

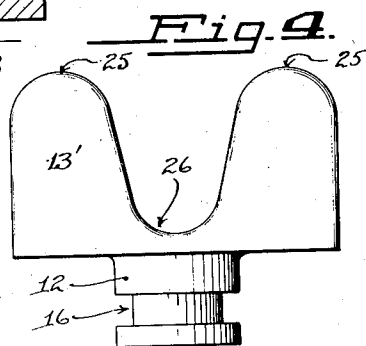
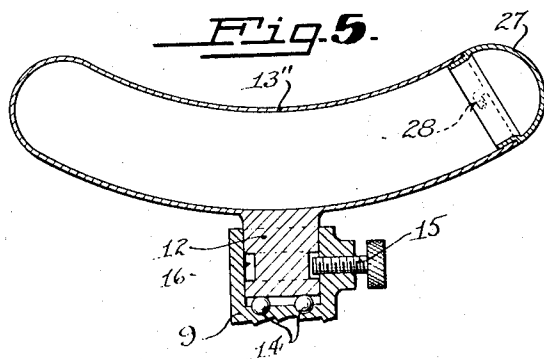
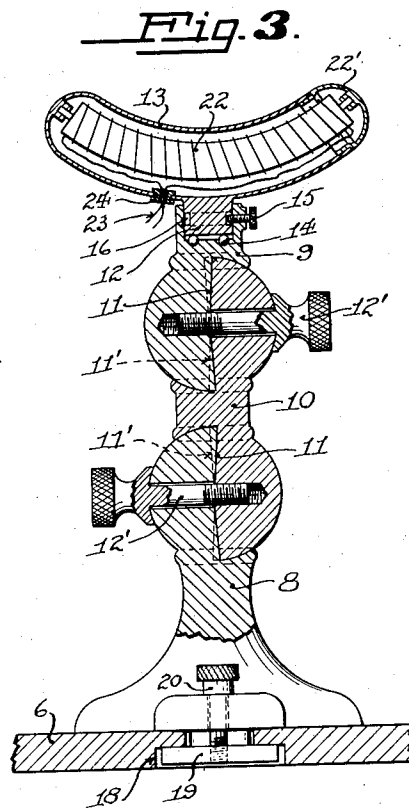
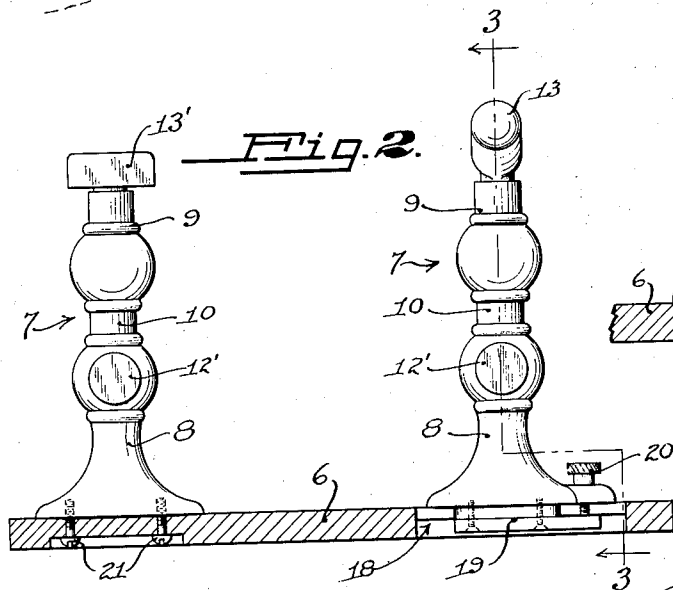
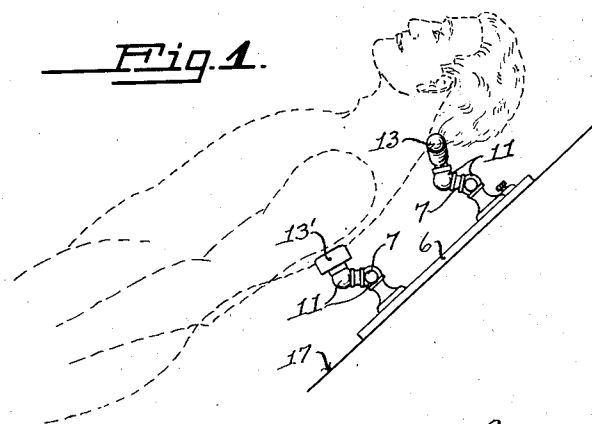
Dec. 18, 1934.

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1,984,520

APPARATUS FOR APPLYING HEAT, COLD, AND PRESSURE TO THE BODY

Filed May 11, 1932



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UNITED STATES PATENT OFFICE

1,984,520

APPARATUS FOR APPLYING HEAT, COLD,
AND PRESSURE TO THE BODY

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Application May 11, 1932, Serial No. 610,593

3 Claims. (Cl. 128—254)

The present invention relates to apparatus for applying heat or cold in controllable degrees, pressure, and traction to parts or surfaces of the human body, for use in treating certain conditions, principally of the nervous system, in which such applications may be beneficial.

The principal objects of the invention are to provide a portable and simple apparatus which is adjustable to enable it to be applied in various positions to various parts of the body; which is provided with interchangeable contact members upon which the body may rest and by which heat or cold may be applied either with or without pressure or traction; and to provide freely rotatable mountings for said contact members or body rests, so that, under certain conditions, the parts of the body being treated may be manipulated to secure the additional benefits of movement. Other objects and advantages of the invention will be apparent from the following specification, which should be read with the understanding that the form, construction and arrangement of the several parts may be varied within the limits of the claims hereto appended, without departing from the spirit of the invention as defined in said claims.

A preferred embodiment of the invention will now be described with reference to the accompanying drawing, in which

Fig. 1 is a side elevation of the device illustrating one of its positions of use.

Fig. 2 is a side elevation of the apparatus on a larger scale, the parts being shown in normal or inoperative position and the base being shown in section.

Fig. 3 is a transverse vertical section on the line 3—3 of Fig. 2.

Fig. 4 is an end elevation, enlarged, of the form of body rest or contact member shown at the left in Figs. 1 and 2.

Fig. 5 is a vertical section, enlarged, of a different form of body rest or contact member.

The apparatus comprises a base 6 to which are secured a plurality of standards 7, there being two such standards shown in the drawing. Each standard 7 comprises a pedestal or base portion 8, a head portion 9 and an intervening connecting portion 10. Hinge joints 11 are provided between the ends of the connecting portion 10 and the pedestal and head portions respectively, said joints being preferably formed, for purposes of strength and appearance, as cooperating hemispheres having their meeting faces arranged in the vertical plane of the longitudinal center line of the base 6, and said meet-

ing faces may, if desired, be formed with inter-fitting radial notches or teeth, as indicated at 11' in Fig. 3, to prevent slipping. Set screws 12' are provided to tighten the joints 11. The head portion 9 is provided with a socket in which is rotatably fitted the shank 12 of a body rest or contact member 13, as shown in Fig. 3. Ball bearings 14 are preferably provided to receive the weight of the applicator and to insure its freedom of rotation. A set screw 15 operates in a groove 16 in the shank 12 of the rest, both to hold said rest against accidental removal and to lock it against rotation, if desired.

The above described construction of the standards 7 permits the members 13 and 13' to be adjusted to various positions relative to each other and to the base 6, as illustrated for example in Fig. 1, in which the apparatus is shown in one of its preferred uses in the treatment of the sympathetic nervous system. In this use of the device, the patient reclines upon it, the back of the head or upper portion of the neck resting upon the member 13 and the lower thoracic or lumbar region resting upon the member 13'. Adjustment of the hinge joints 11 provides the desired distance between the two members and their relative height above the base 6. The amount of pressure, provided by the weight of the patient's head and body, is adjusted by varying the angle of the operating table 17 upon which the base 6 rests, and to which it may be secured if desired by any suitable means, not shown.

An additional adjustment of the spacing between the two members 13 and 13' may be provided by mounting one of the standards slidably upon the base 6, as shown in Fig. 3 and the right hand portion of Fig. 2. The base is provided with a longitudinal slot 18 and the pedestal 8 of the standard is provided with a T-shaped lug 19 slidably fitted in said slot. A clamping screw 20 at one side of the pedestal 8 secures it in any adjusted position in the length of the slot. The other standard, as shown at the left in Fig. 2, may be rigidly secured to the base 6, as for example by screws 21.

The member or rest 13, shown in Fig. 3, is preferably cylindrical in cross section, and is curved as illustrated to fit the back of the neck or head. When the set screw 15 is loose, the rest is free to rotate in the upper portion of the standard so that if it be desired to turn or move the head from side to side by appropriate manipulation, the rest will swing freely with such movement, thereby providing the effects of traction and motion as well as pressure to the region of

the body resting upon it. If no movement is desired, the set screw 15 may be set up tightly, thereby locking the rest rigidly in position. By unscrewing the set screw 15 sufficiently to free its end from the groove 16, the rest may be removed entirely and another of different form substituted for it.

Various forms of contact members or rests are provided as may be required to fit different parts of the body and to provide different effects in treatment. For example, the rest 13, shown in Fig. 3, is hollow, and is provided with an interior electric heating element 22. The wires 23 for supplying current to said element are shown as being led out through a bushing 24 in the underside of the rest, although, if desired, they may be led down through suitable conduits, not shown, in the standard 7 to the base 6. This form of rest is intended for the application of heat, the degree of heat being controlled in any well known manner, not shown. The rest 13', illustrated at the left in Figs. 1 and 2, and in Fig. 4, is intended primarily for the application of pressure to the region of the spine, and is provided with two longitudinal rounded surfaces 25 separated by a longitudinal groove 26. The rest 13'', shown in Fig. 5, is intended primarily for the application of cold, and is similar in shape to that shown in Fig. 3. It is hollow and is provided at one end with a removable cap 27 held in place by any suitable means, such as a bayonet lock connection, indicated at 28. This form of rest may be filled with cold water or ice or any suitable chemical reagents to provide cooling effect.

The form of rest shown in Fig. 4 may, if desired, be made hollow for the reception either of an electric element similar in effect to that shown in Fig. 3 or a cold radiating substance as is done with the rest shown in Fig. 5. Other shapes and forms of rests or contact members may be provided as required.

In the use of the device, the form of the rest or rests used will depend upon the treatment desired. Thus, for example, in the use illustrated in Fig. 1, the right hand rest may be used to apply

either heat or cold and the left hand rest to apply merely pressure. In other treatments, the pedestals may be adjusted to position the rests either closer together or farther apart, and various forms of rests may be used to apply any desired combination of heat, cold, and pressure, with or without movement, according to the necessities of the particular treatment employed.

I claim:—

1. An apparatus for the described purpose comprising a base having a longitudinal slot therein; a pair of standards mounted upon said base, one of said standards being adjustable in said slot toward and away from the other; a body rest carried by the upper end of each standard; and hinged joints in said standards, movable in a vertical plane parallel to the movement of said adjustable standard, whereby said rests may be moved up and down and toward and away from each other.

2. An apparatus for the described purpose comprising a base; a pair of standards mounted thereon, one of said standards being movable bodily toward and away from the other; a removable and horizontally rotatable body rest carried by the upper end of each standard; and hinged joints in said standards, movable in a vertical plane parallel to the bodily movement of the movable standard upon said base, whereby said rests may be moved up and down and toward and away from each other.

3. An apparatus for the described purpose comprising a base; a pair of standards mounted thereon, one of said standards being movable bodily toward and away from the other; a removable and horizontally rotatable body rest carried by the upper end of each standard; means for changing the temperature of one of said body rests; and hinged joints in said standards, movable in a vertical plane parallel to the bodily movement of the movable standard upon said base, whereby said rests may be moved up and down and toward and away from each other.

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