

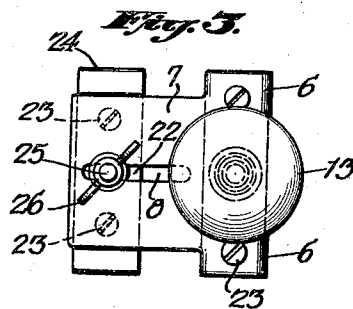
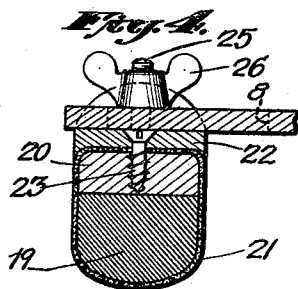
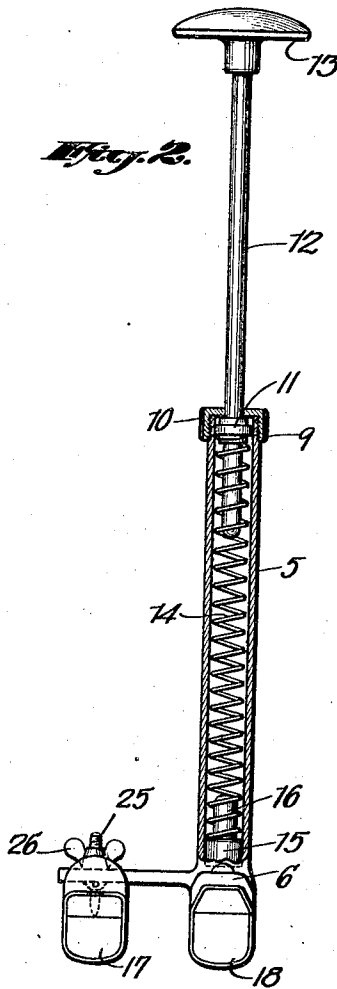
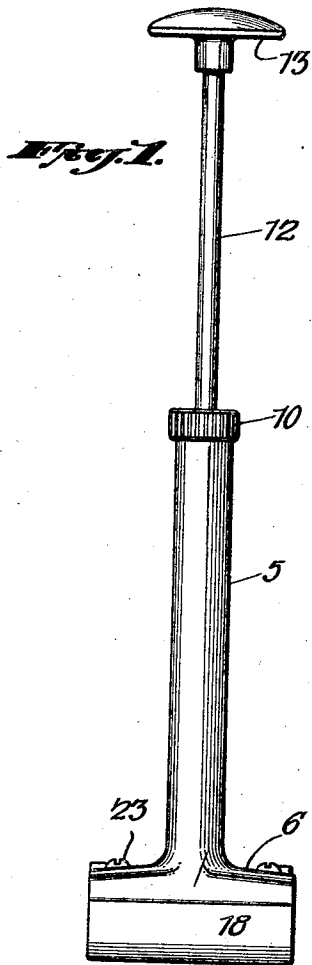
July 30, 1929.

T. H. DAVID

1,722,662

ADJUSTING DEVICE

Filed Jan. 9, 1928



INVENTOR  
TANOUS H. DAVID.  
BY *Living C. McCathran*  
ATTORNEY

Patented July 30, 1929.

1,722,662

# UNITED STATES PATENT OFFICE.

TANOUS H. DAVID, OF SACRAMENTO, CALIFORNIA.

## ADJUSTING DEVICE.

Application filed January 9, 1928. Serial No. 245,492.

This invention relates to massaging devices and in particular to the type adapted for the massaging of the back and treatment of the same adjacent the spinal column in a manner similar to the osteopathic treatment of the spine.

A particular object of my invention is to provide a device of this character which may be applied to a patient by another person in the home without the necessity of having the attendance of a skilled practitioner.

A still further particular object of the invention is to provide an improved device of this class which is comparatively simple in its construction and operation and easily and quickly adjustable to apply pressure to the body at opposite sides of the spine and in a properly distributed manner to suit the requirement of the particular case under treatment, whereby to enhance the practicability and commercial value of such devices.

A still further object of the invention is the provision of means in combination with a vertebra engaging agent for imparting jolting movement to the pads to facilitate the treatment of displaced or injured vertebrae.

To enable others skilled in the art to fully comprehend the underlying features of my invention that they may embody the same in the various modifications in structure and relation contemplated, a drawing depicting a preferred form has been annexed as a part of this disclosure and in such drawing, similar reference characters denote corresponding parts throughout all the views, of which,

Figure 1 is a view in end elevation of the device constructed in accordance with my invention.

Figure 2 is a view in end elevation of the device illustrated in Figure 1, the same being shown partly in section to disclose the shock producing plunger and cylinder or housing in which the same is contained.

Figure 3 is a top plan view of the device illustrated in Figure 2, the same being arranged to show the bridge connecting the pad members whereby the latter may be relatively adjusted to fit the spine, and

Figure 4 is an enlarged cross-sectional view taken through one of the pads and the bridge member showing how the pad is constructed and how it is held in position on the bridge.

In deformities of the spine which are corrected by chiropractic treatment, the segmental vertebrae sections become slightly disarranged, that is, one of these vertebrae will get out of alignment due to some mishap to the spine with the result that the patient suffers various nervous diseases and in order to correct this condition and put the vertebrae segments back into alignment, adjustment is necessary. In making the adjustments, it is usual to apply pressure in the form of a slight shock which will urge the dislocated segments back into position and to this end, I have provided a concussion device for adjustment which can be used in the patient's home and which is an improvement over a device of a similar nature covered in my Patent Number 1,640,536, issued under date of August 30, 1927.

In the improved form of my device illustrated in the accompanying drawings, 5 indicates a plunger housing of substantially tubular formation and cast to provide on its lower end, the pad holding extensions 6, and substantially wide bridge member 7, the latter of which is provided with an elongated slot longitudinally of the center thereof, as indicated by the numeral 8. The upper end of the plunger housing 5 is threaded as at 9 and is closed through the medium of a cap 10 which is knurled on its outer surface for convenience of manipulation. The cap 10 is provided with a central opening 11 through which passes a plunger 12, it of course being understood that the plunger and the housing therefor are made of highly polished metal and well finished, as implements of this nature should be.

The extreme upper end of the plunger 12 has secured thereto in any suitable manner, a hand piece or knob 13. This knob is provided for the purpose of depressing the plunger 12 by striking the knob a sharp blow with the palm of the hand, thus depressing the plunger 12 against the resistance of the spring 14 which is held within the plunger housing 5. This spring abuts at its ends against suitable stop members, the upper of which consist of the collar 11 secured adjacent the lower end of the plunger 12 in any suitable manner, while the opposite limiting member consists of a head of rubber or other relatively soft material disposed in the bottom of the housing 5 and indicated by the numeral 15. This head may be provided with a reduced por-

tion 16 which fits snugly within the lower end of the spring 14 and serves as a guide therefor. The upper end of the head acts as a pad against which the plunger 12 may strike should it be accidentally pressed too far, the head taking up the shock so that the full force of the blow would not be transmitted to the spine.

The spine engaging members consist of two pads 17 and 18, the construction of both being identical in that they are composed of a semi-soft rubber spine engaging member 19 upon which rests the wooden base 20, the base and the semi-soft rubber member 19 being surrounded by a suitable covering 21 of felt or soft leather, the upper ends of which are clamped in place through the medium of the connection of a metal strip 22 to the wooden base 20, the connection being attained through the medium of the fastening screws 23 which pass through the metal strip and are embedded in the wooden base 20. The metal strip 22 is provided only in connection with the removal pad 17, the holding screws 23 for the pad 18 passing through the pad holding extensions 6 which are formed integrally with the cylinder housing 5.

It is quite evident that from this construction, the screws 23 can be removed and the pads can be substituted whenever desired and the coverings 21 thereof may be replaced as often as it is deemed necessary.

The screws 23 will of course serve to tighten up the connection between the wooden base 20 and the metal strip 22 so that the covering 21 of the pads will be securely held.

The metal strip 22 is provided at its ends with upstanding ears 24 and between these ears fit the end of the bridge 7 with its slot in position to overlie a threaded bolt 25 which is secured in the metal strip 22 and extends through the slot 8 to receive on its upper end the wing nut 26 whereby the pad 17 is adjustable longitudinally of the bridge member 7 and the distance separating the pads 17 and 18 can be varied to suit the individual spine in the treatment of which the device is to be employed.

In order to adjust the pad 17 relatively to the pad 18, it is simply necessary to loosen the thumb nut 26 and slide the pad 17 toward or away from the pad 18 and after the proper position is attained, the wing nut 26 may be tightened up and the pad 17 will remain in the proper position on the bridge 7.

It is evident also that by striking the hand piece or knob 17, that the proper adjustment of the vertebrae of the spine may be carried out.

It is further evident that I have provided an improved adjusting device for use in chiropractic treatment of the spine which

can be used by the individual and which is adapted to impart to the vertebrae the slight jar necessary for urging the vertebrae in proper alignment.

It is also evident that the adjustment device can be readily used in the patient's home and the necessity of a skilled practitioner in attendance, is eliminated, and the treatment desired in correcting defects in the spinal column may be carried on properly by an individual unskilled in the chiropractic art.

It is evident also that I have provided an adjusting device having few parts and one which will not get out of order, may be made up at small cost and which is adjustable to suit the needs of the individual employing the same.

It is evident also that the pads may turn slightly inward to engage the vertebrae and thus force them centrally of the pads. If desired, the pads may be made removable for replacement when worn, and the plunger tube may be disposed at an angle to press directly down on the under pad if the latter is turned inwardly.

While I have illustrated and described my invention with some degree of particularity, I realize that in practice various alterations therein may be made. I therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the arrangement of the correlated parts without departing from the spirit of the invention or the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by United States Letters Patent is:—

1. An instrument for use in chiropractic treatment of the spine comprising a tubular housing, a plunger slidably mounted therein, a spring for yieldingly supporting said plunger, a pad mounted upon said housing and occupying substantially the same vertical plane as the axis of the housing, and a second pad adjustably supported with respect to said housing and offset with respect to the first mentioned pad.

2. An instrument for use in chiropractic treatment of the spine comprising a tubular housing, a bridge member extending laterally from said housing, a plunger slidably mounted in the housing, a spring for resisting inward movement of said plunger, a pad mounted at the lower end of said housing, and another pad mounted upon said bridge member.

3. An instrument for use in chiropractic treatment of the spine comprising a tubular housing, a plunger slidably mounted in the housing, a hand piece on the upper end of the plunger, a spring within the housing urging the plunger in an upward direction, a bridge member extending laterally from the

housing and having a longitudinal slot therein, a pad mounted upon the lower end of the housing and occupying substantially the same plane as the axis of the housing, 5 a pad disposed against the bridge member, and a set screw fitted through the slot in the bridge member and threaded into the said pad and constituting means for holding the pad in positions of adjustment longitudinally of the bridge member in a direction 10 toward and away from the first mentioned pad.

4. An instrument for use in chiropractic treatment of the spine comprising a tubular 15 housing, a plunger slidably mounted in the housing, a hand piece on the upper end of the plunger, a spring within the housing urging the plunger in an upward direction, a bridge member extending laterally from 20 the housing and having a longitudinal slot therein, a pad mounted upon the lower end of the housing and occupying substantially the same plane as the axis of the housing, a pad disposed against the bridge member, a 25 set screw fitted through the slot in the bridge member and threaded into the said pad and

constituting means for holding the pad in positions of adjustment longitudinally of the bridge member in a direction toward and away from the first mentioned pad, and 30 spaced upstanding elements upon the second mentioned pad engaging opposite lateral edges of the bridge member to prevent rotative displacement of the pad with respect to the bridge member and maintain the said 35 pad substantially parallel to the first mentioned pad.

5. An instrument for use in chiropractic treatment of the spine comprising a tubular housing, a plunger slidably mounted therein, 40 a pad supported by the housing at the lower end thereof and in the line of extent of the axis of the plunger, a stop upon the plunger, a compression spring fitted to the plunger and bearing at its upper end against said 45 stop, and a head of resiliently yieldable material within the lower end of the plunger above the pad and engaged by the lower end of the said spring.

In testimony whereof I affix my signature.

TANOUS H. DAVID.