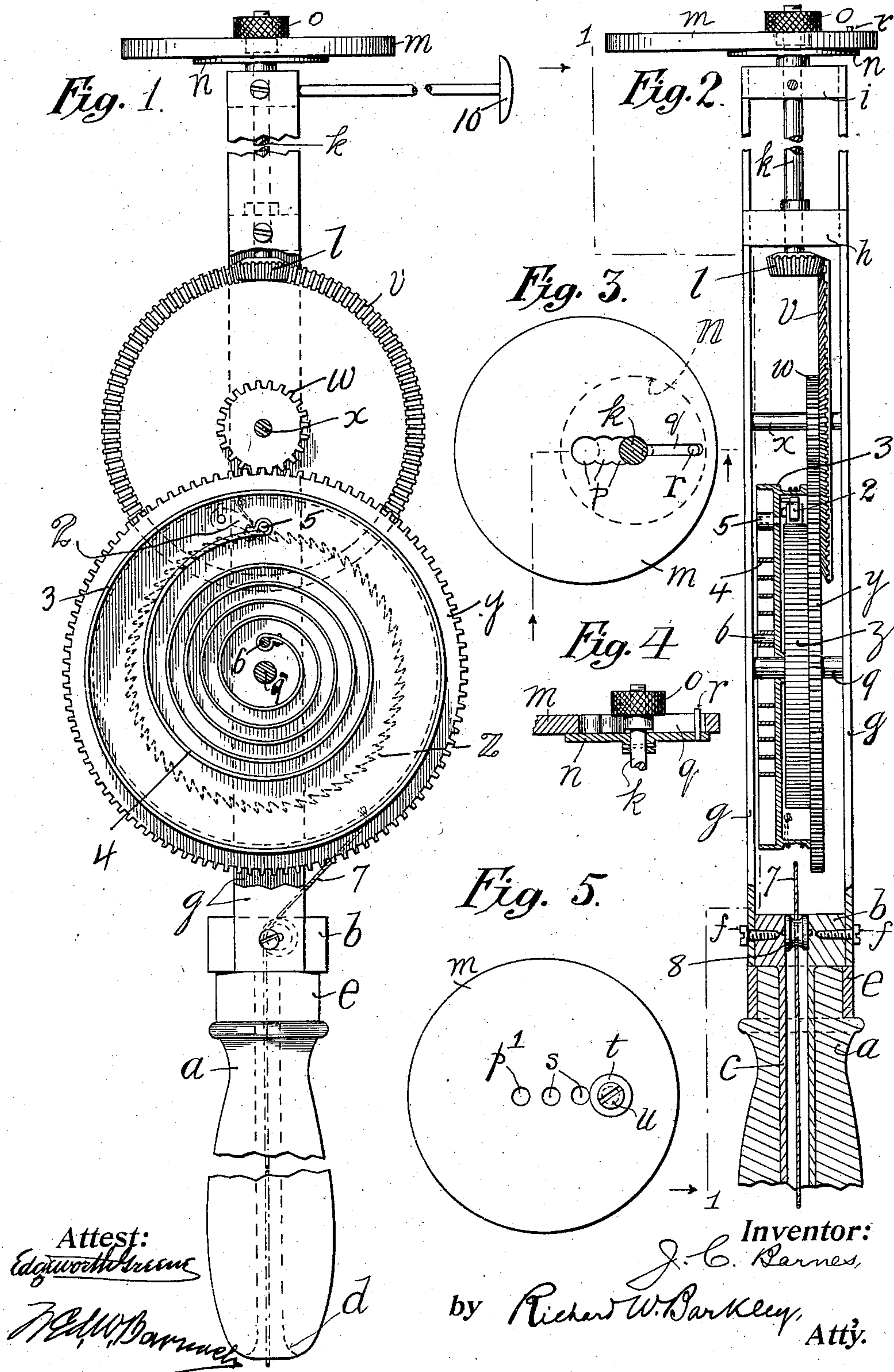


No. 860,182.

PATENTED JULY 16, 1907.

J. C. BARNES.  
MASSAGE APPARATUS.  
APPLICATION FILED JAN. 20, 1906.



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# UNITED STATES PATENT OFFICE.

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## MASSAGE APPARATUS.

No. 860,182.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed January 20, 1906. Serial No. 296,942.

*To all whom it may concern:*

Be it known that I, JAMES C. BARNES, a subject of the King of England, and a resident of Leichhardt, Sydney, New South Wales, in the Commonwealth of Australia, have invented a certain new and useful Improvement in Massage Apparatus, of which the following is a specification.

This invention has for its object the provision of means whereby a person may, with ease and convenience and without the necessary aid of another, treat effectively every part of his body by a hand-operated massage; vibratory, or beating or rubbing apparatus, with ease reaching or treating parts of the body where it is impossible or inconvenient even, to use a crank-operated apparatus.

The invention consists of features of construction and combinations of devices hereinafter described and more particularly pointed out in the appended claims.

One embodiment of the invention is illustrated in the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side elevation, partly sectioned on the line 1—1 of Fig. 2; Fig. 2 is a front elevation, partly in central longitudinal section; Fig. 3 is a face view of the weight; Fig. 4 is a transverse section of the same; and Fig. 5 is a view of a modified arrangement for varying the leverage of the weight.

In the drawing, the reference character *a* marks a handle, to one end of which is fixed a metal block *b*. Preferably, the metal block *b* has a hollow tang or shank *c* which passes through the handle *a* and the outer end of which is flared, as shown at *d*. If the tang or shank does not extend through the handle, the end of the handle is protected by a flared metal ferrule driven into the same, the handle being hollow, for a purpose hereinafter set forth. A ferrule *e* is driven on to the end of the handle at the end where the block *b* is.

Secured to the block *b* by screws *f* are the side bars *g*, which bars are secured to other blocks *h i* by screws. The blocks *h i* provide bearings for a shaft *k*, to which shaft a bevel or miter pinion *l* and an eccentric *m* are made fast. As shown in Figs. 1 to 4, the eccentric *m* is clamped to the shaft *k* between a collar or disk *n*, pinned on the shaft, and a nut *o* which screws on the end of the shaft. The eccentric *m* may be provided with one or more connected holes *p* therein, in line with each other, and with the connecting opening of such a size that the nut *o*, which fits down into a hole *p*, will not allow the eccentric to slip from one hole *p* to another, while a slot *q* for a pin *r* on the disk *n*, provides means for preventing the eccentric and the shaft from having independent motion of rotation. Or the eccentric *m* may have a hole *p*<sup>1</sup> for the shaft *k* and be provided with holes *s* for a screw *u* which holds an

adjustable weight *t* in place. By either construction, the distance between the center of rotation of the eccentric and its center of mass may be varied, and thereby vary the hammer effect of the rotating eccentric. Or the said distance may be varied by other means.

The pinion *l* meshes with a bevel or miter gear *v* which is fast on a transverse shaft *x*, journaled in the side bars *g*. A spur pinion *w* is also fast on said shaft *x*. Or the gears *v w* may be fast to each other and be journaled on the shaft *x*. Meshing with the gear *w* is a gear *y*, which turns on a shaft 9 mounted in the bars *g*. Fast to the gear *y* is a ratchet-wheel *z*, with which a spring pawl 2 engages, the said pawl 2 being pivotally connected with the drum 3, also mounted on the shaft 9. Within the drum 3 is a spring 4 whose ends are looped over pins 5 and 6, respectively fast to the drum and to a side bar *g*. A cord 7 has one end fast to the drum and its other end is passed out through the hollow handle *a* over a pulley 8. Outside the handle, the said cord 7 may be provided with a stop to limit the winding up of the cord by the drum, thus leaving the spring in the drum under some tension when the parts are at rest in normal position.

Any suitable or desired form of beater, as 10, may be screwed into the block *i*, and such beaters may be removed at pleasure.

In the use of the apparatus above described, the device is firmly grasped by the handle with one hand, while the cord is taken in the other hand. The beater 10 is placed on any part of the body, and the cord is then drawn out and slacked up, alternately, thus imparting a rapid motion of rotation to the eccentric *m* through the medium of the described mechanism, the cord driving the gearing as it is drawn off the drum, and the spring rewinding the cord on the drum as the cord is slacked up. Since the center of mass of the eccentric is off the center of rotation, the rotation of the eccentric *m* pulls the frame and shaft *k* with it, thus imparting a gyratory motion to that end of the apparatus and so moving the beater that it dances upon the body. The apparatus may be used in any position thereof and on all parts of the body, since the cord 7 may be pulled in any direction without taking the beater off the body or impeding the action of the apparatus or inconveniencing the operator, since side-pull by the cord is taken by the hand holding the handle *a*.

The invention is not limited to the precise form thereof shown in the drawing and above described, but may be otherwise embodied without departing from the claims herein. Equivalents, as another form of the one-way clutch, may be substituted for elements shown and described.

What is claimed is—

1. In a massage-apparatus, the combination with the beater or rubber, of a shaft and a rotating weight for ac-

tuating said beater, a handle, a framework attached to said handle and supporting the shaft, a spring-drum, a cord for operating said drum, the spring rewinding the cord on the drum, and tooth gearing provided with a one-way clutch device for connecting said drum and said shaft. 5

2. In a massage-apparatus, the combination with the beater or rubber, of a spring-drum, a cord for operating said drum, the spring rewinding the cord on the drum, a shaft, and tooth gearing provided with a one-way clutch device for connecting said drum and said shaft. 10

3. In a massage-apparatus, the combination with the beater or rubber, of a shaft and a rotating weight for ac-

tuating the same, a handle, a framework attached to said handle and supporting said shaft, a spring-drum, a cord for operating said drum, the spring rewinding the cord on the drum, said cord leading out through the handle end-wise thereof, and tooth gearing provided with a one-way clutch device for connecting said drum and said shaft. 15

Signed at New York city in the county of New York and State of New York this 19th day of January A. D. 1906. 20

JAMES C. BARNES.

Witnesses:

A. WHITE,

R. W. BARKLEY.