

Dec. 4, 1928.

M. DANIELS ET AL  
NEUROPATHIC HEALTH TABLE

1,693,810

Filed Dec. 20, 1926

2 Sheets-Sheet 1

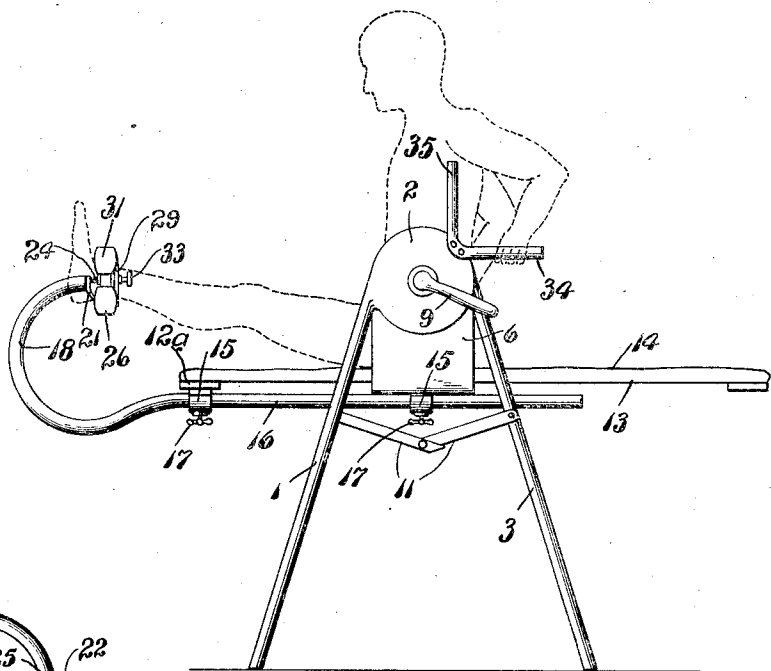


Fig. 1.

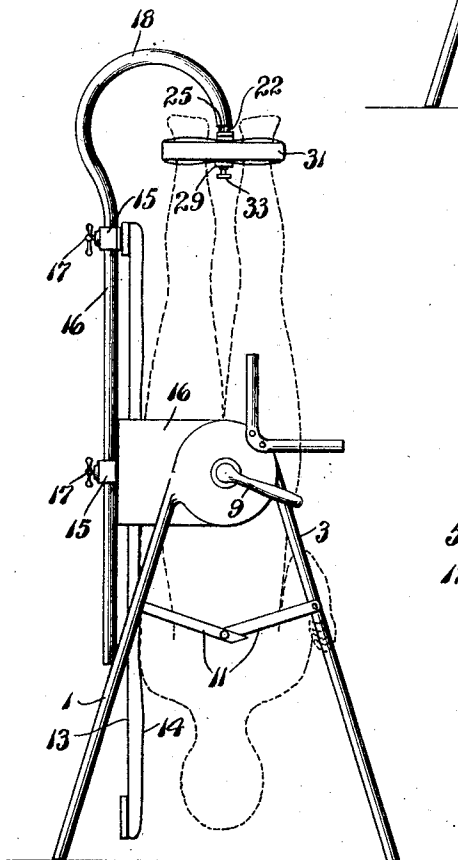


Fig. 2.

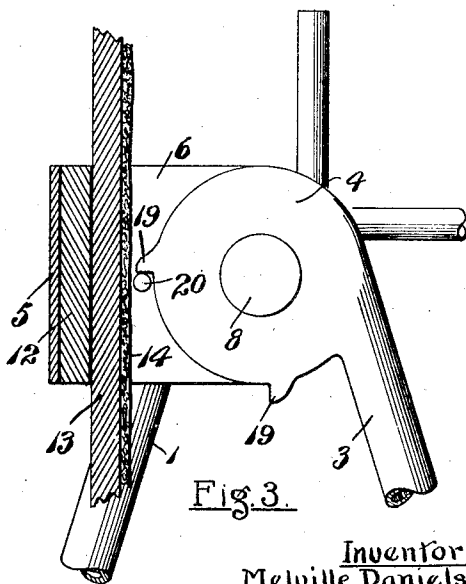


Fig. 3.

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2 Sheets-Sheet 2

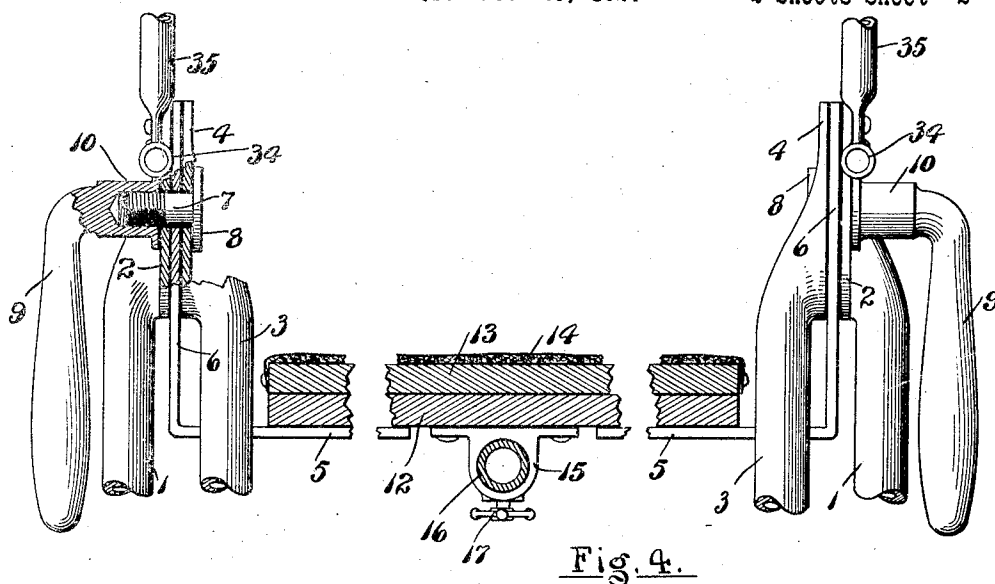


Fig. 4.

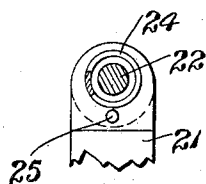


Fig. 5.

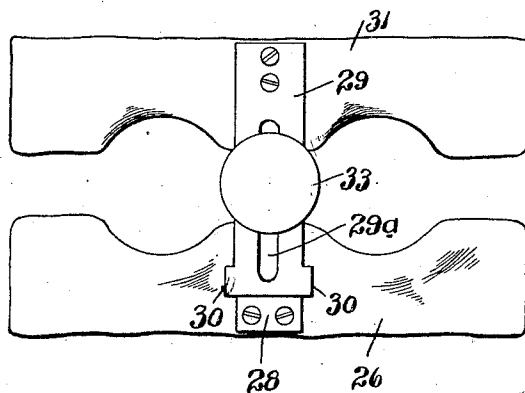


Fig. 6.

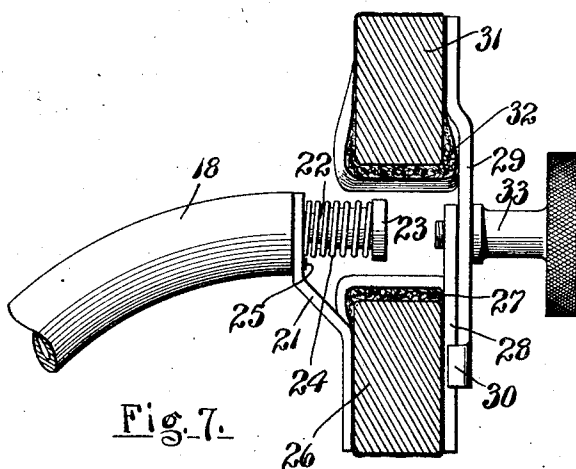


Fig. 7.

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## UNITED STATES PATENT OFFICE.

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## NEUROPATHIC HEALTH TABLE.

Application filed December 20, 1926. Serial No. 156,023.

This invention relates to a table adapted to be used in the treatment of neuropathic ailments wherein the patient lying on the table may manipulate it so as to change the position and in this manner dispose his (or her) body so that the force of gravity may aid in restoring misplaced organs to proper position and relieve pressure of such misplaced organs which pressure may produce a neuropathic condition. We have found that by use of a table of this kind the patient may give self treatment and cure or palliate many disorders to which the body is subject.

It is a primary object and purpose of the present invention to provide a table of the character outlined on which the patient may lie and which is adjustable on the part of the patient to different angular positions and on which the patient may turn to different positions and still be held against accident. Various novel constructions are supplied for the attainments of these ends as well as others not at this time specifically stated but which will appear from the following description and the accompanying drawings, in which,

Fig. 1 is a side elevation of the table of our invention.

Fig. 2 is a similar elevation, the table having been tilted from a horizontal to a vertical position.

Fig. 3 is a fragmentary enlarged vertical section through the table, illustrating the manner in which it is mounted for movement about a horizontal axis and further illustrating the limit stops used in connection therewith.

Fig. 4 is a transverse vertical section through the table construction the plane of section being substantially through the pivotal mounting therefor.

Fig. 5 is a fragmentary section showing the mechanisms used for rotatably mounting the ankles holding clamp.

Fig. 6 is an elevation of said clamp, and

Fig. 7 is a vertical transverse section thereof.

Like reference characters refer to like parts in the different figures of the drawings.

In the construction of the device, supporting standards 1 inclined somewhat to the vertical are used at their upper ends being

equipped each with an enlarged circular disk-like head 2. Associated with each of the standards 1 is a similar standard 3 which is likewise equipped at its upper end with a disk-like head 4. The standards 1 and 3 preferably are of tubular stock, though not necessarily so, and the heads 2 and 4 thereof are adapted to be connected together. Two pairs of standards are used one at each side of the table and are spaced apart somewhat farther than the width of the table. The table is attached to brackets of metal, each including a horizontal section 5 and a vertical section 6. The horizontal sections 5 extend toward each other and the vertical sections 6 pass between the heads 2 and 4 at the upper ends of the standards 1 and 3 as best shown in Fig. 4. A screw 7 having a head 8 passes through the heads 2 and 4 and the vertical sections 6, the heads 8 of the screws bearing against the heads 4 at the upper ends of standards 3, and the screw being connected to a handle 9 from which a socket portion 10 is turned at right angles, it being interiorly bored and threaded to receive the end of a screw 7. This is fully shown in Fig. 4 and it is evident that by turning the handle 9 the parts, including the heads at the upper ends of the standards and the vertical sections 6 of the table supporting brackets may be securely clamped together; and that on releasing the clamps thus provided the table which is supported on the inwardly extending sections 5 of the supporting brackets may be turned to different positions about the horizontal axis of the screws 7 which serve as pivots about which the table may turn. The supporting standards 1 and 3 at each side of the construction are limited in the extent that they may separate by links such as 11 in Fig. 1.

The table is spaced a short distance above the horizontal sections 5 by means of a cross bar 12 which is secured to said sections. The table 13 lies above and is fixed to said bar 12 and at its upper side and edges is covered with any suitable padding, indicated at 14.

On the under side of the bar 12 and also on the under side of a second bar 12<sup>a</sup> secured to the under side of the table near one end thereof, are sleeves 15 mounted in alignment with each other through which a tubular rod 16

may pass, it being adjustable in said sleeves and held in any position to which adjusted by set screws such as indicated at 17. Beyond the end of the table 13 the tube is curved upwardly and thence back toward said table, as best shown in Figs. 1 and 2, making a curved section 18, as shown.

The table with the attached tubular rod 16 is limited in its movements to an arc of substantially 90 degrees. On the heads 4 at the upper ends of standards 3 two stationary stops 19 are provided (see Fig. 3) which are located 90 degrees apart and between which stop pins 20 on the vertical sections 5 of the table supporting brackets may move. This limits the table to a swinging movement between the horizontal position shown in Fig. 1 and the vertical position shown in Figs. 2 and 3.

At the end of the curved section 18 of the tubular rod 16 a bracket 21 of metal is located. It is bent downwardly and inwardly at an incline a short distance below where it is attached to the tube 18 (see Fig. 7) and then extends vertically downward. The upper end of the bracket has an opening through which a pin 22 freely passes, the pin being permanently secured to the end of the tube 18 and at its free end provided with a head 23. A coiled spring 24 under compression is located around the pin 22 between its head 23 and the bracket 21, the normal effect of which is to force the bracket against the end of the curved tubular section 18, as shown in Fig. 7. A short locating pin 25 projects from the end of the tube 18 and passes through an opening in the bracket 21 when the table and the tubular rod 16 are in horizontal position.

A clamping bar 26 is rigidly secured to the downwardly extending outer end of bracket 21 and at its upper side is covered with suitable padding indicated at 27. On the inner side of the clamping member 26, a bar 28 is permanently secured the same extending above the upper side of the bar 26. A second bar 29 having a vertical slot 29<sup>a</sup> therein is adjustably mounted on the bar 28, its lower end at each side edge being equipped with lips 30 which pass alongside each edge of the bar 28. A second clamping bar 31 covered with suitable padding 32 is permanently secured to the upper end of the adjustable bar 29. In order to fix the two clamping bars 26 and 31 securely with respect to each other a clamping screw 33 having an enlarged head passes through the slot 29<sup>a</sup> and into a threaded opening in the bar 28 and has a shoulder which clamps against the bar 29. It is evident that in this manner the bars 26 and 31 may be adjusted back and forth with respect to each other and may be held in any position to which adjusted. When the patient lies on the table the ankle portions of the legs may be placed in suitable recesses in the upper side

of the bar 26 then the bar 31 lowered snugly into engaging position with the legs of the patient and the clamping screw 33 then tightened.

At each side end near the upper edge portion of the heads 2 of the supporting standards 1 of the device, hand holds are permanently secured and lie at right angles to each other as indicated at 34 and 35. In practice these are made from a length of tube flattened between its ends where the attachment is made to heads 2 and bent at right angles at the flattened portion so as to make the vertical hand holds 35 and the horizontal hand holds 34.

The patient having been placed on the table or having placed himself (or herself) thereon and clamped the legs within the ankle clamp may then loosen the handles 9 and turn the table to different positions, anywhere between the horizontal position shown in Fig. 1, and the vertical position shown in Fig. 2. By reason of the structure and the limit stops which are provided the swing of the table can only be so as to lower the head of the patient and at any point between the horizontal and vertical position of the table this movement may be stopped. By reason of the weight of the patient which is carried wholly or partly by the ankle clamping bars, spring 24 is compressed, the bracket 21 is disengaged from the pin 25 and the leg or ankle clamps may be turned about the axis of the pin 22. This permits the patient to turn to different positions on the table. There are many positions in which certain misplacement of organs will be rectified and nerves relieved from pressure and the patient may turn to the desired position and secure such relief with an eventual replacement of the organ to natural position. With this apparatus various attachments may be used on the table for supporting the head or other portions of the body but these are not shown or described in the present application.

The table is very practical and serviceable and has proved particularly valuable in treatment of neuropathic disorders. It is simple to operate, adjustable for different heights of persons using it and can be used in the home without the necessity of an attending physician or nurse. The invention is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

With reference to the ankle clamping device which has been definitely disclosed and described as such, it is pointed out that any equivalent device adapted to clamp the feet or in fact any part of the lower extremities of a person may be substituted as a mechanical and actual equivalent. Wherever the device is referred to as an ankle clamping means such designation is to be understood in this broader sense.

We claim:

1. In a construction of the class described, spaced apart vertical supports, brackets pivotally mounted one at the upper end of each support to turn about a horizontal axis, each of said brackets including a horizontal section, said horizontal sections of the brackets extending toward each other, a table carried by and between said horizontal sections of the brackets, a member located below, lengthwise of and adjustable longitudinally with respect to the table, said member at one end extending beyond the adjacent end of the table and thence bent upwardly and back toward the table and a legs holding clamp mounted at the outer end of the said member.

2. In a construction of the class described, spaced apart vertical supports, a table disposed between said supports and located a distance below the upper ends thereof, means for mounting said table for turning movement on the supports about a horizontal axis located above the table, a rod disposed below and lengthwise of the table, means for adjustably mounting said rod on the table, one end of the rod extending beyond the adjacent end of the table and thence being bent upwardly and back, and a legs holding clamp connected to the outer end of said rod substantially as described.

3. In a construction of the class described, spaced apart vertical supports, a table located between said supports and mounted thereon for turning movement about a horizontal axis, means for limiting the movement of said table between two positions in one of which the table is horizontal and the other vertical, a member located lengthwise of and below the table, means for mounting said member on the table whereby it may be longitudinally adjusted with respect to the table, said member at one end extending beyond the adjacent end of the table and being thence bent upwardly and back toward the table, and a legs holding clamp pivotally mounted on the outer end of said member so that it may be turned to any desired position.

4. A construction containing the elements in combination defined in claim 3, combined with means for normally holding said legs holding clamp against turning movement with respect to the member on which it is mounted.

5. In a construction of the class described, spaced apart vertical supports, a table located between said supports, means for mounting the table on said supports for turning movement about a horizontal axis, a rod located below and adjustably mounted on the table for longitudinal adjustment, one end of the rod extending beyond the adjacent end of the table thence bent upwardly and back toward the end of the table, a headed pin attached to and projecting from said end of the rod, a

bracket rotatably mounted on and depending from said pin, a coiled spring around the pin between said bracket and the head of the pin, a second smaller pin projecting from the end of the rod and adapted to pass through an opening in said bracket and a legs holding clamp carried by said bracket.

6. In a construction of the class described, spaced apart vertical supports having heads at their upper ends, supporting brackets each including a vertical section and a horizontal section pivotally mounted to turn on a horizontal axis, one of said brackets being pivotally connected to each of said supports at their upper ends whereby the vertical sections of the brackets extend downwardly from the pivots and the horizontal sections of the brackets extend toward each other, stop lugs located substantially 90 degrees apart projecting from a head of the support, a complementary stop pin extending inwardly from the vertical section of a bracket between said stop lugs, a table attached to, carried by and extending between the horizontal sections of said brackets, and a legs holding clamp connected with said table adjacent one end thereof substantially as described.

7. In a construction of the class described, spaced apart vertical supports each comprising two tubular standards converging adjacent their upper ends and each formed with circular heads, a bracket of flat metal having a vertical section located between the heads of each pair of standards, a headed and screw threaded pivot screw passing through said heads and vertical section of the bracket, a handle formed at one end with a socket located at right angles to the handle, said socket being screwed on to the threaded end of its pivot screw, whereby said heads and brackets may be clamped together or released sufficient to permit turning movement of the brackets, a table located between and connected to said brackets and means carried by the table for clamping the legs of a patient lying upon said table.

8. A construction containing the elements in combination defined in claim 7, combined with hand holds secured at the upper ends of each vertical support, each of said hand holds including a horizontal rearwardly extending member and a vertical member located at right angles to the horizontal member.

9. In a construction of the class described, a table mounted to turn about a horizontal axis from horizontal to vertical position, means associated with the table and moving therewith for clamping the ankles of a person, said means being freely rotatable relative to the table.

10. In a construction of the class described, a table mounted for movement about a horizontal axis, means associated with the table and freely rotatable relative thereto for

clamping the ankles of a person, and releasable means for holding said ankle clamping means non-rotative.

11. In a construction of the class described,  
5 a table mounted for movement about a horizontal axis, means associated with the table and rotatable relative thereto for clamping the ankles of a person, and releasable means

for holding said ankle clamping means non-rotative, said releasable means being released 10 by weight suspended from the ankle clamping means.

In testimony whereof we affix our signatures.

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