

No. 866,636.

PATENTED SEPT. 24, 1907.

C. R. ELLIOTT.
VIBRATOR.

APPLICATION FILED FEB. 11, 1907.

FIG. 1.

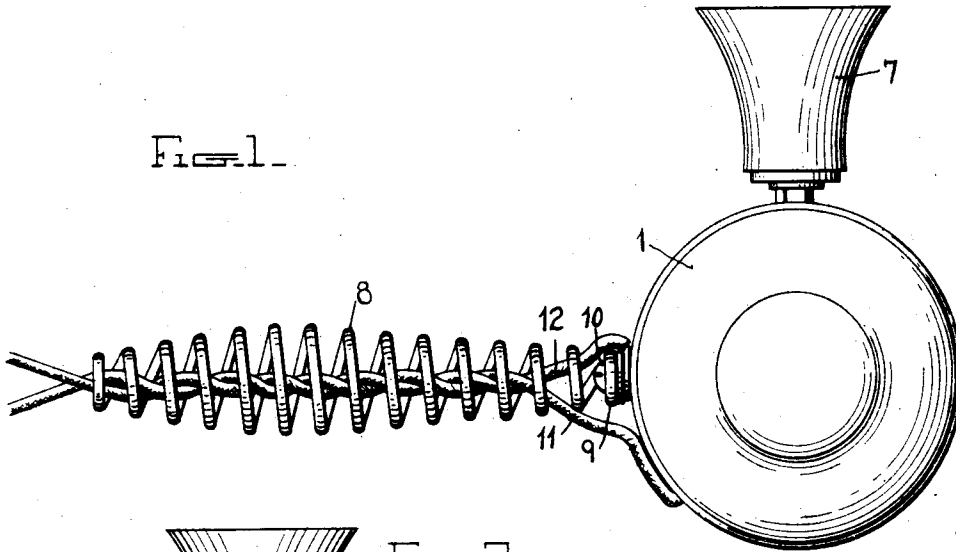


FIG. 2.

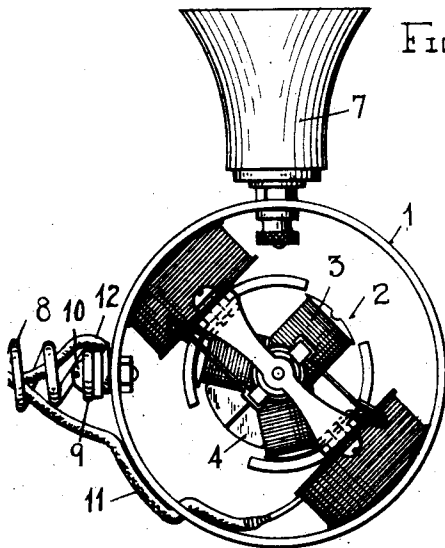


FIG. 3.

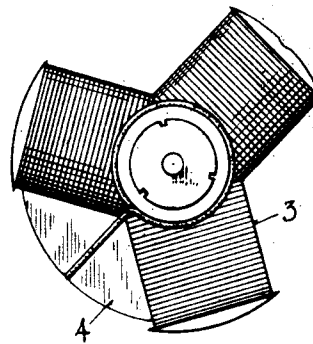
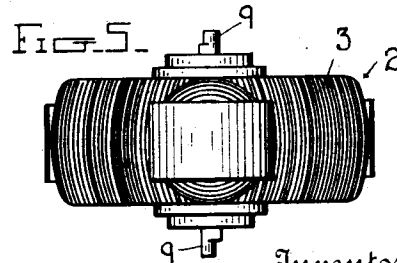
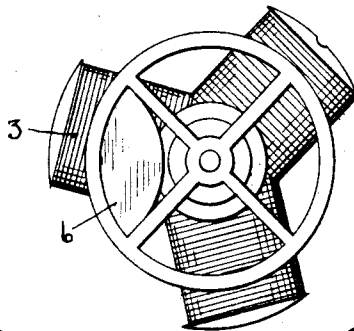


FIG. 4.



Witnesses
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VIBRATOR.

No. 866,636.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed February 11, 1907. Serial No. 356,902.

To all whom it may concern:

Be it known that I, CHARLES ROBERT ELLIOTT, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Vibrators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in electric vibrators, or massage machines.

The object of the invention is to provide a machine of this character by means of which vibrations are produced by the unbalanced armature of the motor therein.

The further object of the invention is to provide a handle for the machine so constructed as to absorb and prevent the vibrations of the machine from being conveyed to the hand of the operator, thus enabling the device to be more easily held and applied to a patient.

With the foregoing and other objects in view, the invention consists in construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings Figure 1 is a side view of the vibrator constructed in accordance with the invention; Fig. 2 is a similar view of the body-portion and operating parts of the machine, with a part of the casing removed; Fig. 3 is a detail view of the armature removed from the motor, and Fig. 4 is a similar view of the armature showing an unbalanced fly-wheel mounted thereon to produce vibrations in the machine. Fig. 5 is a detail side view of an armature, the shaft of which is provided on its opposite ends with eccentric or offset journals.

Referring more particularly to the drawings, 1 denotes the body-portion, or casing of the machine, which may be of any suitable shape, and which is here shown, and is preferably, in the form of an oblate spheroid. Arranged within the casing, 1, is a motor, 2, the field magnets of which are secured to the casing, and within the field is adapted to rotate an armature, 3.

The construction of the armature, 3, is such that the same will be heavier at one side so that when running the same will be unbalanced. The unbalancing of the armature may be produced in a number of different ways, such, for instance, as increasing the size of one of the pole-pieces, or by increasing the wiring on one of the poles, or, as shown in the present instance, by providing a weight, 4, and securing the same to the armature shaft, between two of the pole-pieces. The unbalancing of the armature may also be produced by mount-

ing an unbalanced fly-wheel, 6, on the end of the armature shaft, as shown in Fig. 4 of the drawings, or by providing the armature shaft with eccentric or offset journals, 9, at its opposite ends as shown in Fig. 5. The same effect would also be produced by a bent or sprung armature shaft. By providing the unbalanced armature, the body of the machine will be caused to vibrate when the armature is revolved therein, said vibrations of the body-portion of the machine being conveyed or transferred to the patient by means of a suitable applicator, such as shown at 7.

Attached to the body-portion of the machine is a flexible handle, 8, said handle being here shown, and is preferably, in the form of a coiled wire, the coils of the same being larger near the outer end to provide a suitably shaped handle, which may be conveniently grasped by the operator, there being formed at the forward end of the handle an eye 9 designed to receive the screw bolt 10, by means of which the handle is attached to the casing 1. By providing the flexible, coiled wire handle, 8, the vibrations of the body-portion of the machine will be partly absorbed, thereby relieving the hand of the operator from the full force of the vibrations, thus enabling the machine to be more readily held and controlled when being applied to the patient. The coiled wire handle, 8, also provides a convenient receptacle for the ends of the electric conducting wires 11 and 12, which are adapted to pass therethrough the wire 11 being carried through the casing to the motor, while the wire 12 is terminally engaged with the screw bolt 10, by means of which it is attached to the casing. Thus it will be seen that the screw subserves the functions not only as a fastening means for the handle, but also as a binding post for the wire 12 while the eye 9 acts as a clamping washer between which and the wall of the casing the wire is clamped.

The machine may be operated by batteries or any other source of electrical supply.

In a vibrator constructed as shown and described, the applicator may be pressed as forcibly as desired against the body of the patient without interfering with the operation of the machine, or requiring any more power.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring more extended explanation.

Various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle, or sacrificing any of the advantages of this invention, as defined in the appended claims.

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

5 A vibrator comprising a casing, an electric motor contained therein, a flexible coiled wire handle having its forward end whirled bent to form a terminal eye, a fastening bolt entered through said eye for attaching the handle to the casing, and conductor wires leading through the handle to the casing, one of said wires being terminally

clamped on said fastening bolt between the eye and wall of the casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 10

CHARLES ROBERT ELLIOTT.

Witnesses:

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