

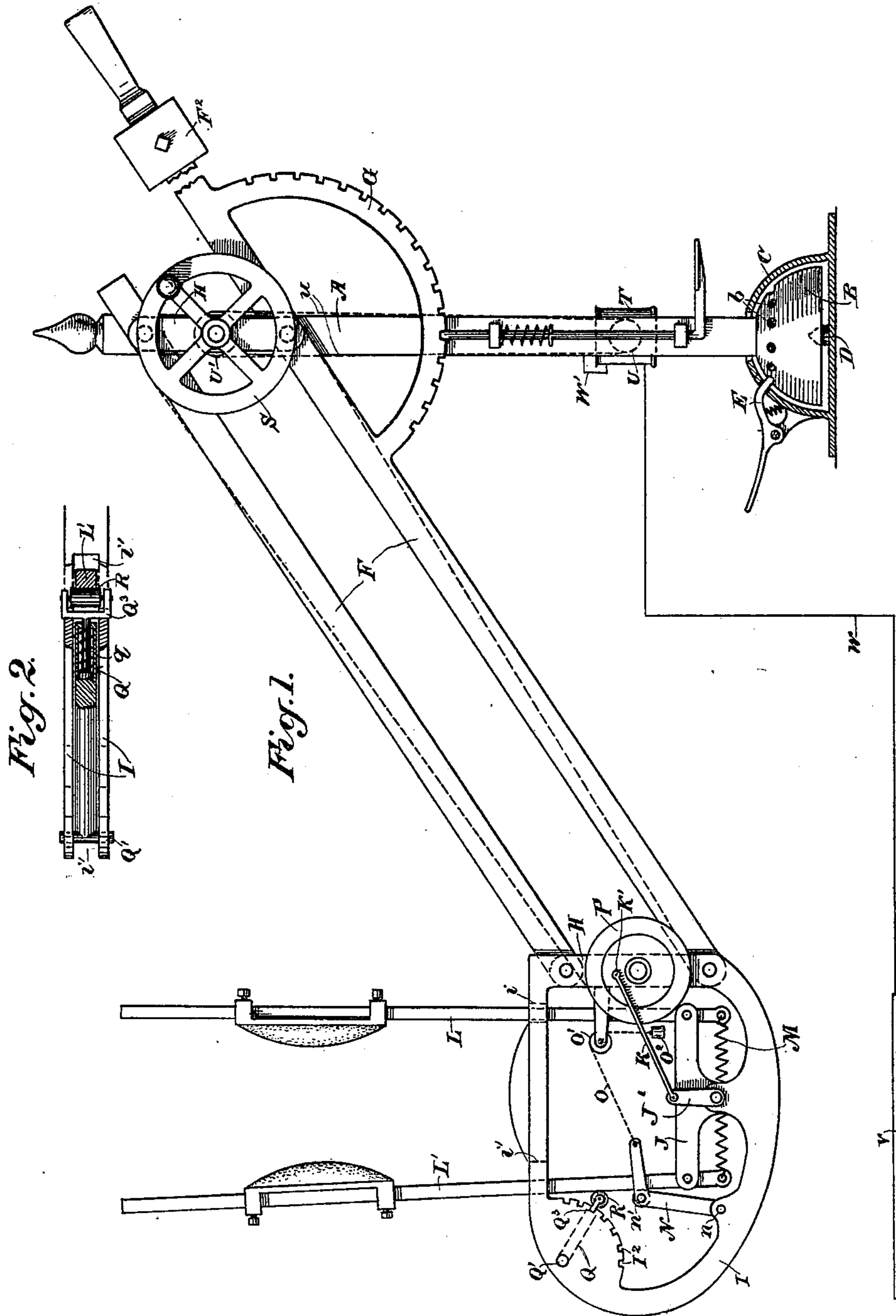
No. 625,976.

Patented May 30, 1899.

W. W. M. HICKEY.
MASSAGE MACHINE.

(Application filed Nov. 4, 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. 625,976, dated May 30, 1899.

Application filed November 4, 1898. Serial No. 695,482. (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 in the parts and the constructions and combinations of parts which I shall hereinafter describe and claim.

Figure 1 is a general view of my machine. Fig. 2 is a plan view of the adjusting device for the rubber-carrying bar.

In the construction of my present apparatus the standard A has a semiglobular foot-piece B, which fits in a corresponding-shaped base C, and this has a step D, upon which the center of the semiglobular foot-piece fits and upon which it is turnable within the casing C at the base. Around the semiglobular head B are made small holes *b*, and a spring-pressed foot-pawl E is fulcrumed upon the outside of the casing, with the inner end adapted to engage with either of the holes *b*, so as to hold the standard in any desired position, or by releasing it when the foot is placed upon the foot-piece the standard may be turned around its vertical axis, so as to present the parts carried thereby in any direction.

Upon the upper part of the standard are carried bars F, which are pivoted one above the other, and by means of a curved rack G, fixed to the lowermost of these bars, and a spring-pressed pawl engaging the teeth of the rack these bars may be tilted up or down about their fulcrum-points to raise or lower the opposite end, which carries the rubbing apparatus, in the same manner as shown in my former patent, No. 613,859, dated November 8, 1898. The opposite ends of these arms F are connected with a centrally-pivoted vertical bar H, so that the bars F H and their connections with the standard A form a parallelogram which will maintain the bar H approximately parallel with the standard A whatever may be the point to which it is raised or depressed.

One of the bars F is extended to the opposite side of the standard and has a handle formed or fixed upon it, by which to move and adjust the parts, and a counterbalance weight F², adjustable upon it with reference to the rubbers, and mechanism carried upon the opposite end, so that the apparatus may be balanced and easily moved about.

Upon the standard A is journaled a pulley S, and upon the center of the bar H is journaled a pulley P, and a driving cord or belt passes around these pulleys, so that by means of a crank upon the pulley S the pulley P may be rotated similarly to the operation of my former device and for the same purpose. In the present case I have shown a semicircular or horseshoe-shaped yoke I, connected with the ends of the arm H and movable up and down with it. The central portion of the lower limb of this yoke forms a fulcrum-point for the lever J, and a crank-arm J', fixed upon a shaft of this lever, is connected by a pitman K with a crank K' upon the shaft of the pulley P, so that when the pulley P and the crank K' are turned the action through the connecting-rod or pitman K will oscillate the lever-arm J. To the ends of this lever-arm are fulcrumed the upwardly-projecting bars L, the lower ends extending sufficiently below their fulcrum-points and having springs M connecting with them, by which the bars are normally drawn toward each other at one end and correspondingly separated at the other, the difference in my present construction being essentially in the manner of fulcruming and mounting the oscillating lever J and in the different connections.

N is a lever fulcrumed to the yoke I, as shown at *n*, and having a roller *n'* journaled in the angle or near the upper end and adapted to travel against the outermost bar L'. The end of this lever N has connected with it a cord O, passing over a pulley O', and a weight O² is attached to the opposite end of the cord, so that this weight pulls continually upon the arm N, pressing the roller *n'* against the back of the bar L'. This action allows the bar L' to move about its fulcrum-point by the tension of the spring M, so that when the yoke I is alternately raised and lowered in the action of applying the rubber to the person the arm L' is allowed to oscillate, so as

to keep the rubber continually in contact with the part acted upon.

The rubbers do not differ essentially from those shown in my former patent and are
5 fixed in a similar manner to the bars L L'.

The yoke I is made of sufficient thickness transversely and has made through one end of it a rectangular hole *i*, through which the bar L extends, and the curved arc of the yoke
10 I is slotted, as shown at *i'*, so that the other arm L' may be oscillated, as previously described, moving in this open slot.

In order to adjust the angle of movement of the rubber-carrier L', I have shown a device consisting of a tube Q, having a transverse arm or pivot Q', which is fulcrumed within the curvature of the arched yoke I. The inner portion of this yoke is convexed in the opposite direction from the curvature of
20 the back and is notched or toothed, as shown at I², and the outer end of the tube Q carries a transverse yoke Q³, in which is journaled a roller R. A spring *q* acts upon the shank of the yoke Q³, which is slidable within the tube
25 Q, and continually draws the yoke Q³ against the convexity of the inner part of the yoke I, so that by drawing the yoke Q³ outwardly the part I may be turned to any desired angle, and by releasing the yoke Q³ the spring
30 *q* draws it inwardly and causes it to engage with one of the notches I², thus retaining the parts in the desired position. The bar L' contacts with the roller R in its movements and is moved up and down by the action of the
35 tilting lever J, as previously described, and the position of the roller R determines the angle to which the bar L' may move outwardly, as previously described.

In order to combine an electrical treatment
40 with the rubbing action, I have shown a magneto-electrical device T, of any well-known or suitable construction, attached to the standard A at a point between the base and the upper portion. This magneto-machine being a mechanically-excited device has
45 a pulley U fixed upon the shaft extending into the machine, and another pulley U' is fixed in line above it upon the end of the shaft carrying the pulley S, previously described, so that when the pulley S is rotated the pulley U will also be rotated, and by means of a belt or cord *u* power will be transmitted to rotate the pulley U and excite the electrical apparatus shown at T.

V is a metallic plate upon which the person to be operated upon may stand or place some part of the person, and one of the wires, W, of the magneto-machine connects with the plate, while the other wire, W', connects with
60 the post A, and by metallic communication through that in one of the arms F, thence through the bars L to the rubbers, a circuit may be completed through the person to be operated upon. By this construction I have
65 considerably improved the operation of my device.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. The combination in a massage apparatus of the character described of the standard having parallel counterbalanced arms pivoted to the upper part, a curved yoke connected with the opposite ends of the arms, bars and rubbers attached thereto carried by
70 said curved yoke, an intermediate mechanism whereby the bars and rubbers are reciprocated, and a means for turning and adjusting the standard consisting of a semiglobular foot-piece, a correspondingly-shaped base
80 and socket within which the foot-piece is turnable, said foot-piece having holes made horizontally around it and a spring-pressed foot-pawl with point adapted to engage with said holes whereby the standard may be
85 turned and the parts carried thereby moved horizontally around a circle.

2. A massage apparatus consisting of the standard or support with a semiglobular foot-piece, a base having a correspondingly-shaped
90 casing within which the foot-piece is fitted and turnable and a controlling-pawl mechanism, arms pivoted to the upper part of the standard having their opposite ends connected with a centrally-pivoted bar and means
95 for raising and lowering the arms about their connection with the standard and a curved retaining rack and pawl therefor, in combination with a semicircular yoke having its ends connected with the centrally-pivoted
100 bar, a lug or projection upwardly from the lower part of the curved yoke, a lever-arm centrally pivoted thereto with upwardly-projecting rubber-carrying arms connected with its outer ends and guided through slots in
105 the upper part of the yoke, pulleys upon the main standard and the pivoted bar at the outer end of the connecting-arms, with a belt whereby motion may be transmitted from the standard pulley to the outer one, a crank
110 fixed to the outer pulley-shaft, a rocker-arm fixed to the fulcrum-shaft of the oscillating lever, a pitman connecting the two whereby the reciprocation of the rubber-arms is effected.
115

3. In an apparatus of the character described, the combination of a horizontally rotatable and adjustable standard, vertically-adjustable arms and a curved yoke carried at the outer end thereof with the interiorly-
120 fulcrumed oscillating lever and mechanism whereby it is actuated, rubber-arms connecting with its outer ends and movable in unison therewith, a convexed toothed rack curving inwardly within the arc of the yoke, a
125 spring-pressed slidable pulley-carrying yoke fulcrumed at the center of the curved rack and adapted to engage the teeth thereof, said pulley standing in the line of reciprocation of the outermost of the rubber-carrying bars
130 and adjustable to regulate the angle at which said bar is moved.

4. The combination in an apparatus of the character described, of a vertical horizon-

tally rotatable and adjustable standard with
arms pivoted thereto, the yoke connected with
the outer ends of the arms, vertically-disposed
rubber-carrying arms, a centrally-fulcrumed
5 oscillating lever to the outer ends of which
said arms are connected, springs by which
the arms are normally drawn together, a
mechanism between the standard and the
lever whereby the latter is oscillated and the
10 rubber-arms reciprocated, a fulcrumed arm
having a roller pressing against the back of
one of the rubber-arms and a weight where-
by the yielding pressure of the roller upon

the arm is effected, the inwardly-curved
toothed rack forming a part of the yoke, and 15
a spring-pressed roller-carrying yoke adapted
to engage the teeth of the rack and adjust
the roller with relation to the reciprocating
rubber-carrying arm.

In witness whereof I have hereunto set my 20
hand.

WHITE WOLF M. HICKEY.

Witnesses:

S. H. NOURSE,

JESSIE C. BRODIE.