No. 847,239. PATENTED MAR. 12, 1907.

B. T. CASTLEMAN.

VIBRATORY MASSAGE INSTRUMENT.

APPLICATION FILED APR. 9, 1906.

FIG. 1.

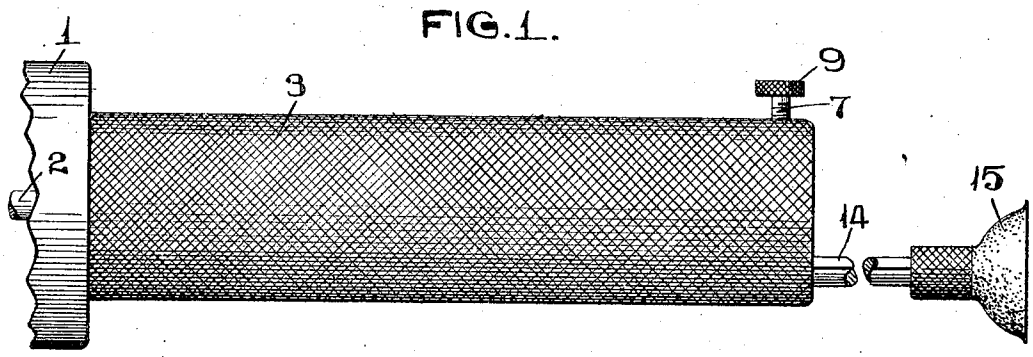


FIG. 2.

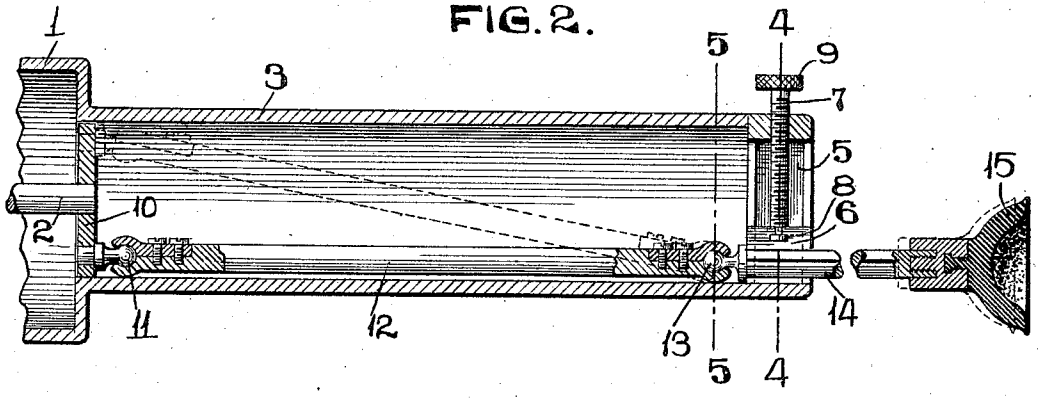


FIG. 3.

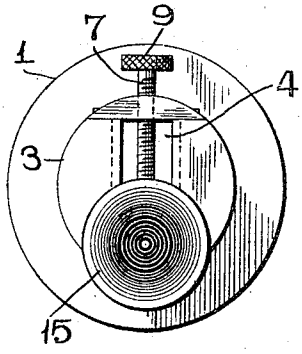


FIG. 4.

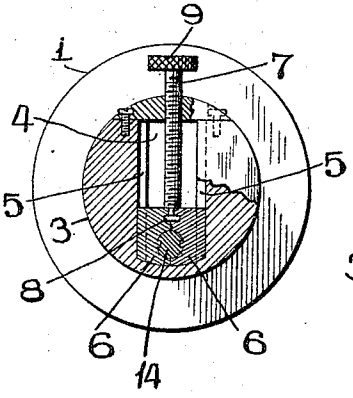
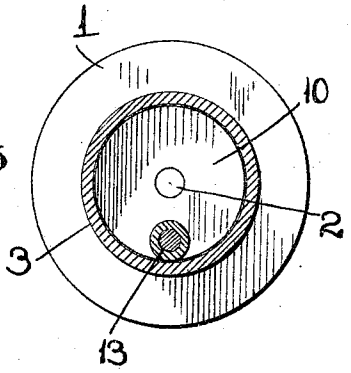


FIG. 5.



ATTEST.

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VIBRATORY MASSAGE INSTRUMENT.

No. 847,239. Specification of Letters Patent. Patented March 12, 1907.

Application filed April 9, 1906. Serial No. 310,787.

To all whom it may concern:

Be it known that I, BENJAMIN T. CASTLEMAN, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Vibratory Massage Instruments, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates generally to vibratory massage instruments, and more particularly to a mechanically-operated vibratory stimulator for imparting vibratory massage to the skin and scalp.

The object of my invention is to construct an instrument for imparting vibratory massage wherein the length of the stroke of the massage-head is readily regulated even while the instrument is in operation.

A further object of my invention is to construct a simple, inexpensive, and easily-operated device which may be attached to or a part of a motor-casing which incloses the motor used for operating the device.

To the above purposes my invention consists in certain novel features of construction and arrangement of parts, which will be hereinafter more clearly set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a device of my improved construction. Fig. 2 is a longitudinal section taken through the center of the instrument. Fig. 3 is an end view of the instrument seen in Fig. 1. Fig. 4 is a vertical section taken on the line 4 4 of Fig. 2. Fig. 5 is a transverse section taken on the line 5 5 of Fig. 2.

Referring by numerals to the accompanying drawings, 1 indicates a portion of the motor-casing, and 2 the outer end of the motor-driven shaft. Formed integral with or fixed to the casing 1 is a hollow stem 3, the outer surface of which is milled in order that it may be readily grasped by the hand. Formed in the outer end of the stem is a vertically-arranged opening 4, and in the side walls thereof is a pair of vertically-extending grooves 5. Arranged for vertical movement in this opening 4 is a bearing 6, made in two parts, and which bearing is adapted to be raised and lowered by means of a screw 7, that is connected by a socket 8 to the bearing 6. The upper end of the screw 7 is provided with a head 9.

Formed on or fixed to the end of the motor-shaft 2 is a disk 10, and secured to the face of said disk, near the edge thereof, by a ball-and-socket joint 11 is the rear end of a shaft 12, the forward end of which is connected by a ball-and-socket joint 13 to the rear end of a shaft 14, which is arranged to reciprocate through the bearing 6. The outer end of this shaft 14 carries a head 15, of rubber or analogous material, which head contacts directly with the skin or scalp while the instrument is in use.

When the screw 7 is so manipulated as to move the bearing to the lower end of the slot or opening 4, the shaft 14 will be in direct alinement with the path of travel of the socket 11. Therefore when the parts are so positioned the shaft 14, carrying the head 15, will have the greatest length of stroke as the shaft 2 and the disk 10, carried thereby, rotate. When the socket 11 is moved one-half a revolution from the point just described, or into the position seen by dotted lines in Fig. 2, the shaft 14 and head carried thereby will be drawn inwardly to their limit of movement. Whenever the bearing 6 is moved to the axial center of the stem 3, the shaft 14 will be in direct alinement with the motor-shaft 2, and consequently there will be no vibration or reciprocating movement of said shaft 14 and the head 15, owing to the fact that the distance between the centers of the sockets 13 and 11 is always the same.

In the use of my improved instrument the head 15 is placed in direct contact with the skin or scalp, and as the motor is driven vibratory massage or stimulation is obtained. The stroke of the shaft 14 and the head 15, carried thereby, may be varied at will, even while the device is in operation, by adjusting the screw 7, which controls the location of the bearing 6.

A device of my improved construction is simple, strong, and durable, comprises a minimum number of parts, can be adjusted while in operation, and provides very effective means for imparting massage in the form of vibratory stimulation to the skin and scalp.

I claim—

1. In a device of the class described, the combination with a motor-shaft and motor-casing, of a tubular handle, an adjustable bearing in the outer end thereof, a shaft arranged for reciprocation in said bearing, an applicator carried by the outer end of said shaft, a disk carried by the end of the motor-

shaft in the opposite end of the handle, and a shaft connected by the ball-and-socket joint to the rear end of the first-mentioned shaft and to the disk; substantially as specified.

2. In a device of the class described, the combination with a motor-shaft and motor-casing, of a tubular handle carried by the motor-casing, a disk carried by the end of the motor-shaft, a bearing arranged for transverse adjustment in the front end of the handle, a shaft arranged for longitudinal reciprocation in the bearing, an applicator carried by the outer end of said shaft, and a shaft connecting the rear end of the first-mentioned shaft with the disk of the motor-shaft; substantially as specified.

3. In a device of the class described, the combination with a motor-shaft and motor-casing, of a tubular handle carried by the motor-casing, there being a transverse slot formed in the forward end of the handle, a bearing-block arranged for movement in said slot, means whereby said bearing-block is adjustable in said slot, a shaft arranged for reciprocation in the bearing-block, an applicator carried by the forward end of the shaft, a disk carried by the end of the motor-shaft in the opposite end of the handle, and a shaft connecting the rear end of the first-mentioned shaft with the disk; substantially as specified.

4. In a device of the class described, the combination with a motor-shaft and motor-casing, of a handle, an adjustable bearing in one end thereof, a shaft arranged for reciprocation through said bearing, an applicator carried by the outer end of the shaft, a rotating member carried by the motor-shaft in the opposite end of the handle, and a connection between said member and the rear end of the reciprocating shaft whereby said shaft is reciprocated by the rotary motion of the member carried by the motor-shaft; substantially as specified.

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

BENJAMIN T. CASTLEMAN.

Witnesses:
M. P. SMITH,
E. M. HARRINGTON.