

April 22, 1952

O. L. HASTINGS ET AL
PHYSIOTHERAPY TRACTION TABLE

2,593,675

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2 SHEETS—SHEET 1

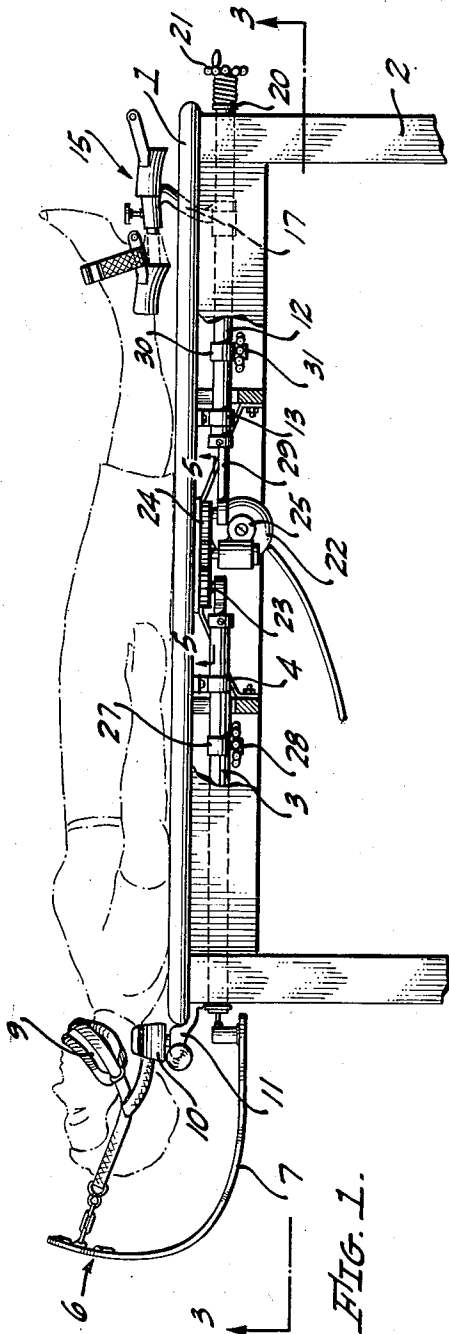
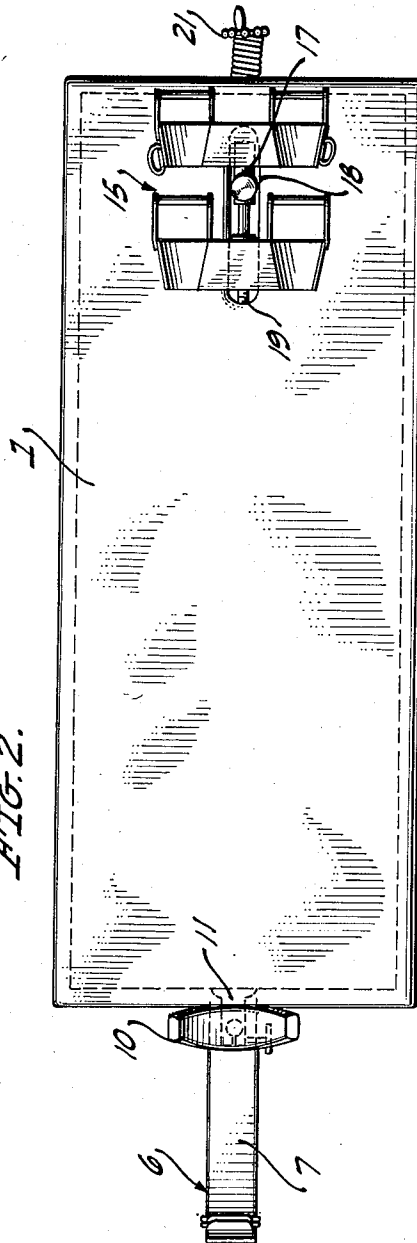


FIG. 1.



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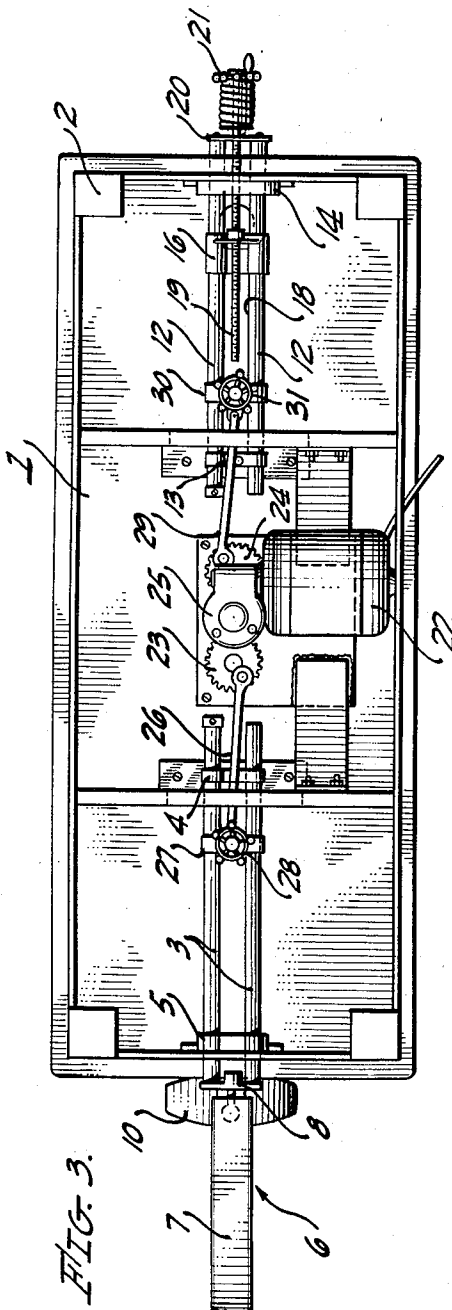
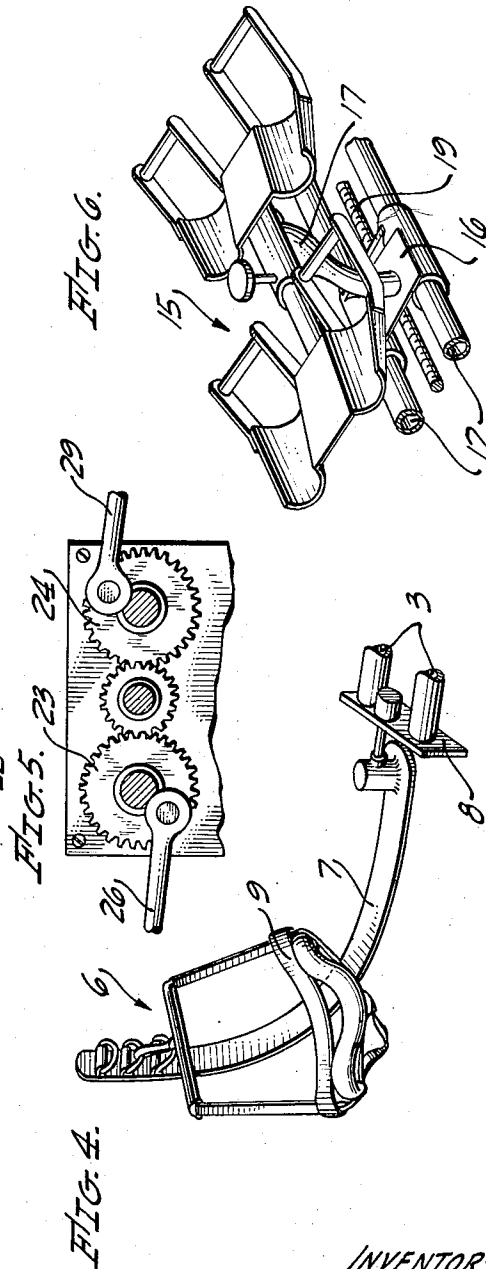
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2 SHEETS—SHEET 2



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UNITED STATES PATENT OFFICE

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PHYSIOTHERAPY TRACTION TABLE

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1 Claim. (Cl. 128—71)

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This invention relates to a physio-therapy traction table wherein intermittent traction is imparted to the patient strapped to the table.

An object of our invention is to provide a novel physio-therapy traction table in which the parts can be readily adjusted to the patient, and also the amount of pull or traction can be adjusted to suit the particular patient.

A feature of our invention is to provide a novel physio-therapy traction table which will effectively manipulate the various joints in the skeleton and also the various vertebrae in the spinal column.

Still another object of our invention is to provide a novel physio-therapy traction table which is simple in construction, effective in operation and beneficial to the patient.

Other objects, advantages and features of invention may appear from the accompanying drawing, the subjoined detailed description and the appended claim.

In the drawing:

Figure 1 is a side elevation of our physio-therapy table with parts broken away to show interior construction.

Figure 2 is a top plan view of the same.

Figure 3 is a bottom plan view as observed from line 3—3 of Figure 1.

Figure 4 is a perspective of the head clamp.

Figure 5 is a view of the gear train as viewed from line 5—5 of Figure 1.

Figure 6 is a perspective view of the foot clamp.

Referring more particularly to the drawing, the numeral 1 indicates a flat horizontal table, which is supported on the legs 2. One or more horizontal rods 3—3 are slidably mounted below the table top 1 and these rods are mounted for reciprocal movement in the bearings 4—5.

A head strap 6 consists of an arm 7, which is fixedly attached to the outer end of the rods 3, preferably by fixedly securing the arm 7 to a transverse plate 8 on the outer ends of the rods 3. A chin harness 9 of usual and well known design is secured to the arm 7 and engages the chin of the patient, substantially as shown in Figure 1. A head rest 10 is secured to the table top 1 by means of the bracket 11, which is bolted or otherwise secured to the table top 1, or depending parts thereof. A second set of rods 12—12, of which there may be one or more, are slidably mounted

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under the table top 1 and are preferably in alignment with the rods 3. The rods 12 are journaled in bearings 13—14 secured to the bottom of the table top.

A foot clamp 15, of usual and well known design, is adjustably secured to the rods 12 in the following manner: A sleeve 16 encircles the rods 12 and a finger 17 rises from the sleeves and is attached to the foot clamp 15 in a suitable manner. The finger 17 extends through a slot 18 in the table top 1 and longitudinal adjustment of the foot clamp 15 is accomplished relative to the table top 1, by means of the screw 19, which threads through the sleeve 16 and is rotatably mounted in the end plate 20 on the rods 12. A hand wheel 21 permits the threaded screw 19 to be turned, thus longitudinally adjusting the carrier or sleeve 16 on the rods 12, as may be necessary to fit the patient.

The rods 3 and 12 are simultaneously moved in opposite directions and lengthwise of the table 1 to impart a traction or pull to the body of the patient strapped to this table. This is accomplished in the following manner: An electric motor 22 drives a pair of gears 23—24 through the gear box 25. A pitman 26 is pivotally attached to the gear 23 and is also pivotally secured at its outer end to a clamp 27 secured to the rods 3. The clamp 27 can be fixedly secured to the rods 3 by means of the screw 28. A second pitman 29 is pivotally secured at one end to the gear 24 and at its outer end to a clamp 30 adjustably secured to the rods 12. The clamp 30 is adjustably fastened to the rods 12 by means of the screw 31 and thus the rods 3 and 12 can be moved lengthwise of the table top 1 permitting of a tension or traction adjustment to suit the particular patient.

Operation.—The patient's head is held in the harness 9 and the feet are secured in the rest 15 by means of suitable straps, or the like. The foot rest 15 is adjusted lengthwise by means of the wheel 21 until the patient's body is substantially under tension on the table. The motor 22 is now started and as the gears 23—24 rotate, the pitman 26—29 will alternately move the rods 3 and 12 outwardly and inwardly, thus imparting a slight but continuous traction or pull on the patient, thereby manipulating the various joints, such as

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the spinal vertebrae, which is beneficial in certain instances.

Having described our invention, we claim:

A physio-therapy traction table comprising a table top, a pair of rods journaled on said table and slidable endwise thereof, a foot clamp mounted on one of said rods, a head clamp mounted on the other of said rods, an electric motor mounted on the table top, a pair of pitmans reciprocally driven by said motor, a clamp encircling each of said rods, means adjustably securing each of the clamps to said rods, said pitmans being pivotally attached one to each of said clamps, means to adjust said foot clamp on a rod comprising a sleeve encircling the rod and rising therefrom, a finger extending from the

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sleeve and attached to the foot clamp, and a screw threaded through said sleeve, means mounting the screw on the table top whereby said screw may move the sleeve on the rod.

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