or channels cut in the base in line with the grooves in the columns and extending to the cam housing. At the inner end of each base groove a bearing member 13—14 is slidably mounted.

Each bearing member 13—14 has a projecting threaded screw extending into a threaded bore in an adjuster 15—15A.

The inner ends of the springs 16—17 bear against the adjusters 15—15A and the adjusters may be lifted out of the grooves with the bearing members and rotated upon the projections to increase or decrease the pressure exerted upon them by the helical springs 16—17.

The outer ends of these springs bear against vertical brake bar members 24—24A which form bearings for rollers 25—25A which are forced against gauge blocks 23—23A rigidly secured to the columns by stud bolts 29.

Strong vertical brake-bar members 24 and 24A, of convenient size and weight, also called "detents," with heads formed to act as "pushers" or brakes, are tiltably mounted in spaces between the base 4 and the columns 5 and 6, in contact with said columns or with gauge blocks 23 and 23A rigidly secured to the columns, with their feet or lower ends resting upon the blocks 20 and 20A and with the heads upon their upper ends in line with the grooves or longitudinal channels which carry the springs 17 and 18 in the base plate.

These heads, impelled by the springs, act as pushers and are bored to form seats for bearing rolls 25 and 25A which contact the gauge blocks 23 and 23A and may be adjusted to exert pressure as brakes on either one of the gauge blocks 23 and 23A and to lock and retain the columns 5 or 6 and the cushions 30 and 30A in their highest position when raised or in lowest position when lowered, and adjustable at an intermediate height when desired.

The outer ends of the springs 16 and 17 bear against the enlarged heads of vertical brake bars 24—24A that act as keys or pushers having bores as bearings which carry rolls 25—25A and act to force the rolls 25—25A against the detent blocks 23—23A where they act as brakes to hold the columns 5 and 6 and their cushioned body rests 30 and 30A thereon at their previously adjusted positions. Each detent block or bar 23—23A has

a curved outer face which forms a curved outer face which forms a sort of runway for the roll 25—25A.

It will be noted that in place of utilizing detent blocks or bars 23—23A fastened to the columns 5—6 by bolts 29, the vertical channels in the columns 5—6 may be formed with the bottom of each channel curve to correspond to the curve shown in the detents 23—23A and for the same purpose.

Four cover plates 7—7A and 8 are applied to cover the channels in the base plate 4 and the shaft 11 secured by screws or stud bolts 18 threaded into bores cut in the base 4.

In FIGURE 3 two of the covers are shown, the other two having been omitted to show the parts underlying them. The cam 10 is eccentrically mounted on the shaft 11 rigidly keyed thereon. It has a curved cover plate 9 and revolves with the shaft 11 in a circular chamber formed by its cover 9 and the concavity 26 of the base plate 4.

As shown in FIGURE 2, the cam is turned to bind the column 6 in its lower position and to relieve the spring pressure from the upraised column 5 so it would be ready to be moved downwardly by the thrust of the doctor's hands upon the area of the body resting on the cushioned section 30.

The cam may be manually rotated by a wheel 12 or any suitable knob or handle to any desired angle so as to increase or relieve the pressure upon either of the columns 5—6. As shown in FIGURE 3, it would cause higher pressure on column 6. If rotated 180 degrees it would produce the higher pressure on column 5. If rotated only 90 degrees, it would allow equal pressure upon both columns 5 and 6.

The intermediate cushioned sections 30—30A, with their columns, may be easily raised directly by the hands of the chiropractor using the table or by means actuated by foot pedals 31—31A.

Rubber or similar washers 19—19A are mounted upon the columns 5—6 and serve to cushion the descent of the columns and cushioned sections carried thereby when forced downward by the adjusting thrust of the operator as applied to the patient's body.

Various changes may be made in the material, form and size of various parts without departing from the spirit of my invention as expressed in the claims and I do not limit my claims to the precise forms shown in the drawings.

I claim:

1. A chiropractic table having a rectangular frame with metal side bars and a metal base plate united thereto, with supporting legs united to the side bars at or near each corner of the frame, head and foot rests mounted on the side bars at opposite ends of the table and spaced apart, sleeve bushings secured in the base plate, vertical columns mounted in said sleeve bushings and manually movable vertically from about three-sixteenths to five-eighths of an inch, separate body rests mounted on said vertical columns, resilient means mounted on said base plate and bearing against the vertical columns to hold said vertical columns at the upward limit of movement when raised with a patient lying in part upon the body rests.

2. A chiropractic table as described in claim 1 wherein said adjustable resilient means includes a vertical channel cut in one side of each vertical column, a gauge block with an inclined outer face rigidly secured in each of said channels, vertical brake bar members each having a foot resting on its adjacent bushing, and also having a head carrying a transverse roller, a channel cut in the base plate, helical springs mounted in the channel, one end of said springs bearing against the heads of the brake bar members, said rollers bearing against the outer faces of the gauge blocks, and a vertical manually adjustable cam mounted in the base plate channel between the springs for

controlling the pressure upon the vertical columns separately or simultaneously.

3. A chiropractic table as described in claim 1, this means comprising longitudinal channels cut in the base plate, adjacent vertical channels cut in the columns and bushings, a gauge block bolted in the channel of each column, a vertical brake bar member fitted to bear against each gauge block, and resilient means slidable in the channels in the base plate adapted to increase or decrease pressure upon the vertical brake bars and thereby to secure the columns when in raised position or permit them to move downwardly when a chiropractic adjusting force is applied to a patient lying upon the intermediate body rests.

4. A chiropractic table as described in claim 3, said resilient means including helical compression springs slidably mounted in the base plate channels respectively, and a manually adjustable vertical cam rotatably mounted centrally in the line of the base plate channels adapted to increase or decrease the compression of the springs and their force as applied to the vertical brake bar members respectively whereby a varied braking effect upon the columns may be accomplished.

5. A chiropractic table as described in claim 4, and bearing members slidably seated in the base plate channels between the cam and the nearest ends of the springs whereby the force of the cam may be applied to the nearest corresponding spring and thence to said vertical brake bar members.

6. In a chiropractic table as described in claim 5, a manually adjustable transverse cam shaft carried by the side frames, said cam being rigidly keyed upon said cam shaft.

7. In a chiropractic table as described in claim 5, a manually operable knob fixed upon one end of the shaft.

8. In a chiropractic table, the combination with fixed head and leg rests spaced apart, of a plurality of movable body rests interposed between them and normally at the same level, unitary means whereby either of the movable body rests may be held a short distance higher than the level of the adjoining rests and allowed to descend to the normal level when a conventional chiropractic thrust is applied to the body of a patient lying in horizontal position upon said table within the area of such body supported by the upraised rest.

9. In a table for use in administering chiropractic adjustments, the combination with a frame having metal sidebars and a metal base plate united thereto, of supporting legs connected to each corner of the frame, head and foot rests on opposite ends of the frame spaced apart, two sleeve bushings mounted in said base plate, a pair of vertical columns slidably mounted in said bushings, means permitting a vertical adjustment of said columns, a channel cut in the base plate between said two bushings, a channel cut in each of said bushings and said vertical columns cooperating with said base channel, a gauge block bolted in each of said column channels, a vertical brake bar tiltably mounted in the channel of each said bushing, each said brake bar having a head and a foot, each said bushing having a block, each said foot resting on said block, each said head carrying a bearing roll, each said bearing roll bearing against one of said gauge blocks, resilient means mounted in the base channel bearing against the heads of the brake bars, and means to vary the amount of pressure exerted by the resilient means.

References Cited in the file of this patent

UNITED STATES PATENTS

1,194,939	Bishop	Aug. 15, 1916
1,201,571	Fouts	Oct. 17, 1916
1,626,471	Miller	Apr. 26, 1927
2,150,519	Rogers	Mar. 14, 1939
2,926,660	Thompson	Mar. 1, 1960