

945,872.

A. J. STECKER.
VIBRATOR.
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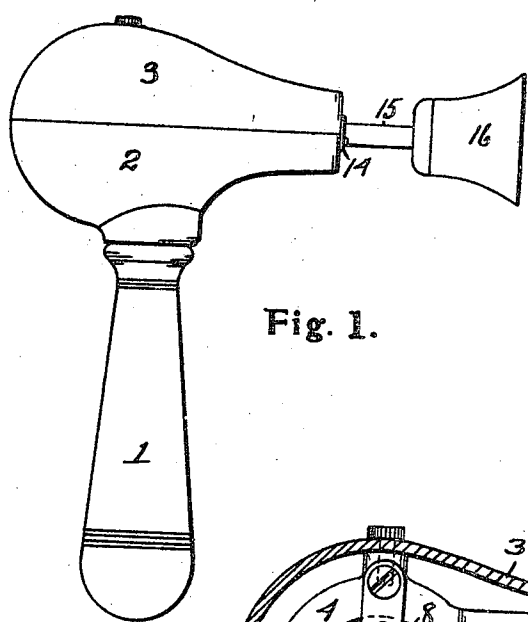


Fig. 1.

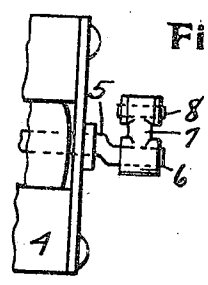


Fig. 4.



Fig. 6.

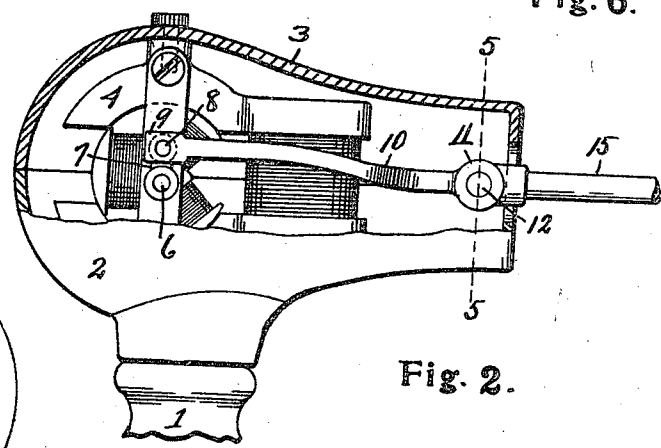


Fig. 2.

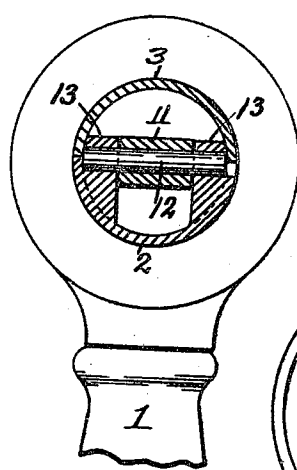


Fig. 5.

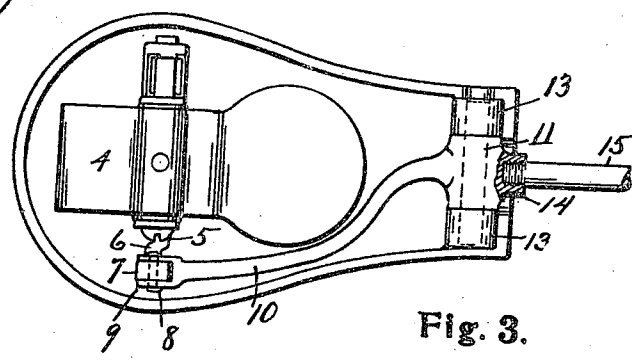


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

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VIBRATOR.

945,872.

Specification of Letters Patent.

Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, ALFRED J. STECKER, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, 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 it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a vibrator, especially designed for massaging purposes, and consists in the construction and arrangement of parts hereinafter more fully set forth and pointed out particularly in the claims.

The object of the invention is to provide an apparatus of the character described of comparatively simple and inexpensive construction, wherein the arrangement is such as to produce a rapid vibratory movement which may be imparted to an applicator through the connected stem thereof.

The above object is attained by the structure illustrated in the accompanying drawings, in which:—

Figure 1 is an elevation of an apparatus involving my invention. Fig. 2 is an enlarged view with the case partly in section and the handle broken away. Fig. 3 is a plan view of the mechanism within the case, the upper portion of the case being removed. Fig. 4 is a fragmentary view, showing the crank on the end of the motor shaft and the pitman connected therewith. Fig. 5 is a sectional view through the bearing of the vibratory arm, as on line 5—5 of Fig. 2. Fig. 6 is an elevation of the connecting pitman between the crank of the motor and the vibratory arm.

Referring to the characters of reference, 1 designates the handle which supports the case containing the operative mechanism, said case being substantially pear-shape and consisting of the upper and lower sections 2 and 3 respectively.

Suitably mounted within the case is an electric motor 4, the shaft 5 of which is provided at one end with a short crank 6. Journaled at one end upon said crank is a link or pitman 7 which at its opposite end is

journaled upon a cross pin 8 mounted in the sides of the fork 9 at the inner end of the vibratory arm 10. The opposite or outer end of said arm is connected to an oscillatory head 11 mounted upon a journal pin 12 which passes therethrough and whose ends are supported in the bearings 13 within the case. Projecting outwardly from said oscillatory head is a boss 14 which extends through an opening in the end of the case and which is tapped to receive the threaded stem 15 of the applicator 16. It will now be apparent that by passing an electric current through the motor in the ordinary manner, its shaft will be caused to revolve and to impart to the arm 10 a reciprocatory movement through the medium of the pitman 7, thereby oscillating the head 11 to which said arm is connected, and causing the applicator connected with said head to vibrate rapidly as required for massaging purposes.

It will be noted that the shaft of the motor and the journal pin 12 on which the oscillatory head is mounted are parallel, and that the connection of the vibratory arm 10 with said head is in line with the connection of the applicator stem thereto, said arm being curved to pass a portion of the motor and allow its free end to be pivotally connected to the pitman 7 which is at one side of the axis of the stem of the applicator. This arrangement reduces the mechanism to a very small compass and enables it to be mounted in a comparatively small case, thereby reducing the weight of the apparatus.

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

1. In a vibrator, the combination with a suitable casing, of a rotatable shaft journaled therein, a crank upon said shaft, a journal pin fixed in the casing parallel with said shaft, an oscillatory head journaled on said pin, a vibratory arm connected to and extending inwardly from said head, a pitman connecting the free end of said arm to the crank on said shaft, and an applicator having a stem which is connected to said oscillatory head.

2. In a vibrator, the combination of a casing, a rotatable shaft crossing the casing transversely and having a crank at one end, a journal pin also crossing the casing transversely and located at one end thereof,

- a head mounted to oscillate upon said journal pin, a curved vibratory arm projecting inwardly from said head, a pitman connecting the free end of said arm to the crank of
5 said shaft, said oscillatory head having a tapped boss which projects through an opening in the end of the casing, and an applicator having a stem which is screwed into said boss.
- 10 3. In a vibrator, the combination of a suitable casing, a rotatable shaft journaled in said casing having a crank upon one end thereof, a journal pin mounted in said casing parallel to said shaft, an oscillatory head
15 centrally disposed upon said pin between its terminal bearings, a vibratory arm projecting inwardly from said head, a pitman connecting the free end of said arm to the crank of said shaft, said oscillatory head having a socket member projecting through an opening in the casing, and an applicator having a projecting stem which engages in said socket member. 20

In testimony whereof I sign this specification in the presence of two witnesses.

ALFRED J. STECKER.

Witnesses:

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