

No. 719,675.

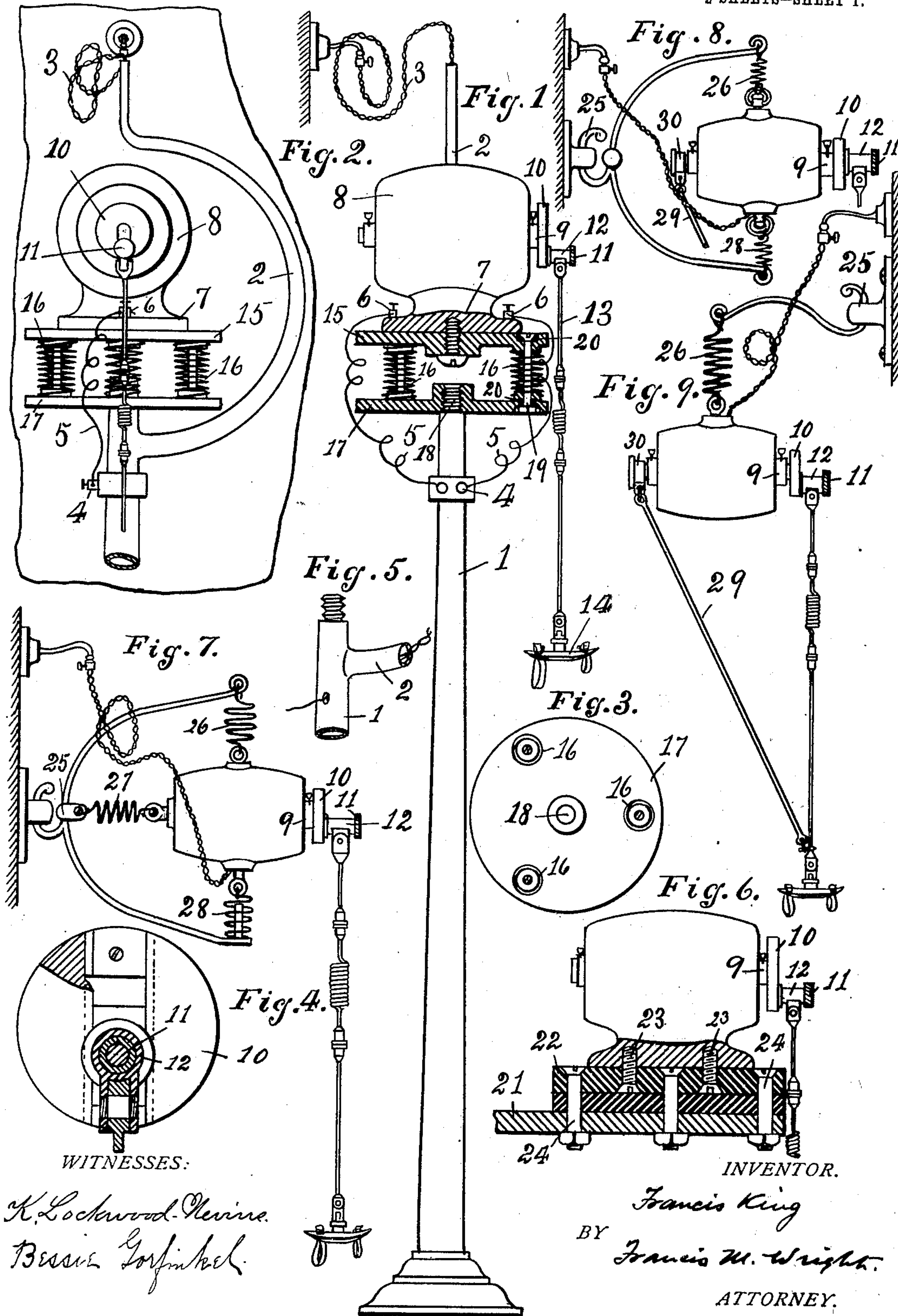
PATENTED FEB. 3, 1903.

F. KING.
SUPPORT FOR MASSAGE MACHINES.

APPLICATION FILED OCT. 6, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

K. Lockwood-Revine.
Bessie Gorfinkel.

INVENTOR.

Francis King
BY Francis M. Wright.
ATTORNEY.

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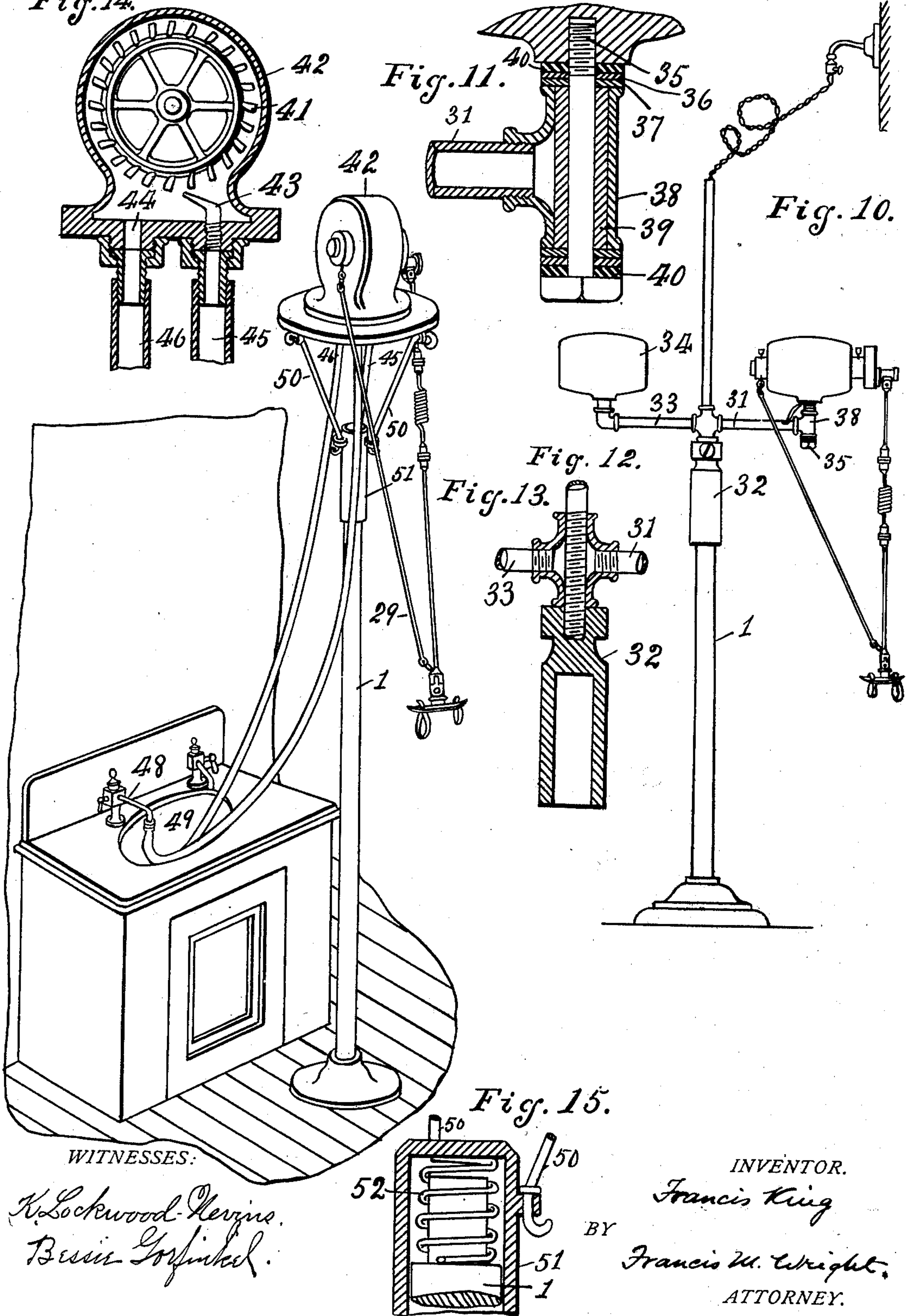
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NO MODEL.
Fig. 14.

2 SHEETS—SHEET 2.



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Bessie Gofinkel.

INVENTOR.

Francis King

BY

Francis M. Wright.
ATTORNEY.

UNITED STATES PATENT OFFICE.

FRANCIS KING, OF SAN FRANCISCO, CALIFORNIA.

SUPPORT FOR MESSAGE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 719,675, dated February 3, 1903.

Application filed October 6, 1902. Serial No. 126,111. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS KING, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Supports for Massage-Machines, of which the following is a specification.

My invention relates to supports for massage-machines. Such machines are employed to transmit vibration to the body of the patient, which vibration is obtained by suitable intermediate mechanism from the rotary shaft of a motor, which is generally an electric motor, but may also be driven by water-power or by other means. One of the principal drawbacks connected with this system of massage has heretofore been the fact that the vibration of the machine has been imparted to its support and thence to the room in which the machine is located, causing a disagreeable sensation to the occupants of the room and of adjoining rooms.

The object of my invention has been to provide a support for the machine which shall be of such character as to absorb or destroy these vibrations, while at the same time holding the machine in the proper position relative to the massage-terminal to permit of the vibration being properly applied by the latter.

My invention therefore resides in the novel construction, combination, and arrangement of parts for the above ends hereinafter fully specified, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of a massage-machine and a standard therefor, the support of the machine on the standard being shown in section. Fig. 2 is a side elevation of the same, the lower part of the standard being broken away. Fig. 3 is a horizontal section through the springs between the machine and the standard. Fig. 4 is an enlarged detail end view, partly in section and partly broken away, of the eccentric plate of the motor. Fig. 5 is a broken detail view of the standard at the junction of the bent arm. Fig. 6 is a front elevation of a modified form of support adapted for use upon a table. Fig. 7 is a front elevation of the machine supported from a

bracket on the wall. Fig. 8 is a front elevation of another modification supported on a bracket. Fig. 9 is a front elevation of another modified form. Fig. 10 is another modification in which the motor is mounted upon an arm. Fig. 11 is an enlarged detail vertical section showing the support of the motor upon the standard in this modification. Fig. 12 is a detail vertical section of the bearing therefor. Fig. 13 is a perspective view of a massage-machine operated by a water-motor and provided with a modified form of support. Fig. 14 is a vertical section through the water-wheel. Fig. 15 is an enlarged vertical section showing the support for the water-motor.

Referring to the drawings, 1 represents the standard for the massage-machine, having near the upper end thereof a curved branch or arm 2, extending in a semicircular curve around the machine to a point above the top thereof and then upwardly to a suitable height. Said branch and standard are hollowed to receive the wires 3, which supply the electric current for the electromotor, said wires being connected to binding-posts 4, which again are connected by wires 5 to the terminals 6 at the base 7 of the electromotor 8. The shaft 9 of said motor carries a plate 10, in which is eccentrically mounted an arm 11, carrying a sleeve 12, to which is pivotally attached the massage-rod 13, carrying at its lower end the terminal 14.

The above construction so far as it relates to the massage-machine is old, being found more fully described in patent granted to me November 26, 1901, No. 687,243.

It has been found that when a machine of this character is rigidly supported the vibration transmitted to the support causes an unpleasant sensation. This it is the object of my invention to remove. For this purpose the base-plate 15, on which the motor is mounted, rests upon three springs 16, which again rest upon a plate 17, screwed, as shown at 18, upon the upper end of the standard. Bolts 19 slidably connect said plates, each bolt within one of the springs, and the head and nut of each bolt are separated from the plates by means of the rubber washers 20. The bolts being slidable in both plates free

vertical movement is permitted to the motor within sufficiently large limits, while lateral or torsional movement is prevented.

In the modification shown in Fig. 6, in which the motor is supported upon a table 21, a pad of rubber 22 is secured by screws 23 to the base of the motor, and between said pad and the table is interposed a second pad of rubber, said two pads being secured to the table by means of bolts 24.

In the modification shown in Fig. 7 the motor is suspended from a bracket 25 by a spring 26, other springs 27 28 being provided to prevent the motor swinging out of place, while said springs absorb or destroy the vibration communicated to the motor.

In the modification shown in Fig. 8 the side spring 27 is omitted and in that shown in Fig. 9 the lower spring 28 is also omitted. In both of these modifications the motor is prevented from turning about its vertical axis by means of a rod 29, loosely connected at one end with a sleeve 30 at the end of the motor opposite to the eccentric plate and at the other end with the terminal end of the massage-rod 13. This contrivance prevents the motor from swinging around, which it would otherwise do by reason of the repeated vibrations imparted thereto, while at the same time the looseness of the connection between the rods 29 13 prevents absorption of the latter.

In Fig. 10 I have shown a further modification, in which the motor is mounted upon an arm 31, extending from a tube 32, rotatably mounted upon the standard 1, said arm and motor being balanced by a second arm 33 and a counterbalance-weight 34, carried upon the end of said arm 33. The motor is rotatably mounted upon the end of the arm 31, being secured thereto by means of a screw 35, metallic washers 36 37 being placed around said screw-stem and at the ends of a T-piece 38 and a sleeve 39, rubber washers 40 being interposed between said metallic washers and the motor and head of the screw to absorb vibration. The above construction is very advantageous, in that it gives a wide extent for the point of application of the massage-terminal without changing the position of the standard.

In Fig. 13 I have shown a massage-machine operated by a water-wheel, (shown at 41.) Said water-wheel is inclosed in a casing 42, having a water inlet and nozzle 43 and water-outlet 44, to which are connected rubber tubes 45 46, one of which, 47, is attached to a faucet 48, while the other discharges into a basin 49. The base of the casing is attached by rods 50 to a sleeve or cup 51, passing over the end of the standard 1 and supported thereon by the spring 52. In this case also the spacing-rod 29 is provided for the purpose, as before, of preventing the motor turning away from the massage-terminal about its vertical axis. It is evidently immaterial for the desired result whether the spacing-rod be loosely connected

at both ends, as described, or at only one end, as in either case the motor is prevented from turning upon its axis without vibration being destroyed by said spacing-rod.

I claim—

1. A massage-machine comprising a movable standard or support, a motor resiliently mounted upon said support, a massage-terminal, and a flexible rod supporting said terminal, and connected with the shaft of the motor to impart vibration to the terminal from the rotation of said shaft, substantially as described.

2. A massage-machine comprising a motor, a massage-terminal, a connection between said motor and terminal for imparting vibration to the latter, and a resilient support for the motor provided with means for controlling angular displacement of the motor relatively to said terminal, substantially as described.

3. A massage-machine comprising a motor, a massage-terminal, a massage-rod for supporting said terminal, an eccentric connection between the shaft of the motor and the inner end of the rod, and a spacing device loosely connecting the outer or terminal end of said massage-rod with the other end of the motor, substantially as described.

4. A massage-machine comprising a motor, a standard therefor, an extension of the standard above said motor arranged to support conductors to said motor, of the power for operating the same and a massage-terminal having an eccentric connection with said motor, substantially as described.

5. A massage-machine comprising a motor, a support therefor by means of which the motor is supported rotatably about a vertical axis, a massage-terminal, a massage-rod for supporting said terminal, an eccentric connection between the shaft of the motor, and the inner end of the rod, and a spacing device loosely connecting the outer or terminal end of said massage-rod with the other end of the motor, substantially as described.

6. A massage-machine comprising a standard, a tube rotatably mounted upon said standard, an arm extending laterally from said tube, a motor resiliently supported upon the end of said arm, and a massage-terminal having an eccentric connection with said motor, substantially as described.

7. A massage-machine comprising a standard, a lateral arm rotatable about said standard, a motor rotatably supported upon the end of said arm, and a massage-terminal having an eccentric connection with said motor, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FRANCIS KING.

Witnesses:

FRANCIS M. WRIGHT,
BESSIE GORFINKEL.