

F. R. KUNKEL.  
VIBRATORY MASSAGE APPARATUS.  
APPLICATION FILED JAN. 10, 1908.

975,436.

Patented Nov. 15, 1910.

Fig. 1.

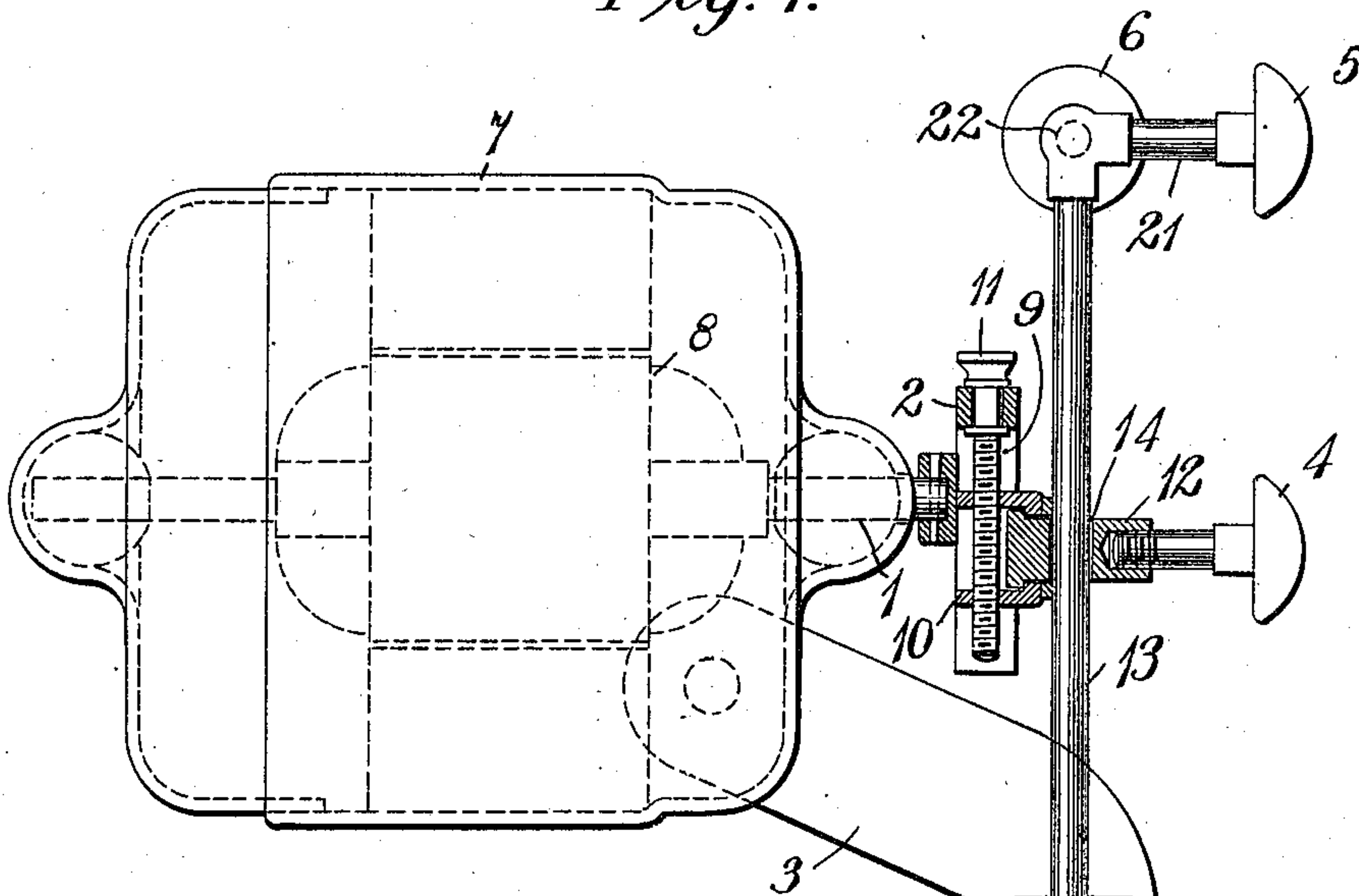
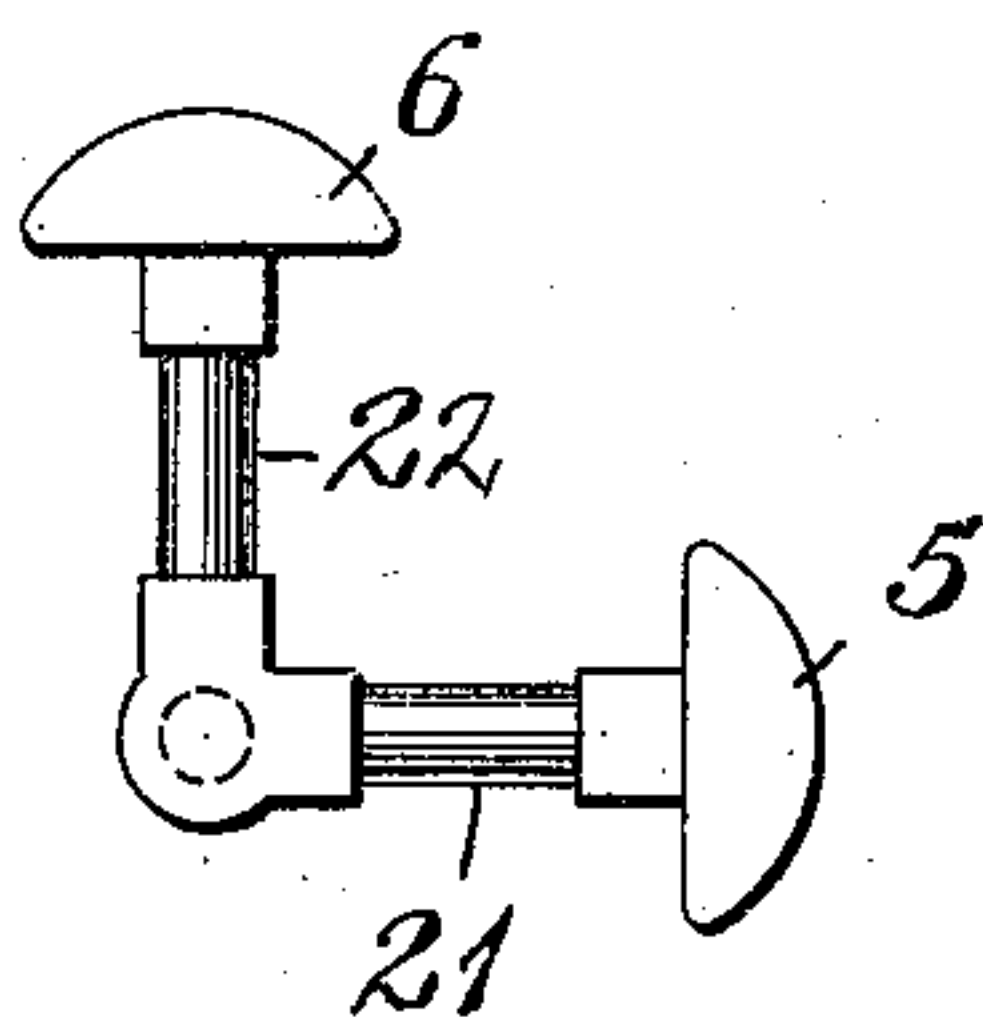


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRED R. KUNKEL, OF EDGEWOOD PARK, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, OF EAST PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## VIBRATORY MESSAGE APPARATUS.

975,436.

Specification of Letters Patent. Patented Nov. 15, 1910.

Application filed January 10, 1908. Serial No. 410,219.

*To all whom it may concern:*

Be it known that I, FRED R. KUNKEL, a citizen of the United States, and a resident of Edgewood Park, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Vibratory Massage Apparatus, of which the following is a specification.

My invention relates to vibratory massage apparatus and it has special reference to such devices as are operated by rotatable driving shafts.

The object of my invention is to provide a simple and durable device of the class above indicated, that shall embody a plurality of applicators and means for adjusting the extent of the motions produced therein.

According to my present invention, I provide a relatively inexpensive device having a plurality of applicators to which different motions are imparted from a single driving shaft, the adjustment of certain of the motions being readily effected while the device is in operation.

Figure 1 of the accompanying drawings is a side elevation, partially in section, of a device constructed in accordance with my invention, and Fig. 2 is a detail plan view of the applicators adjustment of which may be effected during the operation of the device.

Referring to the drawings, the device here illustrated comprises a shaft 1, which may be rotated directly or indirectly by any suitable motor, a disk 2 secured thereto and driven thereby, a supporting frame 3 and a plurality of applicators 4, 5, and 6.

As illustrated in the drawings, a propelling motor 7 constitutes a part of the stationary frame 3, the rotatable member 8 of this motor being mounted on the shaft 1. This motor may be of any suitable design and may be adapted to receive its energy from sources of alternating or direct current electricity.

The disk 2 is provided with a radial slot 9 in which a bearing block 10 is adjustably supported by means of a screw 11 which is rotatably mounted at the end of the slot in the edge of the disk. A member 12, the center line of which is substantially parallel to the shaft 1 is rotatably mounted in the bearing block 10 and projects outwardly therefrom. The applicator 4 is secured to the outer end of the member 12 and its eccentricity, relative to the shaft 1, may be adjusted by means of the screw 11. The motion imparted to the applicator 4 is obviously a circular rubbing motion.

A rod 13 extends through a hole 14 in the member 12 near the bearing block 10 and is supported at one end in a relatively stationary bearing block 15 which is located near the extremity of a handle 16 by which the device may be supported in the hand of the user. The handle 16 constitutes a projection from the stationary frame 3 and is provided with a hole or passage 17 through which the rod 13 extends, this rod being substantially perpendicular to the center line of the member 12 and being adapted to slide through the hole 14 as a pendulum motion is imparted to it by the member 12 when the latter is in eccentric relation to the shaft 1 and is operated by it.

The stationary bearing 15 is in the form of a clevis, the body projection 18 of which is screw-threaded and is engaged by a nut 19 that is rotatably mounted on a plate 20 at the outer end of the handle 16. By turning the nut 19 in the one direction or the other the position of the bearing block 15 may be adjusted, thereby varying the length of that portion of the rod 13 which is between the bearing 14 and its outer extremity.

As shown in Fig. 2 of the drawings, a pair of short shafts 21 and 22 project from the outer extremity of the rod 13 in a plane perpendicular to this rod and at right angles to each other. At the outer extremities of the shafts 21 and 22, applicators 5 and 6 are respectively located. The shaft 22 lies substantially in the plane of motion of the rod 13 which is produced by the eccentric action of the member 12 and, consequently, a reciprocating rubbing action is produced by the applicator 5 while a pounding or picking effect is imparted by the applicator 6.

Since various structural modifications may be effected in the device illustrated without departing from the scope of my invention, I desire that only such limitations shall be imposed as are indicated in the appended claims.

I claim as my invention:

1. In a massage implement, the combination with a driving shaft, an eccentric member disposed parallel thereto and actuated thereby, a rod laterally disposed with refer-



ence to said member and operating through a hole therein, of applicators secured to one extremity of the rod and to the outer end of the projection, respectively.

2. In a massage implement, the combination with a driving shaft, an eccentric member disposed parallel thereto and actuated thereby, a rod laterally disposed with reference to said member and operating through a hole therein, and an adjustable bearing to which one extremity of the rod is pivotally secured, of means for adjusting the degree of eccentricity of the eccentric member, and applicators secured to the extremities of the rod and said member, respectively.

3. In a massage implement, the combination with a driving shaft, a disk secured to one end of the shaft and having a radial slot, an eccentric member attached to one end of the driving shaft, means for adjusting the degree of eccentricity of said member, a stationary frame having a handle the center line of which is substantially perpendicular to the center line of the driving shaft, and an applicator secured to the outer end of the eccentric member, of a rod substantially perpendicular to the eccentric member and operating through a hole therein and an adjustable bearing near the extremity of the handle, one end of said rod being pivotally secured to the adjustable bearing, and applicators projecting laterally from the other end of the rod.

4. In a massage implement, the combination with a stationary frame, a shaft rotatably mounted thereon, a driving motor therefor and a disk secured to one extremity of the shaft and having a radial slot, of a block adjustably mounted in the radial slot, an eccentric member rotatably supported by the adjustable block in a line substantially parallel to the driving shaft, a rod perpen-

dicular to the eccentric member and operating through a hole therein, a bearing to which one end of the rod is pivotally secured and applicators projecting laterally from the other end of the rod.

5. In a massage implement, the combination with a driving shaft having an eccentric end member, of a laterally disposed rod having a pivotal support and an applicator at its respective ends and having a loose intermediate connection to said eccentric end member.

6. In a massage implement, the combination with a driving shaft having a laterally adjustable end member, of a laterally disposed rod loosely attached to said end member, an adjustable support for one end of said rod and an applicator on the other end thereof.

7. In a massage implement, the combination with a driving shaft and a laterally adjustable member attached to one end thereof, of a laterally disposed rod having an intermediate loose connection to said adjustable member and an applicator at one end, and an adjustable support upon which the other end of the rod is pivotally mounted.

8. In a massage implement, the combination with a driving shaft and a laterally adjustable member attached to one end thereof, of a laterally disposed rod having an intermediate loose connection to said adjustable member and an applicator at one end, and a support upon which the other end of the rod is pivotally mounted.

In testimony whereof, I have hereunto subscribed my name this 28th day of Dec., 1907.

FRED R. KUNKEL.

Witnesses:

H. M. SCHEIBER,  
BIRNEY HINES.