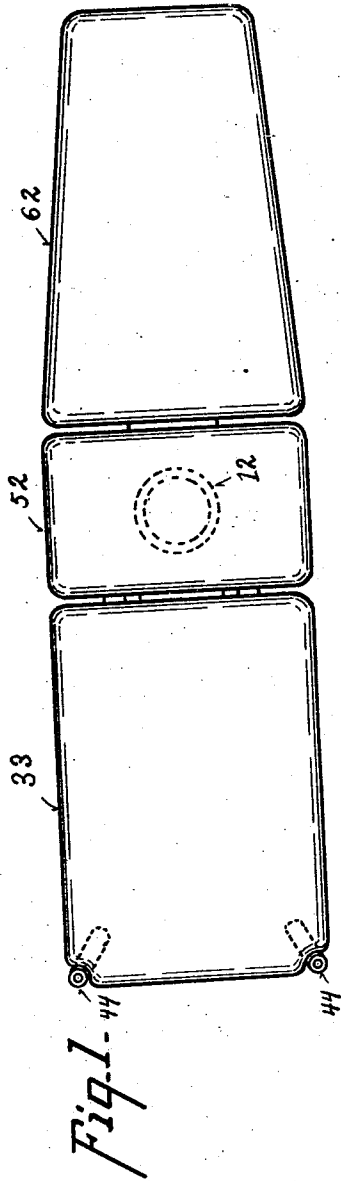
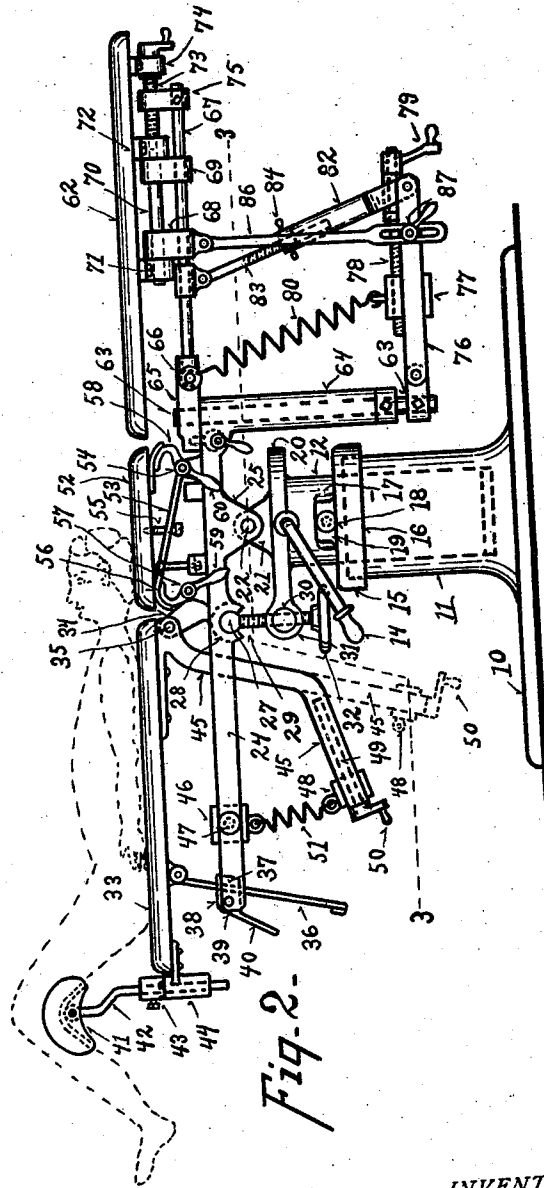


J. V. McMANIS.
TREATMENT TABLE.
APPLICATION FILED JULY 30, 1919.

Patented May 30, 1922.
2 SHEETS—SHEET 1.

1,417,675.

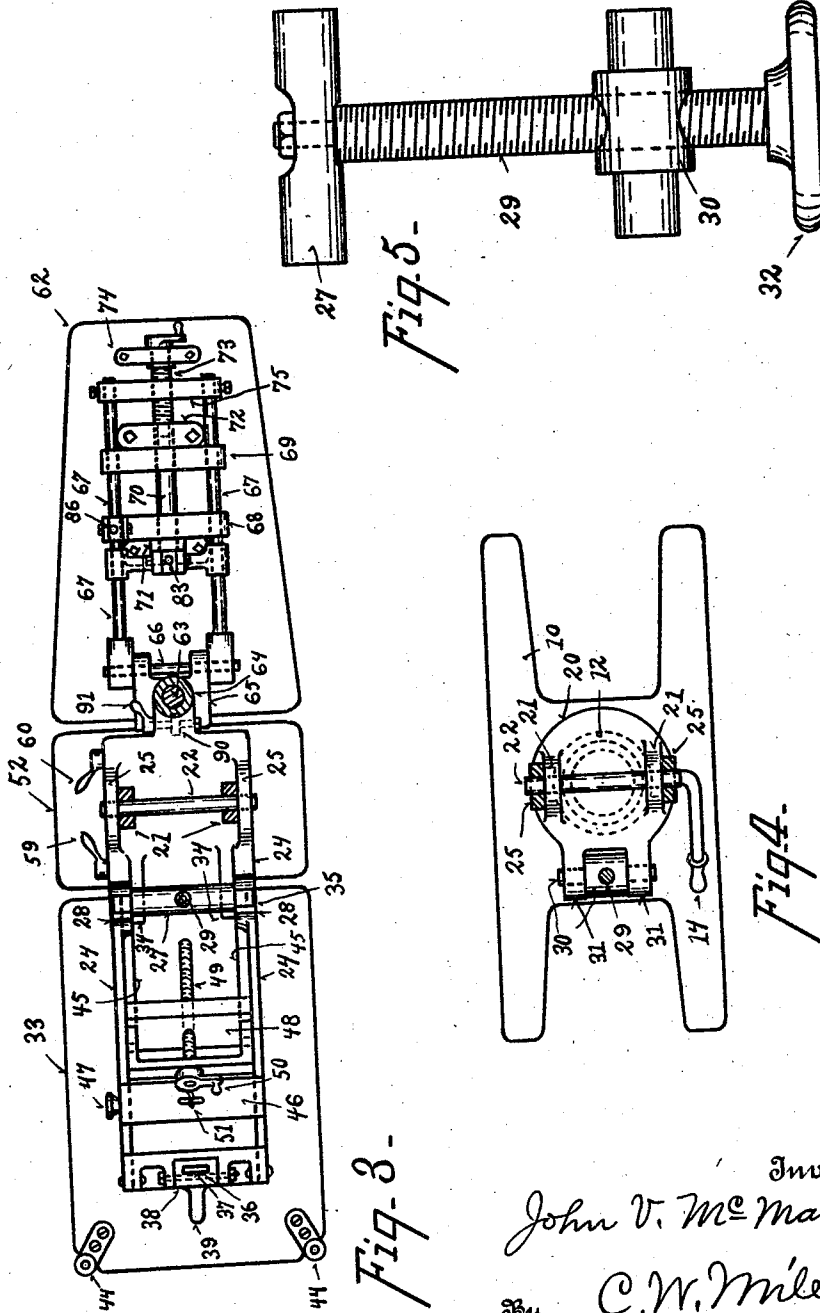


INVENTOR.
John V. McManis
BY C. W. Miles.
ATTORNEY.

J. V. McMANIS.
TREATMENT TABLE.
APPLICATION FILED JULY 30, 1919.

Patented May 30, 1922.
2 SHEETS—SHEET 2.

1,417,675.



Inventor
John V. McManis
C. W. Miles,
Attorney

UNITED STATES PATENT OFFICE.

JOHN V. McMANIS, OF KIRKSVILLE, MISSOURI.

TREATMENT TABLE.

1,417,675.

Specification of Letters Patent.

Patented May 30, 1922.

Application filed July 30, 1919. Serial No. 314,278.

To all whom it may concern:

Be it known that I, JOHN V. McMANIS, a citizen of the United States, residing at Kirksville, in the county of Adair and State of Missouri, have invented certain new and useful Improvements in Treatment Tables, of which the following is a specification.

My invention relates to improvements in treatment tables. One of its objects is to provide an improved treatment table for the use of osteopaths and others employing similar treatments, in which the table top as a whole is vertically adjustable relative to its base or support, and is adjustable as a whole to different degrees of inclination, and in which the respective top sections are adjustable and movable and adapted to be locked relative to each other independently of said vertical adjustment and said adjustment to different degrees of inclination. Another object is to provide improved means to support and adjust a table top comprising a plurality of sections which are in turn adjustable and movable, as for instance oscillatable, relative to each other. Another object is to provide improved means to support a table top as a whole and adjust it to different positions of inclination where said top comprises a plurality of top sections relatively movable and adjustable. Another object is to provide improved means to resiliently and adjustably support one of the table top sections so as to compensate for a considerable portion of the weight of a patient and to thereby enable an operator to readily adjust the top section with the weight of the patient thereon. My invention also comprises certain details of form, combination, and arrangement, all of which will be fully set forth in the description of the accompanying drawings in which:

Fig. 1 is a plan view of a treatment table embodying my invention.

Fig. 2 is a side elevation of the same.

Fig. 3 is a sectional view taken on line 3-3 of Fig. 2 and looking toward the under face of the top sections.

Fig. 4 is a sectional view taken also on line 3-3 of Fig. 2 but looking downwardly.

Fig. 5 is a detail of a portion of the means employed to adjust the top as a whole to different inclined positions.

The accompanying drawings illustrate the preferred embodiments of my invention in

which 10 represents the base, the upright portion 11 of which constitutes a cylinder to receive a hydraulically actuated plunger 12. The plunger is hollow and serves as a container for a quantity of oil or other fluid sufficient to raise and lower the plunger. 14 represents the actuating lever of a hydraulic pump located in the chamber of the plunger, and which is provided with valves and releasing mechanism to enable said liquid to be pumped from the plunger storage chamber into the cylinder beneath the plunger to thereby elevate the plunger, and also to release said fluid and allow the fluid to flow back from the cylinder into its storage chamber and to thus lower the plunger within the cylinder. A collar 15 is fitted loosely with a downwardly hanging flange 16 upon the upper end of the cylinder and provided with a shoe 17 to bear against the outer face of the plunger, and a set-screw 18 threaded through a projection 19 carried by the collar 15. When the set-screw 18 is loose the plunger may be raised or lowered, and also rotated in the cylinder, and when the set-screw is tightened the shoe 17 bears against the face of the plunger, and the flange 16 grips the upper end of the cylinder at one side, so as to lock the plunger and cylinder rigidly together against either of said movements.

A flange or head 20 at the upper end of the plunger is provided with upwardly projecting ears 21 in which ears an axle 22 is supported in a horizontal position. A frame 24 is provided with downwardly projecting ears 25 which also engage said axle 22 and thereby rotatably connect the frame 24 to the head of the plunger, and provide for a limited movement of the frame 24 to different positions of inclination in either direction from the horizontal relative to the head of the plunger. A section of shaft 27 is rotatably mounted in bearings 28 on the frame 24, and is attached to one end of a screw rod 29 so that said screw rod may be rotated relative to said shaft 27.

The screw rod 29 is also threaded through a shaft member 30 which is journaled in ears 31 carried by the head 20 of the plunger. A hand wheel 32 at the lower end of the screw rod 29 enables said screw rod to be rotated by hand thereby drawing the shaft members 27 and 30 toward each other or

forcing them apart, thereby adjusting the frame 24 to any desired position of angularity with reference to the plunger 12, and automatically locking or retaining said frame in the adjusted position against any weight or force tending to change its position.

The main table top section 33 is pivotally supported with reference to the frame 24 by rotatably connecting it at 35 to ears or projections 34 projecting upwardly from the frame 24. The top section 33 is adjustable upon the centers 35 to different positions of inclination with reference to the frame 24, and is automatically locked to any adjusted position by means of a rod or bar 36 which is hinged to the under side of the top section 33 and is movable endwise through a recess 37 in a locking member 38 pivotally connected at 39 to the frame 24. The rod 36 may be drawn upwardly through the recess 37 to lift the top section 33 at its free end, and when released the bar 38 and rod 36 will automatically lock and hold the top section 33 to its elevated or adjusted position. In order to lower the free end of the top section it is necessary to depress the handle 40 of the locking member 38 whereupon the rod 36 is enabled to slide endwise downwardly through the perforation 37. Leg supports 41 are detachably mounted by means of their shanks 42 and collars 43 with reference to socket brackets 44 attached to the corners at the free end of the top section 33, and thereby provide for a patient being positioned substantially as indicated in dotted lines Fig. 2 with reference to the table top sections, and from which position it is frequently desirable to adjust the top section 33 by elevating or lowering it at its free end after the patient is in position. Where the operator is of slight build, as for instance, a woman doctor, and the patient above the average weight, it would ordinarily be difficult for the operator to adjust the top section 33 with the patient in position, and in order to obviate this difficulty I provide a forked arm or frame 45 projecting from approximately the pivot point 35 to a position at its free end below the frame 24. A carriage 46 is adjustable on the frame 24 and may be locked thereto by means of a set-screw 47. A carriage 48 is adjustable upon the frame or arm 45 by means of a screw feed rod 49 turned by a crank 50. The carriages 46 and 48 are united by a spring 51, which tends to draw said carriages toward each other with more or less force, depending upon the positions of said carriages and the greater or less amount of leverage thereby attainable. The force exerted by the spring 51 upon the arm 45 tends to assist an operator to lift and adjust the top section 33 with a patient in position thereon, particularly under the conditions above mentioned. When not re-

quired the carriages 46 and 48 or one of them may be adjusted to a position where the spring 51 will exert practically no force, or if desired the spring may be disconnected from one of the carriages until again required for use.

The top section 52 is supported with reference to the frame 24 by means of a member 53 pivoted upon the axle 54 journaled in ears upon the frame 24, and attached by a bolt 55 to the under side of the intermediate top section 52. At one end the top section rests upon cam members 56 pivoted upon the axle 57, and at the opposite end upon the cam members 58 pivoted upon the axle 54. Hand levers 59 and 60 provide for rotating said axles and their cam members respectively, to thereby raise or lower either end of the top section 52 independently of the opposite end, thereby providing four different positions of adjustment for the top section 52 relative to the frame 24, that is the position illustrated in Fig. 2, a position inclined to the left hand, a position inclined to the right hand, and a position lower than that illustrated in Fig. 2, resulting from depressing both ends of said top section at the same time.

The auxiliary top section 62 is supported with reference to the frame 24 by means of a vertical axle 63 journaled in a sleeve 64 carried by the frame 24. At the upper end of the axle 63 and rigidly attached thereto is a head 65, which in turn carries a horizontal axle 66 to which is pivotally connected a frame 67, on which the members 68 and 69 slide endwise. The members 68 and 69 carry an axle 70 upon which the top section 62 is rotatably mounted by means of brackets 71 and 72 attached to the under side of top section 62. A screw rod 73 journaled at one end in bracket 72 and at the opposite end in bracket 74 is threaded through the cross-bar 75 of frame 67, and serves to adjust the section 62 to and from the section 52. Locking means not shown is employed to lock the section 62 rigidly relative to frame 67 against rotation on the axle 70 when desired. At the lower end of the shaft 63 is pivotally supported a frame 76 on which is mounted a carriage 77, adjustable along the frame 76 by means of a screw feed rod 78 rotatable by means of a crank 79, and carried by the frame 76. A spring 80 is connected at one end to the axle 66, and at its opposite end to the carriage 77, and tends to draw the free end of the frame 76 upwardly with greater or less force, depending upon the position of the carriage 77 with reference to the frame 76. This upward thrust of frame 76 is transmitted to frame 67 to support the top section 62 resiliently in a substantially horizontal position, and at the same time leave top section 62 free to be oscillated in a horizontal plane, by means of a tubular member

82 pivotally attached to the frame 76, an eyebolt 83 pivotally attached to the frame 67 and with its threaded end telescoped in the tubular member 82, and a nut 84 adjustably threaded to the shank of said member 83 and resting upon the end of the member 82. Adjustment of the nut 84 elevates or lowers the free end of top section 62, and adjustment of the carriage 77 increases or decreases the tension to support top section 62. A member 86 pivotally attached to frame 67 and adapted to be clamped by nut 87 to frame 76 serves to lock frames 67 and 76 together to hold the top section 62 nearly or 15 practically in rigid position.

The mechanism herein illustrated and described is capable of considerable modification without departing from the principle of my invention.

20 What I claim is:

1. A treatment table comprising a base, a pedestal vertically adjustable relative to said base, a frame mounted upon and rotatably adjustable upon a substantially horizontal axle relative to said pedestal, means carried by said pedestal and frame to positively adjust said frame rotatably relative to said pedestal, and a plurality of table top sections mounted upon and relatively adjustable upon said frame.

2. A treatment table comprising a base, a frame mounted upon and rotatably adjustable upon a substantially horizontal axle relative to said base, means carried by said base and frame to positively adjust said frame in opposite directions rotatively relative to said base, a plurality of table top sections mounted upon and relatively adjustable upon said frame and means adjustable with a patient in position upon said table to partially compensate for the weight of the patient upon one of said top sections and to thereby assist the operator in adjusting said top section to different positions with the patient in position thereon.

3. A treatment table comprising a base, a pedestal vertically adjustable relative to said base, a frame hinged to the upper portion of said pedestal, means to positively adjust said frame to different positions of angularity upon said hinge joint with reference to said pedestal, and a plurality of table top sections mounted upon and relatively adjustable upon said frame.

4. A treatment table comprising a base, a main table top-section rotatably supported relative to said base upon a substantially horizontal axle and adjustable upon said axle to different positions of inclination by raising or lowering said top section at one end, an automatically actuated locking member to retain said top section in its adjusted position, and means adjustable to partially compensate for the weight of a patient upon 65 said top section and to thereby assist the

operator in adjusting said top section to different positions with the patient in position thereon.

5. A treatment table comprising a base, a pedestal vertically adjustable relative to said base, a table top section rotatably supported near one end upon a substantially horizontal axle relative to said pedestal and adjustable upon said axle to different positions of inclination by raising or lowering said top section at the opposite end, a locking member to retain said top section to its adjusted position of inclination, and means adjustable to partially compensate for the weight of a patient upon said top section and to thereby assist the operator in adjusting said top section to different positions with the patient in position thereon.

6. A treatment table comprising a base, a pedestal vertically adjustable relative to said base, a table top section rotatably supported near one end upon a substantially horizontal axle relative to said pedestal and adjustable upon said axle to different positions of inclination by raising or lowering said top section at its opposite end; a locking member to automatically retain said top section at its adjusted position of inclination, an arm rigidly mounted relative to said table top section, a carriage adjustable along said arm to vary the lifting energy applied to said arm, and a lifting member connected at one end to said carriage and at the opposite end to said pedestal to supplement the lifting power of an operator in lifting said top section with a patient in position thereon.

7. A treatment table comprising a base, a table top section rotatably supported near one end upon a substantially horizontal axle relative to said base and adjustable upon said axle to different positions of inclination by raising or lowering said top section at its opposite end, a locking member limited as to its movement at opposite extremes to automatically retain said top section at its adjusted position of inclination, and means adjustable to partially compensate for the weight of a patient upon said top section and to thereby assist the operator in adjusting said top section to different positions with the patient in position thereon.

8. A treatment table comprising a base, a frame hinged to the upper portion of said base, a main table top section rotatably supported relative to said base upon a substantially horizontal axle and adjustable upon said axle to different positions of inclination by raising or lowering said top section at one end, an automatically actuated locking member to retain said top section in its adjusted position, means adjustable to partially compensate for the weight of a patient upon said top section and to thereby assist the operator in adjusting said top section to different positions with a patient in position 130

thereon, and a table top section adjacent to said main top section and adjustable relative to said base and main top section to afford a comfortable support for the head of the patient.

9. A treatment table comprising a base, a main table top section, rotatably supported relative to said base upon a substantially horizontal axle and adjustable upon said axle to different positions of inclination by raising or lowering said top section at one end, an automatically actuated lock comprising a latch member carried by said base and

provided with a releasing lever, and a rod hinged to the table and movable endwise through a recess in said latch member, a rod rigidly attached to said top section, and means adjustable to partially compensate for the weight of a patient upon said top section and to thereby assist the operator in adjusting said top section to different positions with the patient in position thereon.

In testimony whereof I have affixed my signature.

JOHN V. McMANIS.