

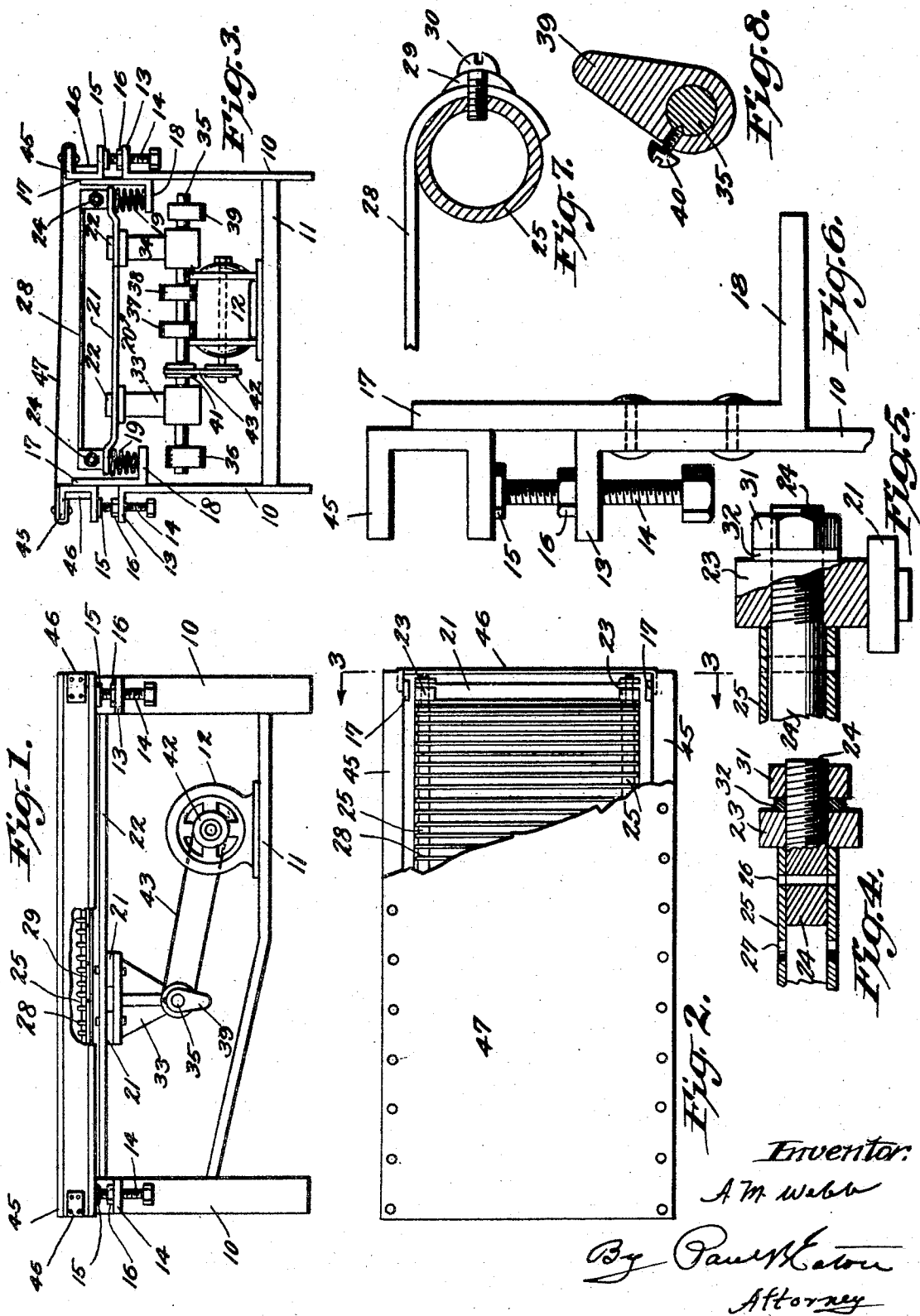
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MASSAGING AND VIBRATING MACHINE

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MASSAGING AND VIBRATING MACHINE

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My invention relates to a vibrating massaging device and more especially to a machine for imparting vibrations to the human body, in which the period of vibration and the intensity thereof may be regulated.

An object of my invention is to provide a machine having means for supporting the human body in prone position and in imparting vibrations to the human body while in a prone position on my vibrating machine.

Another object of my invention is to provide a machine, having a frame work adapted to vibrate at predetermined intervals, together with a vertically adjustable frame, associated with the vibrating frame for supporting the object which is desired to be vibrated.

Some of the objects having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of my device with a portion thereof cut away;

Figure 2 is a plan view of my vibrating machine;

Figure 3 is an end view of my machine taken along the line 3—3 in Figure 2;

Figure 4 is an enlarged cross-sectional view, taken along a horizontal line, showing my means for securing the ends of the vibrating frame;

Figure 5 is an enlarged side elevation, partly in cross-section of the structure shown in Figure 4;

Figure 6 is an enlarged end elevation of the upper left hand corner of Figure 3;

Figure 7 is a cross-sectional view taken through one of the side rails of the vibrating frame;

Figure 8 is a cross-sectional view taken through the vibrating shaft and one of the cams mounted thereon.

A brief description of the drawings having been given, a detail description of the same will now follow, in which like reference characters indicate corresponding parts throughout the drawings and in which the numeral 10 represents the four upright posts of my device. Spanning the space between the uprights 10 is the floor portion 11 on which the

electric motor 12 is adapted to be mounted. The upper ends of the members 10 have the horizontal portions 13 and piercing these portions 13 are the threaded bolts 14 which have the members 15 loosely mounted on their upper ends and each of the bolts is provided with lock nut 16 fitting against the upper surfaces of the portions 13. Secured in parallel relation with the member 10 and on the inner surface thereof are the L-shaped members 17 which have the horizontally disposed portions 18 which portions are adapted to act as a seat for the coiled springs 19, and resting on these coiled springs is the vibrating frame 20 which has the cross members 21 and the longitudinally disposed members 22, and secured on the upper side of the end members 21 are the upwardly projecting members 23. These members 23 have holes therethrough which are adapted to receive the ends 24 of the side rails 25. The pins 24 being secured in the interior of the side rails 25 by means of the pin 26 and the side rails 25 also have the holes 27 therein, in which pins may be inserted for twisting these side rails 25. These side rails 25 are adapted to have secured thereto members 28 which may be made of wire, spring steel or other suitable material, and these members 28 are adapted to be secured to the side rails 25 by means of a strip 29 fitting there against with the members 28 running between the strip 29, and the side rails 25 with bolts 30 piercing the members 29 and 25, and clamping the members 28 securely in position. The tension of the members 28 is adjusted by placing a pin or lever in the holes 27 after loosening the nut 31 on the end of the portion 24 and after twisting the side rails 25 until the proper tension in the members 28 is reached the nut 31 is then tightened and by means of the lock-washer 32 the side rails 25 are held in adjusted position.

Secured to the lower side of the frame 20, and preferably secured to the cross pieces 21 are the downwardly projecting bearing members 33 and 34 which have rotatably mounted therein the shaft 35, which shaft 35 has a plurality of eccentrically mounted members or unbalanced weights 36, 37 and 38 and 39, 100

which members are secured to the shaft 35 by means of set screws 40. This shaft 35 also has a pulley 41 mounted thereon which is in alinement with the pulley 42 on the electric motor 12, and a belt 43 is placed over these two pulleys for the purpose of driving the shaft 35.

Slidably mounted on the outer surfaces of the members 17 are the U-shaped members 45 which are secured to each other at their ends by means of the member 46 and spanning the distance between these members 45 is the covering 47, such as canvas or other suitable material.

The vertical position of the movable frame work composed of the members 45, 46 and 47 can be adjusted, as before stated, by means of the bolts 14, and when adjusted to the proper position the patient may recline upon canvas 47 until the canvas is forced into contact with the wires 28, and by means of the unbalanced weights 36 to 39 being mounted off center and the shaft 35 rotated at high speed, vibrations are imparted to the frame work 20 and the wires 28 and these vibrations in turn are imparted to the patient reclining on the canvas 47. The period of this vibration and intensity thereof can be regulated by the position in which the unbalanced weights 36 to 39 are adjusted with relation to each other, and with relation to the shaft 35, so that practically any desired amplitude of vibration may be produced.

The intensity of the vibrations can also be regulated by variations in the speed of the motor 12, and also by changes in the size, contour and weight of the unbalanced weights 36 to 39.

In the drawings and specifications I have set forth a preferred embodiment of my invention, and although specific terms are employed, they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being set forth in the appended claims.

I claim:

1. In a massaging and vibrating machine, a framework, a vertically adjustable frame mounted on the framework, a supporting element secured on the vertically adjustable frame, a resiliently mounted frame supported by the framework below the vertically adjustable frame, a rotatable shaft mounted on the resiliently mounted frame, a plurality of eccentrically mounted members secured on the rotatable shaft, a pulley mounted on the rotatable shaft, and a prime mover mounted in the framework and being adapted to impart rotary motion to the rotatable shaft.

2. In a device of the class described, a framework, a vertically adjustable frame mounted on the top portion of the framework, a vibratory frame resiliently mounted in the framework, a supporting element secured on top of the vertically adjustable

frame and being adapted to support the human body, the supporting element being adapted to be forced into contact with the vibratory frame by the weight of the human body resting thereon, and means on the vibratory frame for imparting vibrations to the vibratory frame and to the supporting element when in contact therewith.

3. In a device of the class described, a rectangular framework, outwardly extending projections on the framework near the top portions thereof, inwardly extending projections on the framework, the outwardly extending projections being adapted to support a vertically adjustable frame which extends over the entire upper portion of the framework, the inwardly extending projecting portions being adapted to support in a resilient manner a framework having tautly stretched members thereon, a canvas stretched over the vertically adjustable frame, said canvas being adapted to come in contact with the resilient framework when pressure is applied thereon, a rotatable shaft having unbalanced weights fixedly mounted thereon and being secured for rotation on the resiliently mounted framework, and means for rotating the shaft to impart vibrations to the resiliently mounted frame.

4. A massaging and vibrating machine having a resiliently mounted vibrating frame, and a vertically adjustable frame mounted above the vibrating frame, and having means thereon for supporting a patient, and means for adjusting the adjustable frame to allow contact between the portion of the adjustable frame supporting the patient and the vibrating frame.

5. In a device of the class described, a frame, a vertically adjustable frame having means thereon for supporting a patient, a vibratory frame resiliently mounted beneath the adjustable frame, means for imparting vibrations to the vibratory frame, and means for adjusting the adjustable frame to allow contact between the portion of the adjustable frame supporting the patient and the vibratory frame.

In testimony whereof I affix my signature.

ADOLPHUS M. WEBB.