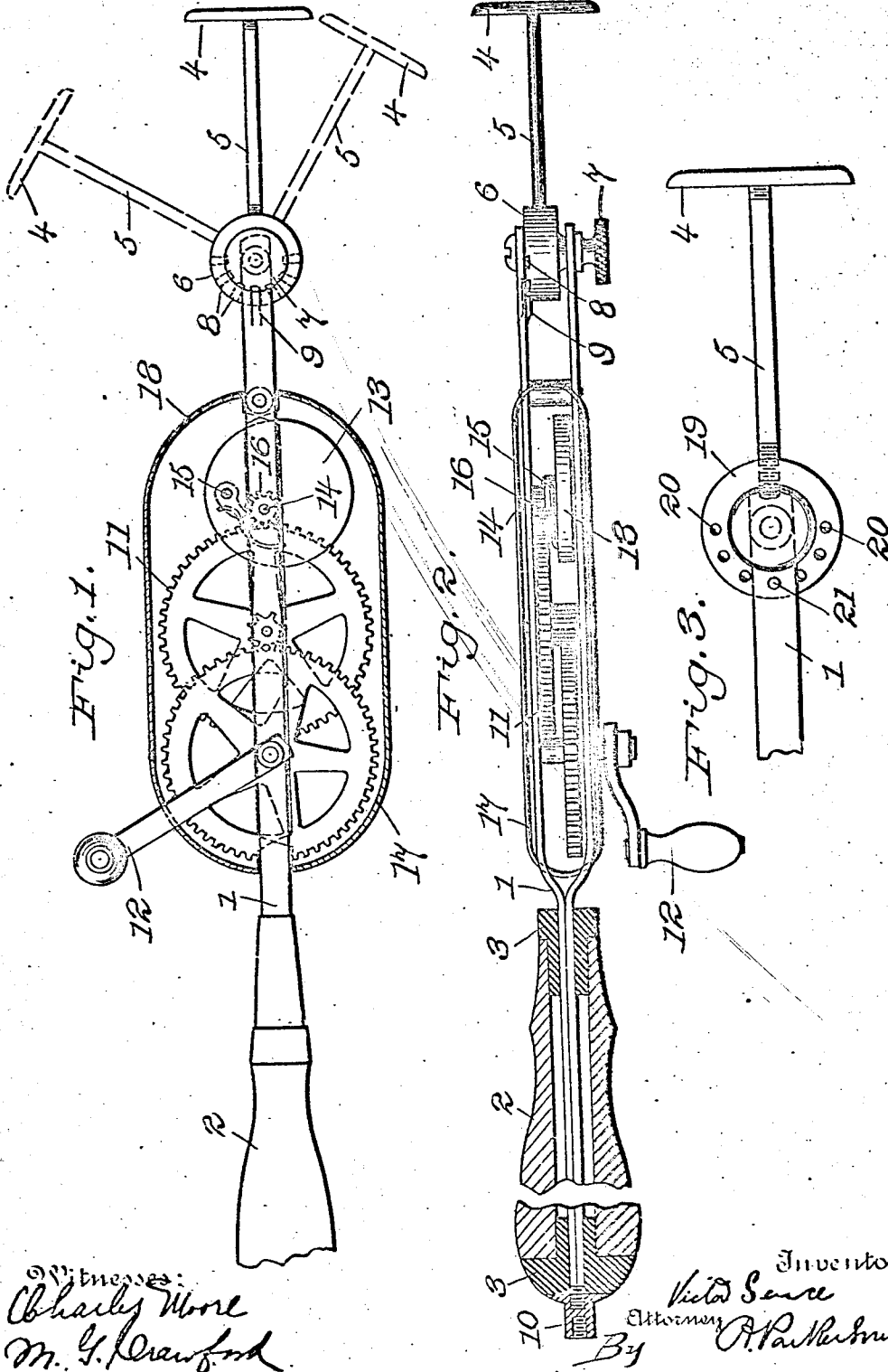


No. 895,505.

PATENTED AUG. 11, 1908.

V. SENCE.
VIBRATORY MASSAGE APPARATUS.
APPLICATION FILED NOV. 15, 1907.



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UNITED STATES PATENT OFFICE.

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VIBRATORY-MASSAGE APPARATUS.

No. 895,505.

Specification of Letters Patent.

Patented Aug. 11, 1908.

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To all whom it may concern:

Be it known that I, VICTOR SENCE, a citizen of the United States of America, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Vibratory-Massage Apparatus, of which the following is a specification.

My invention relates to mechanical massage apparatus and is designed to produce an improved form of hand operated vibratory massage machine which is of most compact form, capable of producing the greatest variety of effects and most easily manipulated.

The best form of apparatus embodying my invention at present known to me is illustrated in the accompanying sheet of drawings in which,

Figure 1 is a side elevation of the apparatus, and a section through the inclosing casing. Fig. 2 is a side view in partial section on a plane at right angles to that of Fig. 1. Fig. 3 illustrates a modification.

Throughout the drawings like reference figures indicate like parts.

1 is the main frame supported by the handle 2, which is preferably made hollow and mounted on an extension of the frame by thimbles or sleeves 3, 3, made of rubber or other sound deadening material.

4 is a rest plate designed to be rested or pressed upon that portion of the body which is to be treated. This plate is carried by shaft or spindle 5, which is preferably provided with a screw threaded end adapted to screw into a threaded opening in the socket piece 6. This socket piece 6 is mounted on a shaft in that end of the main frame opposite to the one at which the handle is attached, and is capable of revolution thereon, being held in any desired position by thumb screw 7. To make the adjustment more positive, the socket piece 6 may be provided with a series of radial slots 8, 8, which cooperate with the catch 9, formed on the inside of the frame 1.

The end of the main frame, which passes through the handle is provided with a screw threaded socket 10 into which the shaft 5 may also be screwed.

Within the frame is mounted a train of toothed gearing 11, adapted to be driven by the crank 12. The eccentric disk 13 is mounted on the short shaft 14 within the frame and is driven by the pawl 15 engaging the pinion 16 on said shaft 14. Either

the disk or the pinion is loosely mounted on said shaft usually while the other is rigid therewith.

An oval cover formed in two parts 17 and 18 incloses the train of gearing and eccentric and the supporting portion of the frame.

In the form shown in Fig. 3, the socket piece 19 has a series of holes 20 through which pin 21 may be inserted, said pin passing through holes in the main frame 1.

In the operation of my invention, the rest plate is adjusted so as to most conveniently permit of pressure being applied to the body of the patient at the desired point, and the apparatus being held in one hand by the handle 2, the crank 12 is rotated in the direction of the hands of a watch. This gives the eccentric disk 13 a very high speed of rotation, which produces a rapid vibration of the entire apparatus which is transmitted to the rest plate 4, and the body of the patient. The handle 2 being mounted upon vibration-deadening material only a small portion of the vibration is transmitted to the hand of the operator. When the motion of the crank is stopped, the eccentric will continue to rotate for a long time by reason of the fact that the pawl connection leaves it free to do so, and also frees it from the drag of the driving gear. This also saves unnecessary wearing of the gears.

The eccentric being mounted upon a short shaft at right angles to the axis of the main frame, it creates a purely vibratory movement of the apparatus in the plane of the eccentric and does not create a wobbling or rotating motion such as would be produced if the shaft of the eccentric were in line with the axis of the frame and the handle. Furthermore, the above described arrangement of the eccentric produces a much more compact construction and enables the eccentric and gearing to be completely hidden in a compact flat casing.

Having, therefore, described my invention, I claim:

1. In a mechanical massage apparatus, the combination of a main frame and handle therefor, a train of gearing mounted in said frame, a crank exterior of the frame connected to said gearing, an eccentric mounted on a short shaft at right angles to the axis of the frame and of the handle, and connected to said gearing by a pawl mounted on the eccentric, and a rest plate adjustably connected to the frame.

2. In a mechanical massage apparatus, the combination of a main frame and handle therefor, a train of gearing mounted in said frame, a crank exterior of the frame connected to said gearing, an eccentric mounted on a short shaft at right angles to the axis of the frame and of the handle, and connected to said gearing by a pawl mounted on the eccentric, and a rest plate adjustably connected to the frame, together with a two part casing inclosing the train of gearing, the eccentric and the supporting portion of the frame.

3. In a mechanical massage apparatus, the combination of a main frame and handle therefor, a train of gearing mounted in said frame, a crank exterior of the frame connected to said gearing, an eccentric mounted on a short shaft at right angles to the axis of the frame and of the handle, and connected to said gearing by a pawl mounted on the eccentric, and a rest plate adjustably connected to the frame, together with an intervening layer of vibration deadening material between the handle and the frame.

4. In a mechanical massage apparatus, the combination of a main frame, a handle, a

train of gearing mounted in said frame, an eccentric connected thereto and mounted on a short shaft at right angles to the axis of the frame, a hand crank for driving said gearing, a rest plate and means for attaching same to either end of the main frame.

5. In a mechanical massage apparatus, the combination of a main frame, a handle, a train of gearing mounted in said frame, an eccentric connected thereto and mounted on a short shaft at right angles to the axis of the frame, a hand crank for driving said gearing, a rest plate and means for attaching same to either end of the main frame, the means at the end of the frame farthest from the handle comprising a rotating socket piece, a supporting shaft for the plate fitting into said socket, and a thumbscrew on the main frame for holding said socket piece in various positions of adjustment.

Signed at New York, N. Y., this 16th day of October, 1907.

VICTOR SENCE.

Witnesses:

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