May 12, 1959 J. C. THOMPSON 2,886,029

HEADREST AND PROCESS OF CHIROPRACTIC ADJUSTMENT

Filed Feb. 17, 1958 3 Sheets-Sheet 1

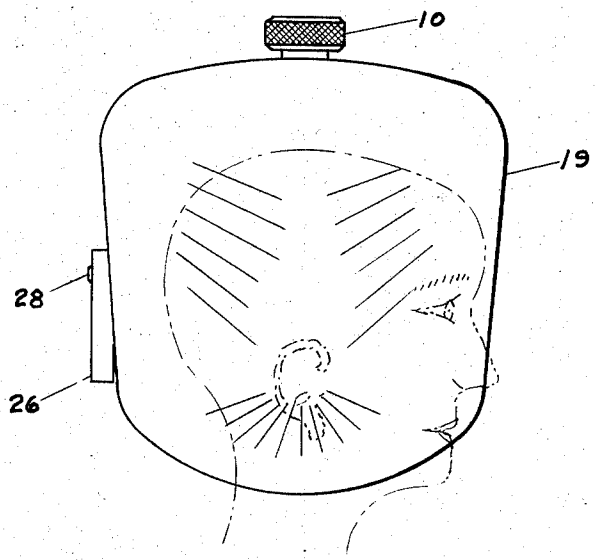


FIG. 1

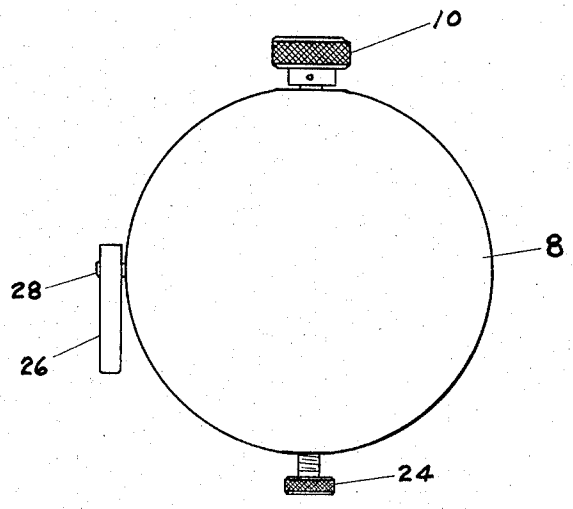


FIG. 2

Joseph Clay Thompson INVENTOR.

BY Busk & Busk,

Attys.

May 12, 1959 J. C. THOMPSON 2,886,029

HEADREST AND PROCESS OF CHIROPRACTIC ADJUSTMENT

Filed Feb. 17, 1958 3 Sheets-Sheet 2

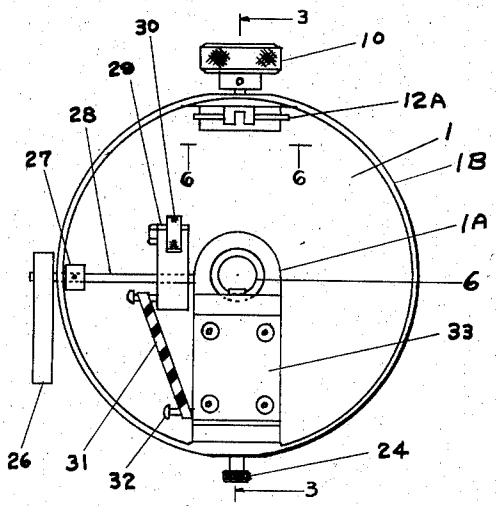


FIG. 5

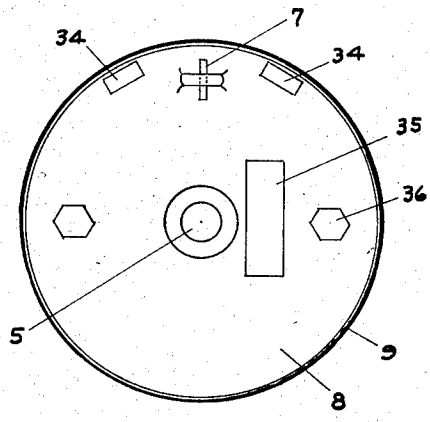


FIG. 4

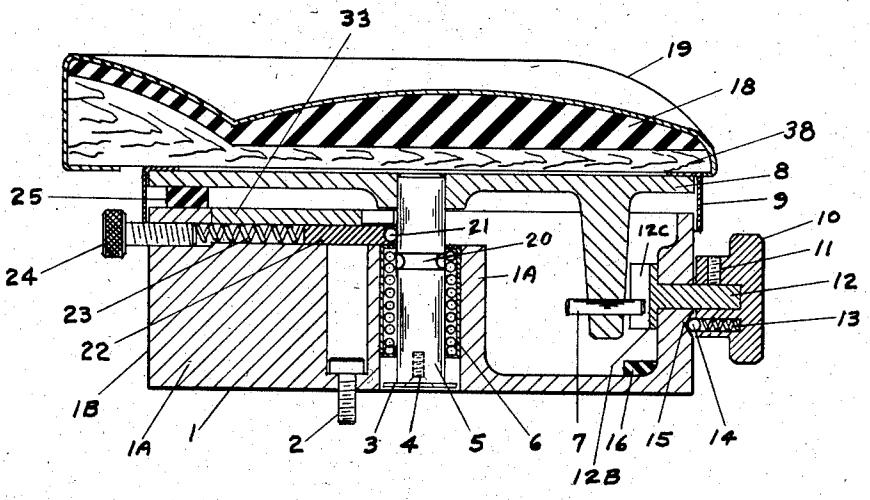


FIG. 3

Joseph Clay Thompson INVENTOR.

BY Burke & Burke

Attys.

May 12, 1959 J. C. THOMPSON 2,886,029

HEADREST AND PROCESS OF CHIROPRACTIC ADJUSTMENT

Filed Feb. 17, 1958 3 Sheets-Sheet 3

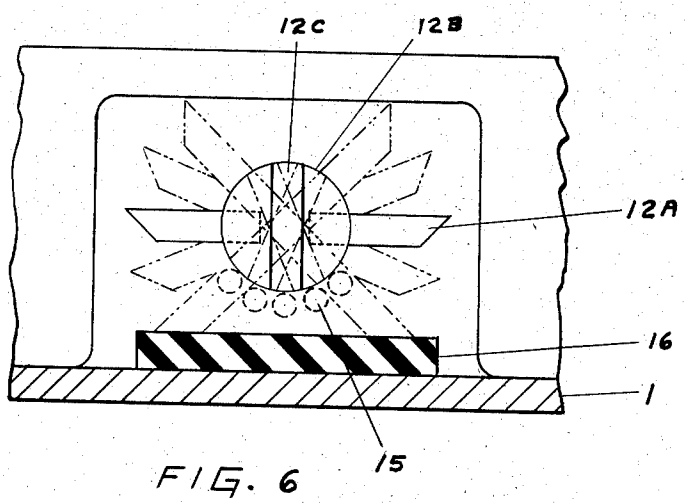


FIG. 6

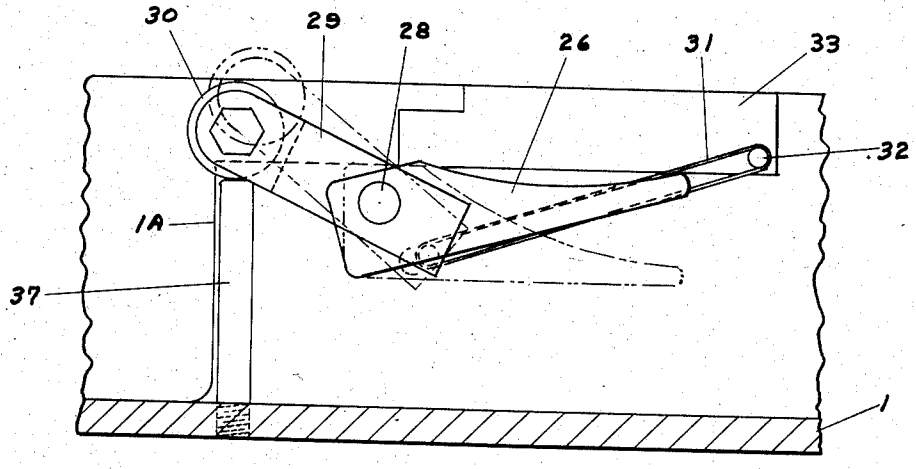


FIG. 7

Joseph Clay Thompson INVENTOR.

BY Burke Burke.

Attys.

United States Patent Office 2,886,029 Patented May 12, 1959

2,886,029

HEADREST AND PROCESS OF CHIROPRACTIC ADJUSTMENT

Joseph Clay Thompson, Davenport, Iowa

Application February 17, 1958, Serial No. 715,603

4 Claims. (Cl. 128—69)

My invention relates to an improvement in headrests and process for use of chiropractors in administering chiropractic adjustments for subluxations of vertebrae or condyles of the occiput in the cervical region of the human spinal column.

The objects of my invention are:

To provide an improved support for the head of a patient which will hold the head in a comfortable position while undergoing adjustment;

To provide adjustable means for such support which may be adjusted to direct the support in a main direct movement in line at a right angle to the plane of the support and also to cause the support to be moved rotationally upon its central axis if required thus giving a partial rotation to the support and the head resting thereon simultaneously with the main direct transverse movement thereof;

To provide a headrest having a movable support for the side of a patient's head which can be adjusted manually to rotate upon a central axis sufficiently to overcome an existing rotation of a vertebra which has become subluxated, simultaneously with the adjustment of slippage of a cervical vertebra in any direction;

To provide means to prevent tilting of the upper plate of a telescopic headrest that might interfere with its freedom of transverse or rotational movement in any desired direction;

To provide a central shaft secured at a right angle to the head support of a headrest with adjustable coacting means to retain the head support in its primary position before adjustment and to retain it in its secondary position after an adjustment;

To provide a method of chiropractic adjustment whereby subluxations of a part of the spinal column in the cervical region can be corrected by means which will simultaneously restore to its normal healthy position a vertebra which has either slipped or become inclined laterally, anteriorly, posteriorly, superiorly or inferiorly or become rotated, or otherwise displaced, including the utilization of adjustable mechanical means to control the directions of simultaneous movements of the parts during adjustment.

I accomplish these objects by the means described and shown by the drawings, in which;

Figure 1 is a plan or top view of the support or top of the headrest which contacts the head of a patient during adjustment, showing a head in broken lines;

Figure 2 is a top view of the cover with the wooden form and its padding removed;

Figure 3 is a vertical section on the line 3—3 of Figure 5 with the movable cover section in its lowermost position;

Figure 4 is a view of the underside of the cover and its depending rim;

Figure 5 is a plan view of the base section with the cover section removed;

Figure 6 is an enlarged detail of the means for adjusting the drop and rotation of the movable support for the head;

Figure 7 is an enlarged detail of the means for raising the movable part of the headrest.

Similar numerals refer to similar parts throughout the several views.

My headrest includes a base plate **1** having a circular band **1B** united thereto. This base plate has a flat bottom which can rest securely upon the upper surface of a chiropractic table, bench or other suitable support and will be freely manually movable thereon so as to align it with the patient's head with one ear at the central depression thereof instead of being obliged to move the patient to produce such alignment.

An arm or block **1A** is cast integral with the base **1** and rim **1B** at one side thereof and extends a little past the center thereof and has a bore at the center which forms a cylinder perpendicular to the base plate **1**.

This base section is fitted with a cover plate **8** having a circular rim band **9** fited to telescope over the base rim **1B**. The cover **8** has a shaft **5** rigidly united thereto at the center of the under side thereof and extending at a right angle thereto which corresponds to and fits closely in the bore in the cylinder of the block **1A**.

This shaft **5** has a shallow rounded circumferential groove **20** cut therein. In the block **1A** a bore extends lengthwise thereof parallel to the base plate in which a bar **22** is slidably mounted, the inner end of which carries a hardened transverse roller or ball **21** rounded to correspond with the curvature of the shallow groove **20**. The opposite end of the bar **22** is engaged by a coiled spring **23** inserted in the bore. A threaded shaft is mounted in the rim **1B** and extends into the bore where it engages the outer end of the spring **23**. It has a knurled head **24** on its outer end by which it can be adjusted to increase or decrease its pressure upon the spring **23** and the pressure of the ball **21** against the shaft **5**.

In the opposite side of the base rim **1B** there is journaled a shaft **12** bearing upon its inner end a channeled disc **12B** having a channel **12C** which normally stands at a right angle to the base **1** and parallel to the central shaft **5**.

The other end of the disc-shaft projects outwardly from the rim **1B** and is provided with a head **10** by which it can be rotated either to the right or left so as to incline the channel in the disc **12B** to right or left.

The disc and channel **12B** coact with a pin **7** mounted on an arm depending from the cover **8** by which when and as the cover **8** is forced downwardly by the adjusting thrust of the operator upon the neck of the patient, the cover moves either on a line perpendicular to the base without any rotation, or will rotate either clockwise or counter clockwise for a short distance governed by the angle to which the disc channel **12C** has been set by the operator.

One great advantage of my form of headrest is that it permits rotation of the head support either clockwise or counter clockwise upon an axis which is at or close to the center of the head in its lateral position and thereby causes the head to incline either forwardly or backwardly as the case may require.

In order to facilitate the longitudinal movement of the shaft **5** in the cylinder I mount in the cylinder sets of longitudinal ball bearings **6** in which the balls bear against the shaft and insure free longitudinal as well as rotational movement thereof.

The cover rim **9** may move relative to the base **1**. The disc **12B** has a lateral arm **12A** united thereto which limits the extent of its rotation by contact with a rubber bar **16** mounted upon the base **1**.

A buffer **25** may be mounted upon the cover **8** to contact the block **1A** and stop the telescopic movement of the cover rim.

The cover **8** and its rim **9** may be moved upwardly

by an inner lever 29 pivoted upon a shaft 28 carried by a support 27 mounted upon the base and extending out through the base rim with an outer arm 26 by which its shaft 28 can be rotated and the outer end 30 of the inner lever 29 can contact with and move the cover plate upwardly. Resilient means 31 may be suspended upon a pin 32 mounted in one edge of the plate 33 to exert tension upon the bar 29, if desired.

A series of shallow sockets 15 to control the angle of the disc channel are formed in the outer face of the rim 1B. A small bore is made in the head 10 of the shaft 12 in which a coiled compression spring 13 is mounted the inner end of which carries a ball 14 adapted to enter any one of the sockets 15 and act as a detent for the channeled disc.

In Figure 6, the disc has united thereto at a right angle to the channel, an arm 12A shown in solid lines but this arm may be turned at the angles shown in dotted lines and the channel 12C will be turned to correspond.

In the use of rotational headrests, I have found that to be most effective the cover plate must at all times be held parallel to the base plate whether in horizontal or vertical planes and that to avoid lateral tilting of the cover plate it is necessary that any allowable rotation thereof must be upon a transverse axial line projected through the center of the base and cover plates.

The central cylinder of my base plate and the central close fitting central shaft of my cover plate hold the base and cover plates in parallel at all times, even though the adjusting thrust of the operator is applied at a marginal point of the cover. This avoids any interference to movement that would arise from tilting of the cover in the absence of such control. Upon the cover 8 is secured a cushioned headrest including a layer of wood or equivalent fibrous matter 38 with a layer of soft rubber 18 over it which may be of sponge rubber, and is covered by a leather fabric cover 19.

This is of great importance because the point of an adjustment in the cervical region of the patient will be away from the center of the head and at the margin of the cover plate, and likely to tilt the cover causing it to bind and not move fully either vertically or rotationally.

In the specification for convenience I have referred to the base and cover plates and the patient's head as being in horizontal position, but my headrest may be supported in vertical position by any suitable means and the patient's head placed in contact therewith, and when so placed, the operation of adjustment would be applied in the way described with the same curative results.

A convenient means for supporting the base plate and

headrest in vertical position would be afforded by forming a bore through the block 1A large enough to admit the head of a machine screw 2 with the other end of the screw threaded to be inserted in a threaded bore in a pillar or suitable support of any desired kind.

Changes may be made in the size and shape of the parts without departing from the spirit of my invention as described in the claims and I do not limit my claims to the precise forms shown in the drawings.

I claim:

1. A headrest for the use of chiropractors, including a base section having a flat horizontal base plate with a vertical circular band wall united thereto, a central vertical cylinder rigidly united to the base, a flat cover plate, a vertical circumferential flange wall united to the cover plate depending therefrom and surrounding the upper portion of the circular base band wall and movable thereon both vertically and rotationally and having a slidable and rotational central pivot shaft united to the cover plate slidably and rotationally mounted in said cylinder.

2. A headrest as described in claim 1, and contacting means mounted on the cylinder coacting with means carried by the pivot shaft whereby the cover and shaft may be held in an upraised position until displaced by manual force.

3. A headrest for use of chiropractors including a base section having a flat base plate with a circular wall band united thereto and a cover plate mounted thereon with a corresponding band united thereto in telescopic relation to the base band, a manually operable shaft rotatably mounted in the base wall band bearing upon its inner end a disc with a transverse channel cut therein, an arm united to the cover plate having a pin at its lower end fitted to enter and move lengthwise of said channel when and as the cover plate is moved toward or away from the base plate, said channel normally standing perpendicularly to the base plate.

4. A headrest as described in claim 3, said disc being manually adjustable to cause the channel to be inclined at an angle to the perpendicular whereby the cover plate when depressed or raised, will be rotated for a short distance either clockwise or counter clockwise as determined by the adjusted position of the disc.

References Cited in the file of this patent

UNITED STATES PATENTS

1,626,471	Miller	Apr. 26, 1927
2,351,293	Saunders	June 13, 1944