Oct. 26, 1926. 1,604,585

J. W. KENNEDY

ELECTRICAL DEVICE FOR TREATING THE HUMAN BODY

Filed Jan. 15, 1925 2 Sheets-Sheet 1

Fig. 1.

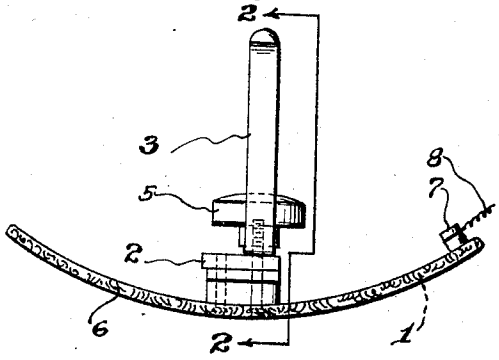


Fig. 2.

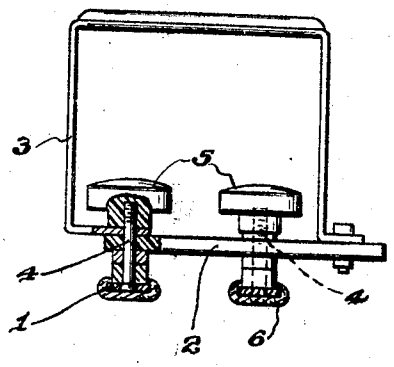


Fig. 3.

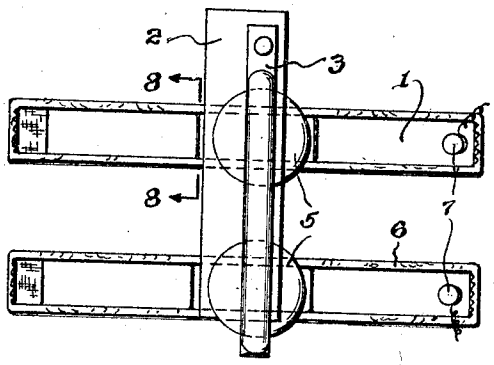


Fig. 4.

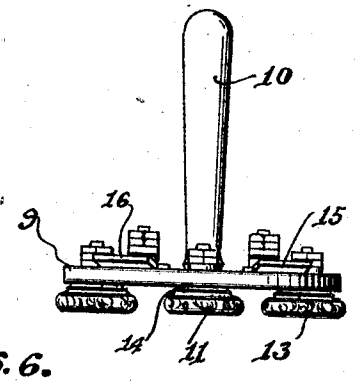


Fig. 5.

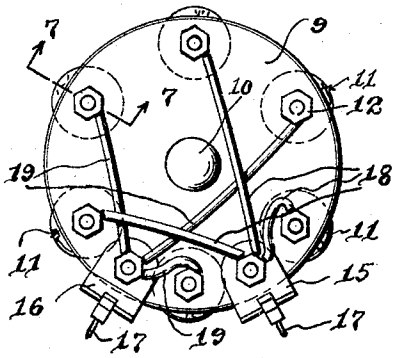


Fig. 6.

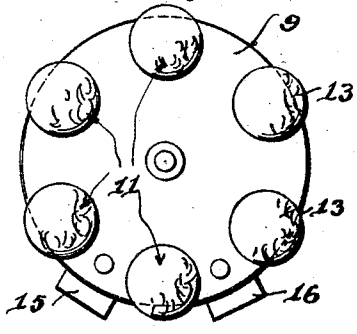


Fig. 7.

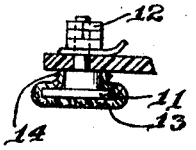
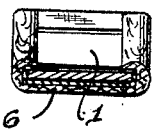


Fig. 8.



Inventor
James W. Kennedy

By

J. Kaplan
Attorney

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J. W. KENNEDY

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Fig. 9.

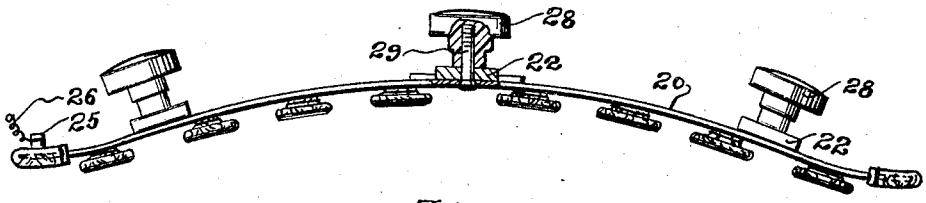

Fig. 10.

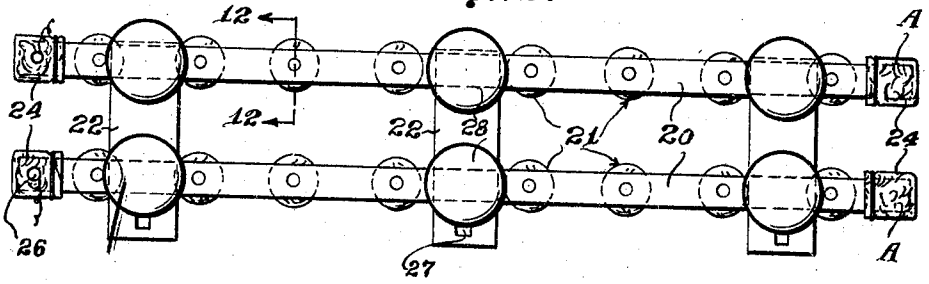

Fig. 11.

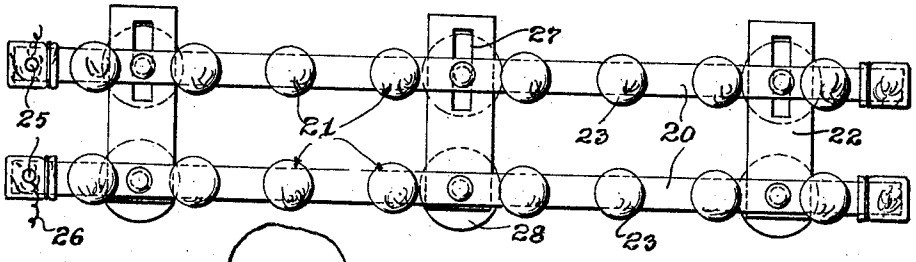

Fig. 13.

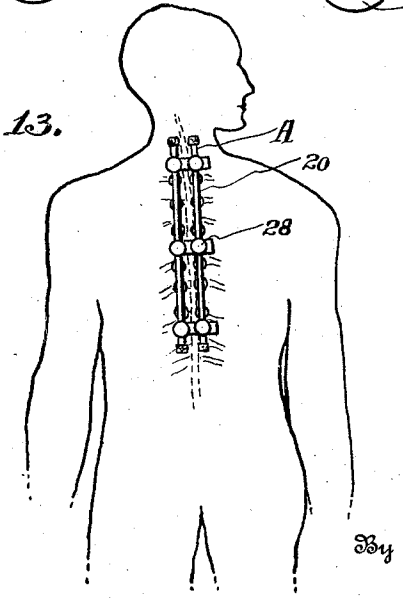

Fig. 12.

Inventor
James W. Kennedy

By J. Kaplan
Attorney

Patented Oct. 26, 1926. 1,604,585

UNITED STATES PATENT OFFICE.

JAMES W. KENNEDY, OF CANTON, OHIO.

ELECTRICAL DEVICE FOR TREATING THE HUMAN BODY.

Application filed January 15, 1925. Serial No. 2,582.

This invention relates to instruments for electrically and mechanically treating the human body and more especially the nerves, muscles and blood vessels of the spinal column.

One of the objects of the invention is the provision of a device to correct the curvature of the spine and to adjust a misplaced vertebra.

Another object of the invention is the provision of a device for supplying electrical current and for sending an oscillating current through the body.

Other objects will appear as the disclosure progresses. The drawings are intended merely to indicate a possible embodiment of the invention. It is obvious that the actual needs of manufacture may necessitate certain mechanical changes. It is therefore not intended to limit the invention to the embodiment illustrated, but rather to define such limits in the appended claims.

For a more detailed understanding of the invention, attention is now called to the drawings in which a preferred embodiment is shown illustrated. In these drawings like parts are designated by like reference numerals in all the views.

Figure 1 is a side view of the device for electrically and mechanically treating the human body.

Fig. 2 is a section on line 2—2 of Fig. 1.

Fig. 3 is a top view thereof.

Fig. 4 is a modified form of the device shown in Fig. 1.

Fig. 5 is a top view thereof.

Fig. 6 is a bottom view thereof.

Fig. 7 is a section on line 7—7 of Fig. 5.

Fig. 8 is a section on line 8—8 of Fig. 3.

Fig. 9 is a side view of a modified form of the device shown in Fig. 1.

Fig. 10 is a top view thereof.

Fig. 11 is a bottom view thereof.

Fig. 12 is a section on line 12—12 of Fig. 10.

Fig. 13 is a view showing one of the devices applied to the human body.

Referring now to the drawings in detail, numeral 1 designates a pair of curved bars, 2 a cross-piece made of insulating material, and 3 a U-shaped handle. The handle, cross-piece and curved bars are connected together by means of a screw 4 and a non-conducting nut 5.

Underneath the under face of the curved bars 1 is a cushioning material 6 of sponge or of any suitable material fastened by any suitable means to said bars. And attached to one end of the bars are a pair of terminals 7 for attaching a conductor 8 thereto.

In Figs. 4, 5 and 6 a modified form of the invention is shown in which numeral 9 represents a circular disk of insulating material, 10 a handle attached thereto, and 11 a series of conducting terminals attached to the said circular disk by nuts 12. Covering each conducting terminal is a cushioning material 13, tied in place by a cord 14. This cushioning material may be made of sponge or any other soft and absorbing structure.

Numerals 15 and 16 represent a pair of terminal plates for attaching electrical conductors 17 thereto. It will be seen in Fig. 5, that the terminal plate 15 connects to three conducting terminals 11 by the conductors 18, and the terminal plate 16 connects to the other three conducting terminals by the conductors 19.

In Figs. 9, 10 and 11 is shown another modified form of invention in which numeral 20 designates a pair of flexible curved bars, 21 a series of conducting terminals attached to the underside of the curved bars and 22 spacers for keeping the bars 20 in spaced relation to each other. The conducting terminals 21 are provided with a soft and absorbent material 23 of a similar nature as described in Fig. 5. The ends of the bars 20 are also provided with soft and absorbent material 24, and at one end of the bars are attached terminals 25 for attaching a conductor 26 thereto.

The spacers 21 are provided with slots 27 to provide for an adjustment, and to retain the adjustment insulated nuts 28 and screws 29 are provided.

The operation of the device shown in Figs. 1, 2 and 3 is as follows: A wire leading from a source of electrical current is attached to the terminals 7, and the device is then applied in a rocking motion, to the part of the body desired to be treated. While in this motion the negative and positive poles of the current are alternately changed, causing an expansion and contraction of the muscles and energizing the nerves that are directly underneath the bars 1. The electrical apparatus used with these instruments consists of a vibrating coil similar to the usual medical vibrating coil having the alternating current produced in the secondary coil of an induction apparatus

and is described in my co-pending application, Serial No. 716,746, filed May 29, 1924.

The device shown in Figs. 4, 5 and 6 is especially designed for treating the regions around the thigh by being placed firmly against the infected parts. The oscillating action of the current will expand and contract the inflamed muscles and release the strain of the nerves, and thereby remove the pain.

The modification shown in Figs. 9, 10 and 11 is designed for treatment of the cervical vertebras, the dorsal vertebras and the lumbar vertebras. This instrument is placed in a position straddling the spine with the upper ends A against the cervical vertebras. The current is then applied and oscillated, which will expand and contract the horizontal and perpendicular muscles opposite one of the cervical vertebras. The instrument is then manipulated until the series of conducting terminals 21 are in contact with the fleshy portion of the back on both sides of the spinal column. To reach the lower vertebras, the instrument is lowered, and then the same action as above takes place. By this treatment a muscle expansion and contraction is created, which will pull the misplaced vertebras into their normal position and relieve the strain of the various nerves.

A snake-like movement of the whole spinal column can be brought about and thereby compel all the vertebras to resume their normal position by bringing any portion of the patient's body below the hips, in contact with a secondary current and connected to both limbs below the hips. For this action the primary current is connected to both terminals 25 of this instrument shown in Fig. 9 and the device is held firmly against the patient's back in a straddling position of the spine. The oscillating instrument described in my aforesaid co-pending application is then operated by which the negative and positive poles of both the primary and secondary currents are changed alternately, and thereby cause the snake-like movement to be brought about in both the upper and lower spinal column. All the vertebras will then be vibrated and thence brought back to their normal position. The nerves will be allowed to act normally, the muscles will be strengthened and aid to keep the vertebras in a normal position and allow a free circulation of the blood through the veins of the portion of the body affected.

I claim:

1. In an electric device for treating the human body, parallel bars for contacting with portions of the human body, the said bars being curved at the ends, means for keeping the said bars in spaced relation to each other and means whereby the said bars may be gripped.

2. In a device of the class described in combination a pair of bars, soft absorbent material attached to the under side of the said bars, means for keeping the said bars in their relative position and terminals on the said bars for attaching a conductor thereto for supplying current to the said bars.

3. In a device of the class described in combination, a pair of parallel bars, the said bars being curved, a cross piece, a U shaped handle, means for fastening the said handle, cross piece and bars together, the said bars fastened to the said cross piece at the center, the ends being free, a soft absorbent material on the under side of the said bars and terminals for connecting an electrical conductor thereto.

4. In an electrical apparatus for treating the humam system comprising a pair of resilient parallel bars, conducting terminals attached to the said resilient bars, soft absorbent material attached to the said conducting terminals, and terminals attached to the said bars for connecting to a source of current.

5. In a device of the class described in combination, a pair of resilient bars, the said bars being curved and also parallel to each other, cross-pieces for keeping the said bars in spaced relation to each other, slots in the said cross-pieces for allowing an adjustment of the said bars, means for fastening the said bars to the said cross pieces, a series of conducting terminals attached to the said bars, soft and absorbent material covering the said conducting terminals, soft and absorbent material covering the ends of the said bars, and terminals attached to the said bars for connecting a wire thereto.

In testimony whereof I affix my signature.

JAMES W. KENNEDY.