

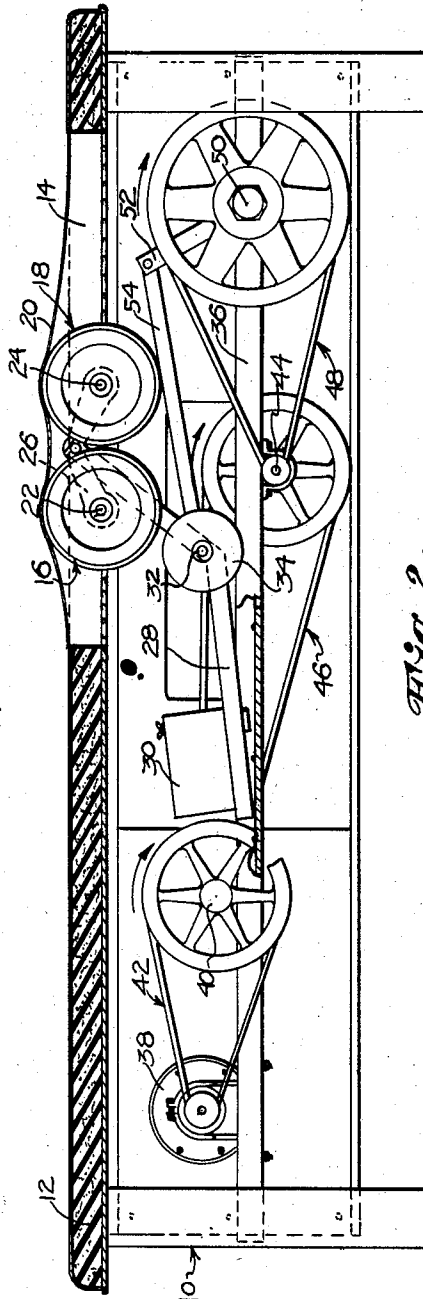
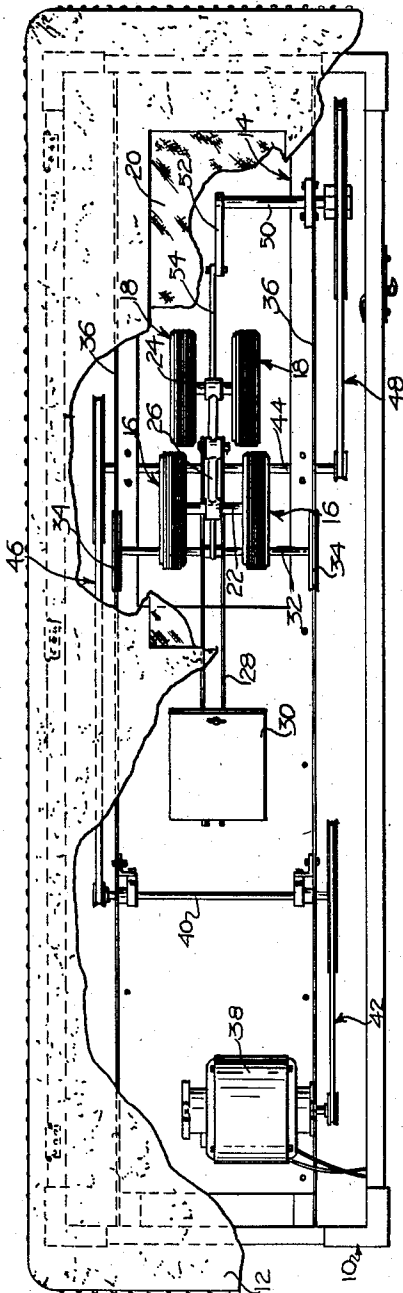
Oct. 20, 1959

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2,909,173

MOTOR DRIVEN BACK MASSAGING MACHINE

Filed July 30, 1956



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MOTOR DRIVEN BACK MASSAGING MACHINE

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Application July 30, 1956, Serial No. 600,898

4 Claims. (Cl. 128—33)

This invention relates to a massaging machine and particularly to motor driven apparatus that is especially adapted for massaging the spine or the muscles of the back throughout the full length of the spine, and has for its primary object the provision of equipment for automatically conforming to the curvature of the spine, thereby rendering the same universally adaptable for use by virtually any patient.

It is the most important object of the present invention to provide a massaging machine wherein the massaging elements are not only mounted for reciprocation to thereby move along the spine from one end thereof to its opposite end, but which massage elements are floatingly mounted and yieldably biased against the spine so as to conform to the contour thereof during reciprocable movement.

Another important object of the instant invention is the provision of massage apparatus having a tandem arrangement of massage elements which are themselves movable with respect to reciprocable mechanism upon which the same are mounted so as to still more fully impart a massaging operation that is soothing, comfortable and non-irritating.

A further object of the instant invention is the provision of a massaging machine having reciprocable rollers mounted on swingable apparatus that is in turn biased through use of a weight or the like to yieldably maintain the rollers in contact with the back of the user throughout the entire path of reciprocable movement of the said massage elements.

A still further object of the present invention is the provision of a machine of the aforementioned character incorporating as a part thereof a rocker element upon which the rollers are mounted, permitting the latter to swing independently of the swinging movement of the weight mechanism upon which they are mounted, all automatically while reciprocable movement is imparted thereto.

Other objects include important details of construction to be made clear or become apparent as the following specification progresses, reference being had to the accompanying drawing, wherein:

Figure 1 is a top plan view of a motor driven back massaging machine made pursuant to my present invention, parts being broken away to reveal details of construction; and

Fig. 2 is a side elevation view with the front panel removed, showing the pad in section.

The massaging machine shown in the drawing preferably takes the form of a conventional elongated massage table broadly designated by the numeral 10, the top whereof is in the nature of a pad 12 that is in turn provided with a recess 14 for clearing two pairs of massage elements 16 and 18 in the nature of wheels or rollers disposed beneath cover 20 forming a part of the pad 12.

Rollers 16 and 18 are carried by shafts 22 and 24 respectively for free rotation on spaced horizontal axes,

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the shafts 22 and 24 being in turn carried by the outermost and lowermost ends of a rocker arm 26.

The rocker arm 26 is in turn swingably mounted upon the uppermost end of a substantially L-shaped crank 28 having a weight 30 rigidly attached to the lowermost and forwardmost end thereof. Crank 28 is journaled for swinging movement about a horizontal axle 32 that is in turn provided with spaced wheels, pulleys, sheaves or the like 34, reciprocable rectilinearly along horizontal tracks 36.

Reciprocable movement is imparted to axle 32 and accordingly, wheels 34, crank 28, rocker arm 26 and massage elements 16—18 through the provision of an electric motor or other prime mover 38 driving an idler shaft through belt-pulley means broadly designated by the numeral 42. A second idler shaft 44 is driven from the shaft 40 through belt-pulley means broadly designated by the numeral 46. Through the medium of belt-pulley means 48 a stub shaft 50 is driven from the shaft 44, a crank 52 being rigidly attached to the shaft 50 for rotation therewith. The crank 52 and the axle 32 are pivotally interconnected by a link 54.

In operation, upon energization of the prime mover 38, shaft 50 and, accordingly, crank 52 are rotated to impart reciprocable movement to the axle 32 through the link 54. As the wheels 34 roll along the tracks 36 the reciprocable movement is imparted to the crank 28 causing massage elements 16 and 18 to move longitudinally of the table 10 within the space 14 provided in the pad 12.

The machine is placed in use by the patient or user lying upon the pad 12 with his back resting on the massage elements 16 and 18, it being noted that the two rollers 16 are spaced a greater distance than the rollers 18—18. Throughout the time the user is lying upon the massage table the weight 30 maintains the massage elements 16 and 18 against his back throughout the path of reciprocable movement of such massage elements. By virtue of such construction the rollers 16 and 18 tend to follow the contour of the spine and such advantageous results are enhanced further by virtue of the rocking movement of the rollers 16 and 18 about the axis of swinging movement of rocker arm 26.

It is seen, therefore, that in all respects the massaging machine is capable of providing effective massage results, particularly with respect to the spine muscles, notwithstanding the curvature of the spine or other condition of the back of the user and without undue pain or other deleterious effects.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

1. A massaging machine comprising a reciprocable unit including a wheel and axle assembly; a crank element swingably carried by the axle of said assembly; rocker means swingably carried by the crank element; massage rollers carried by the rocker means on each side respectively of the axis of swinging movement thereof; means yieldably biasing the crank element in one direction to maintain the rollers against the body of a user; and means coupled with said axle for reciprocating the unit to move the rollers along said body of the user.

2. A massaging machine comprising a horizontally reciprocable unit provided with upstanding support means; rocker means mounted on the uppermost end of said support means for reciprocation therewith and for free vertical swinging movement with respect thereto; and massage means rotatably carried by the rocker means for swinging movement therewith, said support means being mounted on said unit for free vertical swinging movement with respect thereto and being provided with means yieldable to pressure exerted on the massage

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means for biasing the support means toward one end of its swinging path of travel.

3. A massaging machine as set forth in claim 2, said massage means comprising a plurality of rollers on each side respectively of the axis of swinging movement of said rocker means, said axis being parallel with the axes of rotation of said rollers.

4. A massaging machine as set forth in claim 2, said massage means comprising a plurality of rollers on each side respectively of the axis of swinging movement of said rocker means, said axis being parallel with the axes

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of rotation of said rollers, and the axis of swinging movement of said support means.

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