

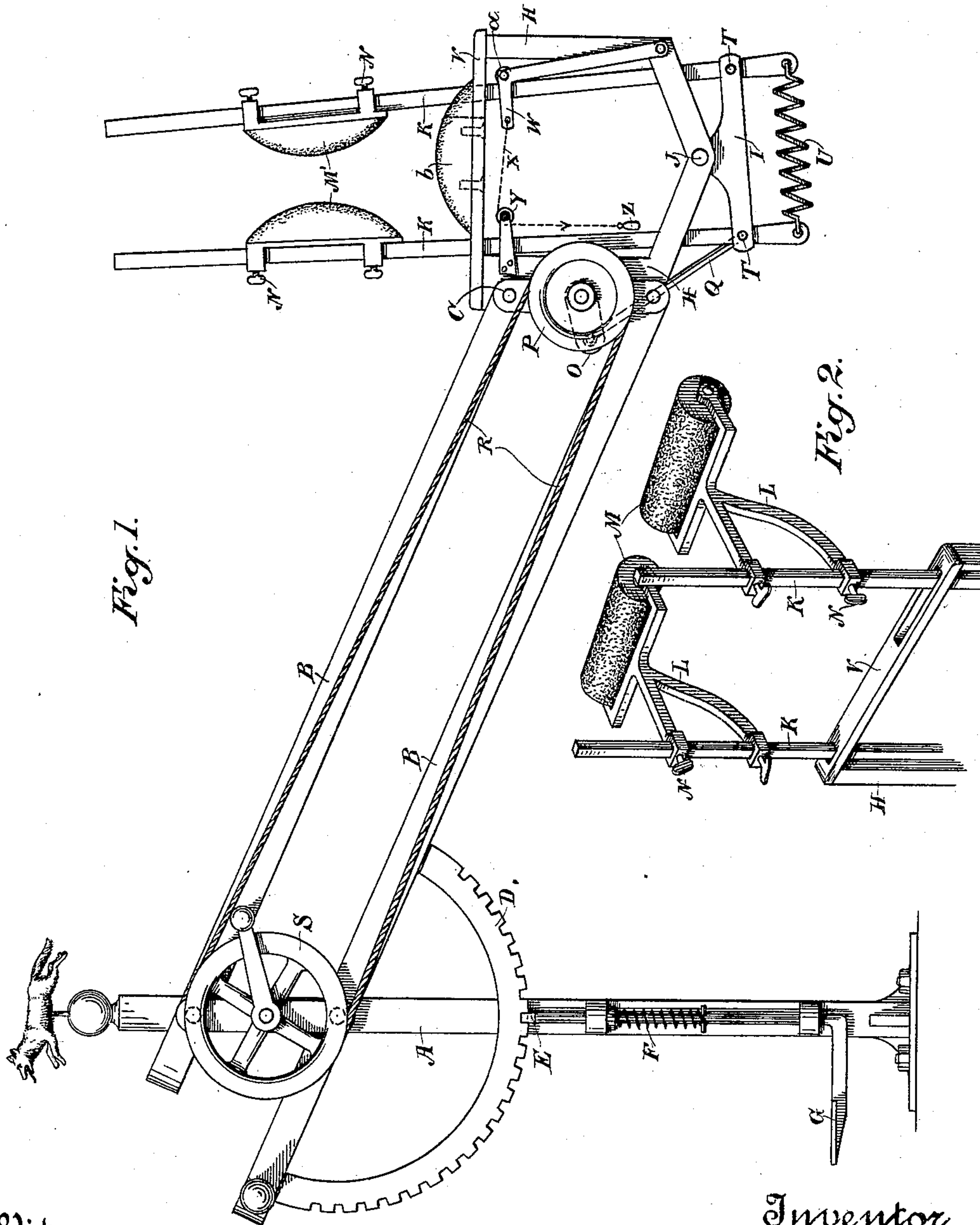
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Patented Nov. 8, 1898.

WHITE WOLF M. HICKEY.
MASSAGE MACHINE.

(Application filed May 26, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

WHITE WOLF M. HICKEY, OF SAN FRANCISCO, CALIFORNIA.

MASSAGE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 613,859, dated November 8, 1898.

Application filed May 26, 1898. Serial No. 681,763. (No model.)

To all whom it may concern:

Be it known that I, WHITE WOLF M. HICKEY, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Massage-Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an apparatus which is especially designed for the massage treatment of persons.

It consists, essentially, in a framework with an adjustably-supported mechanism attached thereto, reciprocating spring-pressed arms, and rollers or pads so connected therewith as to be capable of moving over the parts to be treated.

It also consists in details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my apparatus. Fig. 2 shows the application of rubber rollers.

The object of my invention is to provide an apparatus by which a rubbing, pressing, and general massage treatment may be applied to various parts of the body and limbs of a patient without the exhausting work which is necessary when such treatment is effected by hand.

A is a standard which may represent any suitable supporting-frame. Upon this standard are fulcrumed the arms B, projecting sufficiently to one side and connected at the outer end by links C, so that the bars B are approximately parallel and equidistant from each other at each end. By this construction the link C is maintained approximately parallel with the standard A when the arms B are raised or depressed. These arms carry on the outer end the massage mechanism to be hereinafter described, and are adjustable up or down to allow the mechanism to be fixed at any desired point, so that the application may be made to any portion of the body when a person is standing, or by varying its position it may be applied to various parts of the body.

D is a toothed segment the ends of which are fixed to the lowermost of the bars B, and the toothed arc is movable over the standard A. Upon this standard is a sliding spring-pressed pawl E, the spring F acting to nor-

mally press it up, so that the end will engage any one of the teeth or notches in the segment D, and thus hold it in any desired position, and the arms B, which are secured to the segment, are movable in unison with it.

G is a foot piece or lug upon which pressure is applied to release the pawl E and allow the apparatus to be moved to any desired point.

Upon the outer ends of the arms B is secured a framework H of such shape and dimensions as to carry the oscillating bar or beam I, which is pivoted to the frame, as shown at J. Fulcrumed in the ends of this oscillating beam I are the rods K, which carry the rubbers L. These rubbers may be made of various forms. I have in one case shown them in the form of yokes L, having journaled transversely within them rubber or other suitable soft, flexible, or elastic rollers M. The yokes L are secured to the standards K by set-screws N, as shown, and they may be adjusted to any desired point upon the standards. Another form of rubbers is shown at M'. These rubbers are in the form of convex blocks, which may be covered with buckskin or other soft or flexible material, as before stated, and they are secured to the arms K by set-screws, as previously described.

It will be seen that either the rubbers or rollers may be used, as desired, the one applying a rolling pressure to the surface to be treated, while the others apply the rubbing pressure. The movement is effected by means of a crank-arm O, fixed upon the shaft of the pulley P and connected with one end of the oscillating lever I by a pitman Q.

The pulley P is driven by means of a belt R, extending to a pulley S, which is mounted upon the bar connecting the carriers B B, so as to be raised or depressed with these carriers without losing its position.

The shaft of the pulley P is mounted upon the outer ends of the bars B, and the two maintain the same distance apart whatever may be the adjustments of the bars B.

When the apparatus is set in position for operation, the pulley S may be turned by crank or other power and motion will be transmitted through the crank O and pitman Q to reciprocate the bar I, and this moves the arms K alternately up and down, thus producing the required movement of the massage rollers or pads.

In order to regulate the pressure, I have shown the vertical bars K, which carry the pads, as pivoted to the ends of the arm I at T, and the lower ends of the bars K are connected by a spring U, the tendency of which is to pull these ends together and to separate the upper ends. One or both of the bars K are movable in a slot in the guide-arm V, through which they pass, so that they may be made to approach each other to any desired degree. In order to bring these bars together and regulate the pressure of the rubbing-pads M or M', I have shown a bell-crank arm W, one end of which is fulcrumed to the frame H, and the other has connected with it a cord X, which passes over a pulley Y and has a small weight Z fixed to the end. This cord enables the operator to produce any desired pressure of the pads by simply pulling upon it and causing the lever-arm W to press against one of the movable bars K and force it inwardly against the tension of the spring U.

An antifriction-roller *a*, journaled in the angle of the lever W, presses against the back of the bar K and holds it to its work, while allowing it to reciprocate freely by the action of the oscillating bar I.

Various modifications of the device may be made to suit special applications without materially altering the character of the invention.

When the rubbers M' are employed, if it is desired to apply the treatment to the forearm the elbow is rested upon a pad *b*, which is fixed upon a guide-bar V and which serves as a rest for the elbow of the person operated upon. This support-pad *b* has a slot made in its edge a sufficient size in depth to allow the bar K to be moved in or out as much as may be desired for the purposes of the application.

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

1. A massage apparatus consisting of a supporting-standard, arms adjustable with relation to said support, a frame and oscillating bar carried by the outer ends of said arms, and bars connecting with the oscillating bar, with rubbers attached thereto, and means whereby the bars and rubbers are caused to oscillate.

2. A massage apparatus consisting of a standard or support, arms turnable about said support, the massage-rubbers and means whereby they are carried by the outer movable ends of the arms, a means for adjusting the carrying-arms consisting of a segmental rack, a spring-pressed pawl adapted to engage the teeth of the rack and a foot-piece whereby it may be disengaged to allow the arms to be adjusted about the connections with the standard.

3. A massage apparatus consisting of a standard, arms pivoted thereto extending outwardly from the standard, a pawl-and-ratchet mechanism whereby said arms are adjustable about their pivot-points to raise or depress

the outer ends, a frame carried upon the outer end of said arms, a bar fulcrumed in said frame having bars projecting upwardly from it with massage or rubbing attachments secured thereto, and a mechanism whereby a reciprocating motion is transmitted to said bars.

4. A massage apparatus consisting of a standard, parallel bars fulcrumed on said standard with the ends extending to one side therefrom and connected together, a rack and pawl whereby the arms may be turned about their supporting-points to raise or depress the outer ends, arms having massage-rubbers attached to them, said arms being pivoted to the ends of a centrally-fulcrumed bar, a means whereby the bar is caused to oscillate consisting of a crank-and-pitman connection and pulleys whereby the crank may be rotated.

5. In an apparatus of the character described, a standard having parallel arms pivoted thereto projecting outwardly from the standard and a pawl-and-ratchet mechanism for adjusting the height of said arms, a frame upon the outer ends of the arms a centrally-fulcrumed bar pivoted thereto and mechanism whereby the bar is oscillated upon its fulcrum-point, vertically-disposed arms pivoted to the ends of said bar and a spring whereby the upper ends of said arms are normally separated from each other, rubbers attached to said arms and a means for drawing the arms toward each other and regulating the amount of pressure applied to the rubbers.

6. In an apparatus of the character described, a standard with parallel arms fulcrumed thereto and adjustable up or down about the fulcrum-points, pawl-and-ratchet mechanism by which they are retained at any point of adjustment, a frame carried upon the outer ends of said arms, a bar centrally pivoted upon said frame and a means whereby the bar is oscillated about its fulcrum-point, vertical bars pivoted in the outer ends of the oscillating bar, a lever-arm fulcrumed and adapted to press upon one of said bars so as to draw them toward each other and a spring by which the bars are separated when released, and rubbers mounted in yokes which are adjustably fixed to the vertical bars.

7. The combination in an apparatus of the character described, of a supporting-standard, adjustable arms and oscillating bar with arms connected therewith and rubbers detachably secured to said arms, said rubbers being adapted to press upon any portion of the patient while being reciprocated and a pressure-lever and attachment whereby any degree of pressure may be applied to the rubbers.

In witness whereof I have hereunto set my hand.

WHITE WOLF M. HICKEY.

Witnesses:

S. H. NOURSE,

J. B. LEE.