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CHIROPRACTIC ADJUSTMENT MACHINE

Original Filed June 8, 1921

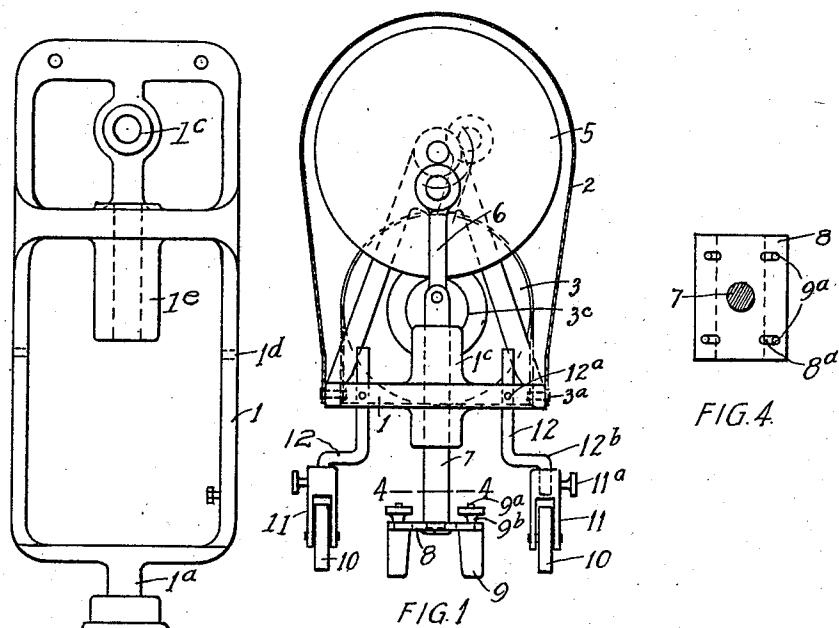


FIG. 1

FIG. 4

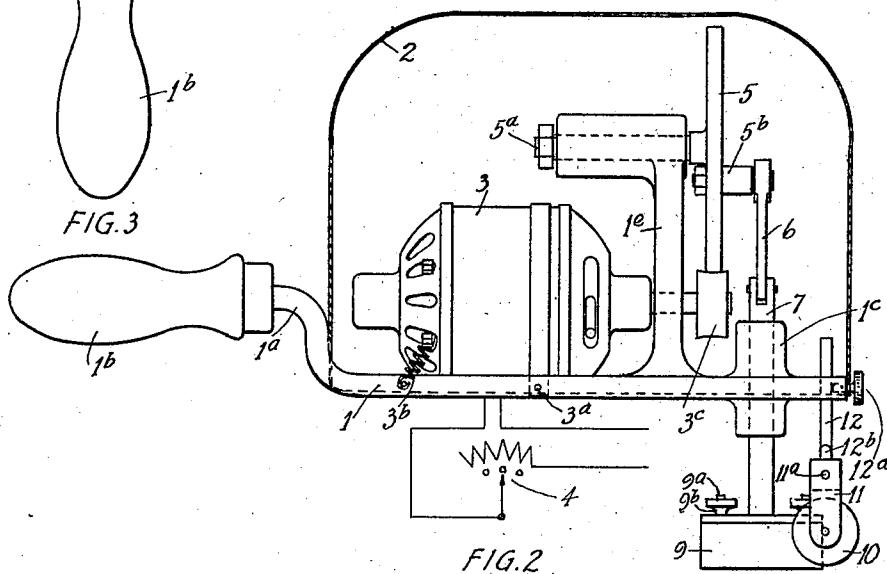


FIG. 2

FIG. 3

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UNITED STATES PATENT OFFICE.

ERNEST H. ASHLOCK, OF SAN DIEGO, CALIFORNIA, ASSIGNOR OF ONE-FOURTH TO
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SAN DIEGO, CALIFORNIA.

CHIROPRACTIC ADJUSTMENT MACHINE.

Application filed June 8, 1921, Serial No. 475,874. Renewed February 3, 1923.

To all whom it may concern:

Be it known that ERNEST H. ASHLOCK, a citizen of the United States, residing at San Diego, in the county of San Diego and State 5 of California, have invented a certain new and useful Chiropractic Adjustment Machine, of which the following is a specification.

My invention relates to a machine for 10 making chiropractic adjustments and the objects of my invention are; first, to provide a motor driven machine which will be effective for producing the proper motions against the body for producing vertebrae adjustments, relating to the science of chiropractic; second, to provide a machine of this 15 class which is easily and readily handled upon the body of the patient; third, to provide a machine of this class which is adjustable, adapting it for practically all purposes and positions in the chiropractic profession; fourth, to provide a machine of this class which is operated directly by an electric motor which may be operated from any source 20 of electrical energy; fifth, to provide a device of this class which is very compact in form and sixth, to provide a device of this class which is very simple, economical of construction, durable, easy to operate, efficient in its action, and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings and to the characters of reference thereon which form a part 40 of this application, in which:

Figure 1, is an end elevational view of the device complete with the casing shown in section to facilitate the illustration. Fig. 2 45 is a side elevational view of the same with the casing shown in section to facilitate the illustration. Fig. 3 is a top or plan view of the frame member alone and Fig. 4 is a sectional view through 4-4 of Fig. 1.

50 Similar characters of reference refer to similar parts and portions throughout the several views of the drawings. The frame member 1, casing 2, motor 3, rheostat 4,

crank wheel 5, connecting rod 6, plunger member 7, contact member support 8, contact members 9, supporting rollers 10, supporting roller supports 11, and supporting roller posts 12, constitute the principal parts and portions of my chiropractic adjustment machine.

The frame member 1 is shaped, as shown best in Figs. 2 and 3 of the drawings provided with an extended portion 1^a at one end upon which the handle 1^b is secured. It is provided near its opposite end with a journal portion 1^c in which the plunger member 7 is adapted to reciprocate. It is also provided with an upwardly extending journal member 1^d which serves as a bearing for the shaft 5^a for the crank wheel 5. Between this portion 1^c and the handle member 1^b, the frame member is so shaped that it is adapted as a support for a small electric motor 3 which is mounted thereon in a pivotal manner by means of pins 3^a positioned in the holes 1^d in the sides of said frame. This motor 3 is held in such relative position on the frame by means of a spring 3^b the one end of which is secured to the motor on the opposite side of its pivotal mounting from its drive wheel, and the other end of said spring is secured to the frame 1, thus providing means tending to raise the drive wheel of the motor upwardly at all times. This motor 3 is controlled by a conventional rheostat for changing the speed of the motor depending upon the usage and condition in which the machine is used. The drive wheel 3^c of the motor 3 is kept in engagement with a wheel 5 mounted on the shaft 5^a and journaled in the support 1^e. This wheel 5 is preferably a fiber wheel and is operated by frictional contact of its periphery with the drive wheel 3^c on the motor 3. This fly wheel 5 is provided with a lug 5^d extending therefrom and serving as a crank, upon which is pivotally mounted the one end of the connecting rod 6, the other end of said connecting rod is pivotally connected to the upper end of the plunger 7, which plunger 7 is reciprocably mounted and supported in the supporting portion 1^c of the frame 1. Secured on the lower end of this plunger member 7 is the contact member support 8 which is preferably shaped as shown best in the Figs. 1 and 4 of

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the drawings and provided with a plurality of slots, or elongated holes 8^a therein in which are mounted extended threaded lugs 9^a on the contact members 9 and said contact members 9 are adjustably positioned on this support by means of thumb nuts 9^b. These contact members 9, it will be noted, are preferably resilient members composed preferably of rubber sufficiently resilient to produce the proper results. Adjustably mounted in the frame 1 by means of set screws 12^a are the supporting posts 12 which it will be noted are provided with right angle turns 12^b upon which are pivotally mounted the bifurcated roller supporting members 11 by means of adjusting screws 11^a and mounted between the bifurcated portions of the member 11 are rollers 10 which are adapted to rest upon the body of the patient and support the machine in the proper position and conduct it on the body while the contact member 9 is reciprocated by the motor for producing a stroke like action on the body of the patient as desired. It will be noted that with the particular post members 12 and supports 11 that these rollers 10 may be adjusted so that they are of varying width apart as desired and may be caused to maintain certain positions in advance or along the side of the contact members 9 or may be adjusted to provide the proper stroke of the plunger member 7 relatively to the body of the patient by moving the post members 12 upwardly or downwardly in the frame 1.

Though I have shown and described a particular construction, combination and arrangement of parts and portions, I do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

It is obvious that with this construction there is provided a machine for making chiropractic adjustments on the vertebræ or other places as desired; that the members 9^a are adjustable for different widths; that the plunger member 7 will be reciprocated in the frame and carry the members 9 backwardly and forwardly providing a stroke action; that this stroke action may be regulated as to its length by means of the position of the rollers 10 relatively to the machine; that the crank wheel 5 provides an increase of power from the motor for direct action of the plunger 7; that the frictional contact between the wheel 5 and drive wheel 3^c is provided by the spring 3^b through the pivotal mounting of the motor upon the frame 1; that the device as a whole is very simple and economical of construction, durable, compact in form and that the machinery is encased.

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

1. A device of the class described, including a supporting frame, a motor mounted on said supporting frame, a friction wheel revolvably mounted on said supporting frame and adapted to engage the drive wheel of said motor, a crank arm extending from said wheel, a connecting rod with one end connected to said crank arm, a plunger reciprocably mounted in said frame and its one end extending below the same and its opposite end pivotally connected to said connecting rod, and a resilient contact member secured to the lower end of said plunger member. 70

2. A device of the class described, including a supporting frame, a motor mounted on said supporting frame, a friction crank wheel revolvably mounted on said supporting frame and adapted to engage the drive wheel of said motor, a crank arm extending from said wheel, a connecting rod with one end connected to said crank arm, a plunger reciprocably mounted in said frame, and its one end extending below the same and its opposite end pivotally connected to said connecting rod, a resilient contact member secured to the lower end of said plunger member, and rollers for supporting said frame. 85

3. A device of the class described, including a supporting frame, a motor mounted on said supporting frame, a friction crank wheel revolvably mounted on said supporting frame and adapted to engage the drive wheel of said motor, a crank arm extending from said wheel, a connecting rod with one end connected to said crank arm, a plunger reciprocably mounted in said frame, and its one end extending below the same and its opposite end pivotally connected to said connecting rod, a resilient member secured to the extended end of said plunger member, rollers for supporting said frame positioned on opposite sides of said resilient contact member, and means for adjusting the spaced relation of said rollers. 100

4. A device of the class described, including a supporting frame, a motor mounted on said supporting frame, a friction crank wheel revolvably mounted on said supporting frame and adapted to engage the drive wheel of said motor, a crank arm extending from said wheel, a connecting rod with one end connected to said crank arm, a plunger reciprocably mounted in said frame, and its one end extending below the same and its opposite end pivotally connected to said connecting rod, resilient contact members secured to the lower end of said plunger member, rollers for supporting said frame positioned on opposite sides of said resilient members, and means for adjusting the position of said rollers relatively to the movement of said resilient members. 115

5. A device of the class described including a supporting frame provided with a handle on one end, supporting rollers at its opposite end adjustably mounted thereon, a
5 plunger reciprocably mounted in the said frame and supported thereby, means for reciprocating said plunger comprising a connecting rod with one end connected to said plunger, its opposite end pivotally connected
10 to a crank wheel supported on said frame, and a motor secured to said frame with its drive wheel in frictional engagement with said crank wheel.

6. A device of the class described, including a supporting frame, a motor mounted on said supporting frame, a plunger reciprocably mounted on said supporting frame and

crank means connecting said plunger with said motor for reciprocating said plunger with the operation of said motor.

7. A device of the class described, including a supporting frame, a motor mounted on said supporting frame, a plunger reciprocably mounted on said supporting frame, crank means connecting said plunger with said motor for reciprocating said plunger with the operation of said motor, and a resilient member secured to the extended end of said plunger.

In testimony whereof, I have hereunto set my hand at San Diego, California, this 2nd day of June, 1921.

ERNEST H. ASHLOCK.