G. W. MOORE.

MASSAGE VIBRATOR.

APPLICATION FILED NOV. 4, 1918.

1,301,866.

Patented Apr. 29, 1919.

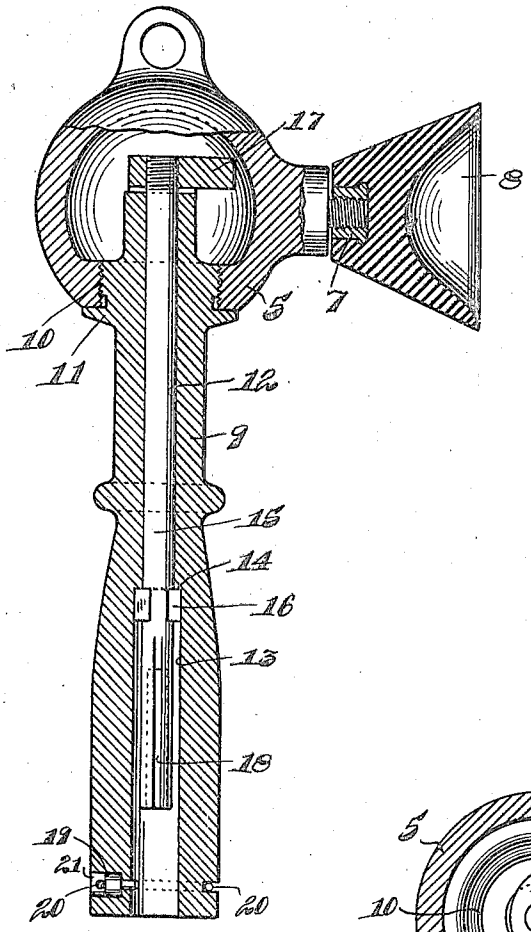


Fig. 1.

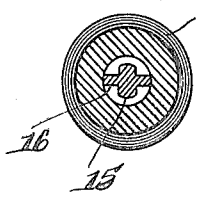


Fig. 2.

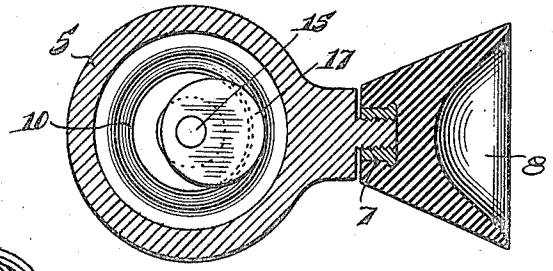


Fig. 3.

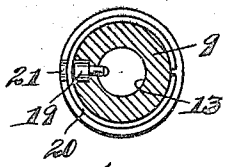


Fig. 4.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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MASSAGE-VIBRATOR.

1,301,866. Specification of Letters Patent. Patented Apr. 29, 1919.

Application filed November 4, 1918. Serial No. 260,921.

To all whom it may concern:

Be it known that I, GEORGE W. MOORE, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Massage-Vibrators, of which the following is a specification.

My invention relates to improvements in massage vibrators, and has for its object the provision of an improved construction of this character capable of operating substantially noiselessly, and which is of simple construction and efficient in use.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1, is a longitudinal section of a vibrator embodying the invention,

Fig. 2, a transverse section taken through substantially the central portion of the handle of the vibrator.

Fig. 3, a transverse section taken through the head of the vibrator, and

Fig. 4, a transverse section taken through the extreme end of the handle portion of the vibrator.

The preferred form of construction comprises a hollow spherical head 5 having a threaded stud 6 projecting from one side thereof and adapted to enter a threaded socket 7 in a contact piece or member 8, as indicated. The instrument is designed for use with various styles and types of contact members 8, all of which are made, however, in the usual manner, with a threaded socket 7 being detachably secured on the head 5 as indicated. A combined handle and shaft bearing member 9 is arranged to project from one side of the head 5 at substantially right angles to the stud 6, said handle member being detachably secured in a threaded opening 10 in the corresponding side of head 5, said handle member being provided with threads engaging the threads in opening 10 and with a sealing flange 11 contacting with the surrounding sides of head 5 so as to seal the interior of said head against the escape of grease or other lubricant with which the said head 5 is ordinarily filled.

The handle member 9 is provided with a shaft bearing bore 12, which is enlarged near its outer end to form a larger bore 13, and an intermediate stop shoulder 14, as shown. An operating shaft 15 is arranged within the handle member 9 and is provided with lugs or ears 16 stamped or struck up therefrom to contact with the shoulder 14 to limit the inward movement of said shaft. At its inner end the shaft 15 is threaded, and a vibrator weight 17 is secured eccentrically thereto to revolve within the hollow interior of head 5, the inner end of shaft 15 being preferably upset to prevent accidental removal of said weight. The weight 17 is of a size to pass freely through the opening 10, so that the parts may be readily assembled or taken apart when desired. By this arrangement, all that is necessary to assemble the shaft and its coöperating parts is to drop the shaft through the bore 12 and secure the weight 17 to the inner end thereof, the lugs 16 contacting with shoulder 14 and the weight 17 contacting with the inner end of handle 9 to hold said shaft in place. At its outer end shaft 15 is made hollow and provided with a longitudinal slot for engagement with the end of a flexible shaft in the usual manner for operating the instrument. A latch pin 19 is arranged in the side of handle member 5 projecting into the bore 13 and adapted to engage a groove in the flexible shaft, in the usual manner, to prevent accidental disengagement of the flexible shaft but to permit of ready engagement or disengagement thereof when desired. The latch pin 19 is normally held in place by means of a wire spring 20 in the form of a broken ring seated within a groove 21 provided in handle member 5, as shown. By this arrangement, upon rapid rotation of shaft 15, the eccentric weight 17 will cause corresponding vibrations of the contact member 8 carried by the head 5, thus providing the desired vibrations for massage treatments of the face, scalp, or the like. The instrument operates practically noiselessly, and produces a character of vibrations well adapted to the use intended. Owing to the simplicity of the form and arrangement of parts set forth, the instrument can be made with great economy but is, nevertheless, strong, durable and efficient in use.

While I have illustrated and described the preferred form of construction for carrying

my invention into effect, this is capable of variations and modifications without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A vibrator comprising a hollow head; a detachable handle for said head; a shaft mounted in said handle and extending into said head, said shaft being mounted in said handle to permit of free outward longitudinal movement thereof but to prevent free inward movement; and an eccentric weight removably secured to the inner end of said shaft, said weight serving to removably secure said shaft in position in said handle, substantially as described.

2. A vibrator comprising a hollow head; a combined handle and shaft bearing removably secured to said head; a shaft bearing extending through said handle, the bore for said shaft being enlarged adjacent its outer end to form a stop shoulder; a shaft mounted in said shaft bearing and provided with a stop contacting with said shoulder; and an eccentric weight threaded on the inner end of said shaft and contacting with the inner end of said handle, substantially as described.

3. A vibrator comprising a hollow spherical head having a threaded opening leading into one side thereof; a contact member mounting projecting from another side of said head at substantially right angles to the axis of said opening; a combined handle and shaft bearing threaded in said opening and provided with a flange for sealing the same; a shaft bearing extending centrally through said handle, the bore for said shaft being enlarged adjacent its outer end to form a stop shoulder; a shaft mounted in said shaft bearing and having burs set therefrom to contact with said shoulder; and a weight eccentrically mounted on the inner end of said shaft and revolving in said head, substantially as described.

4. A vibrator comprising a hollow spherical head having a threaded opening leading into one side thereof; a contact member mounting projecting from another side of said head at substantially right angles to the axis of said opening; a combined handle and shaft bearing threaded in said opening and provided with a flange for sealing the same; a shaft bearing extending centrally through said handle, the bore for said shaft being enlarged adjacent its outer end to form a stop shoulder; a shaft mounted in said shaft bearing and having burs set therefrom to contact with said shoulder; screw threads on the inner end of said shaft; and a weight threaded on said screw threads and contacting with the inner end of said handle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE W. MOORE.

Witnesses:

JOSHUA R. H. POTTS,

HELEN F. LILLIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."