

No. 667,357.

Patented Feb. 5, 1901.

A. ANDREAE.  
MESSAGE DEVICE.

(Application filed May 9, 1900.)

(No Model.)

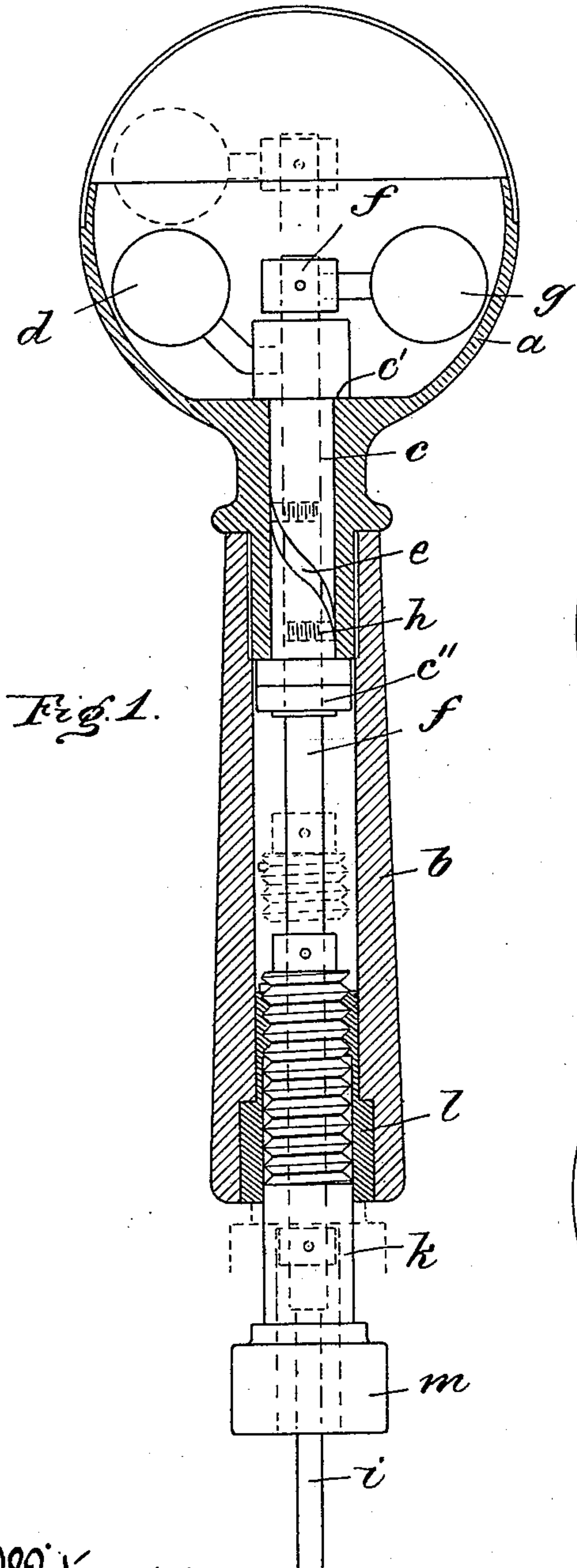


Fig. 1.

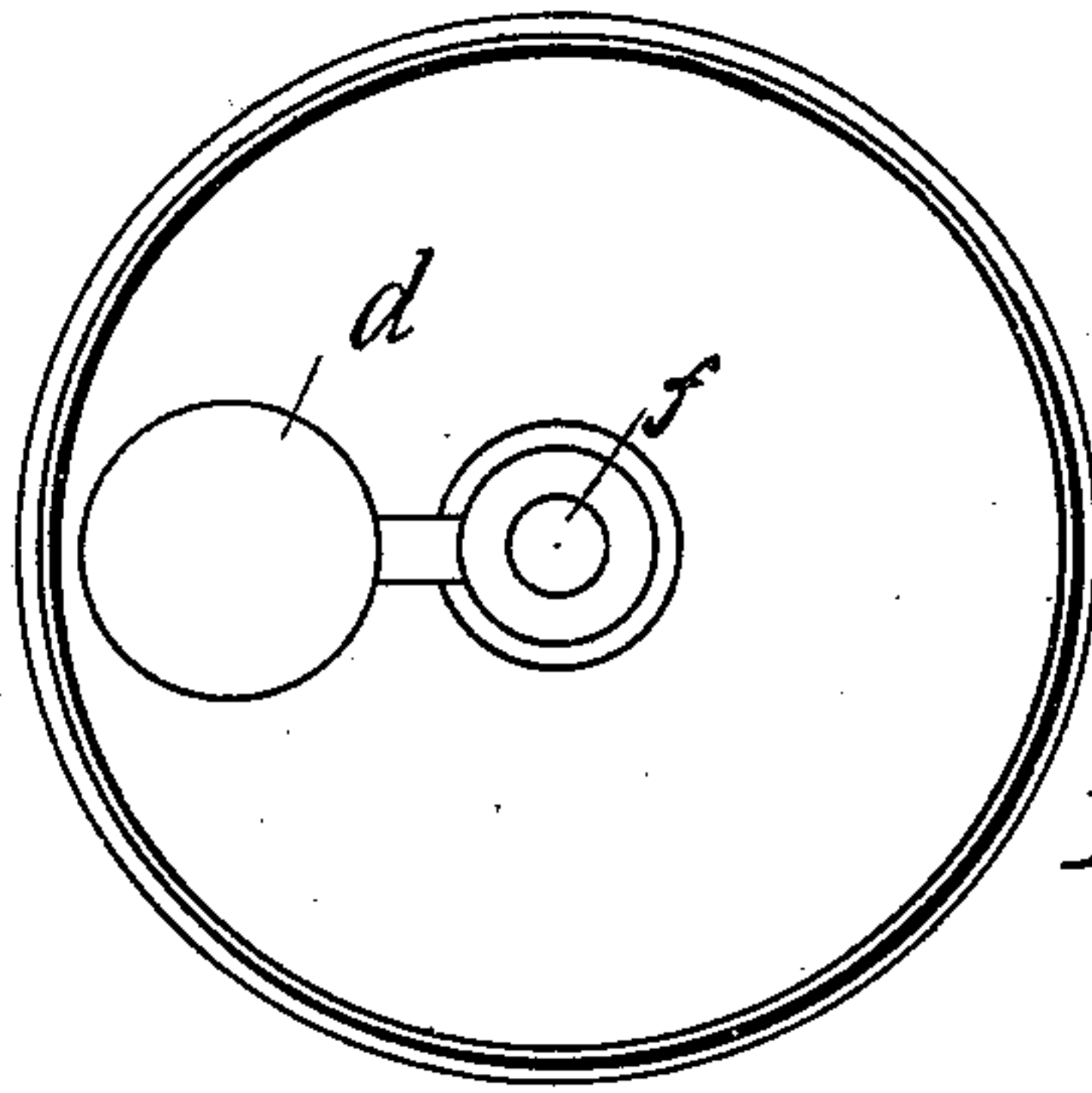


Fig. 2.

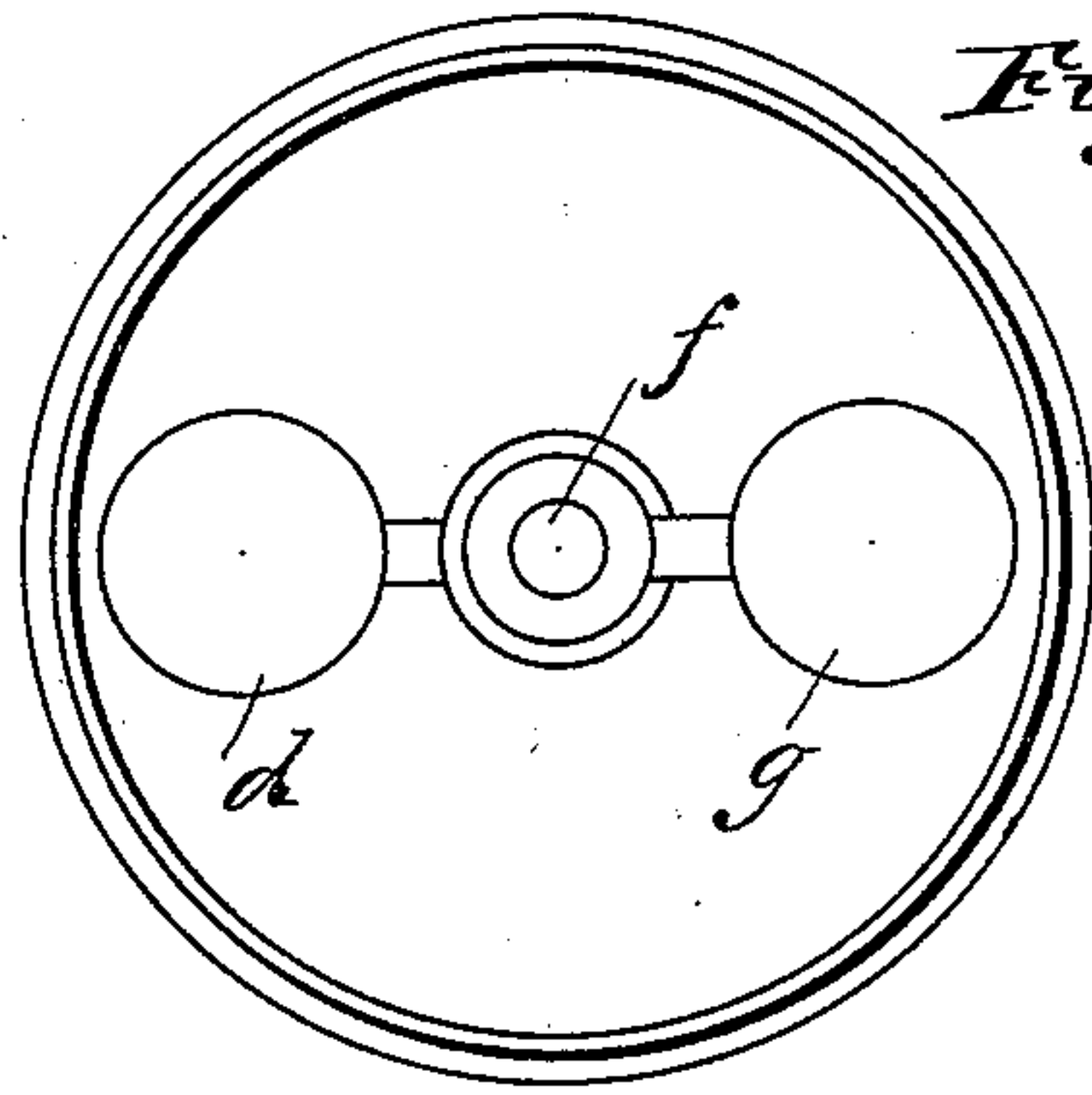


Fig. 3.

Witnesses

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# UNITED STATES PATENT OFFICE.

AUGUST ANDREAE, OF FRANKFORT-ON-THE-MAIN, GERMANY.

## MASSAGE DEVICE.

SPECIFICATION forming part of Letters Patent No. 667,357, dated February 5, 1901.

Application filed May 9, 1900. Serial No. 16,000. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST ANDREAE, mechanical engineer, residing at Kirchnerstrasse No. 6, Frankfort-on-the-Main, in the  
5 Empire of Germany, have invented new and useful improvements in Massage Devices, (for which Letters Patent have been applied for in Germany, E. 6,949, 11/30, dated April 12, 1900,) of which the following is a specification.

10 My new massage device is of the well known type of devices having a quickly-rotating weight which transmits the shocks generated by its rotation to a case which is applied to the place of the body to be massaged.

15 My invention relates particularly to an easy and quick regulation of the effect without varying the number of revolutions. This is attained by varying the momentum imparting the shocks to the case by constructing it in  
20 two parts, which may be set with respect to each other to increase or to lessen the momentum of the shocks effected by the quick rotation. For this purpose two weights are fixed on concentric rotating shafts in a manner  
25 that the angular position of the two weights might be altered by turning the one shaft with respect to the other. If the two weights are at the ends of the two radial arms pointing in the same direction, the momentum of one is  
30 added to that of the other. If, however, they are placed opposite to each other, the momentum of one weight is reduced by that of the other. In every intermediate position a more or less strong effect will be obtained.

35 In order that my invention may be better understood, I have affixed drawings.

Figure 1 is a section through the device. Figs. 2 and 3 show the different positions of the weights.

40 *a* is a metal case having a handle *b* of hard rubber. The hollow shaft *c* is rotatably fixed at the case by its shoulder *c'* and nut *c''*. The metal globe *d* is fixed on an arm of the shaft *d*. *f* is the inner shaft, carrying a globe *g*. The  
45 shafts *c* and *f* are connected by a pin *h* engaging a slot *e*, which is in shape of a steep screw-thread. The shaft *f* is rotated by a flexible shaft *i*, connected with its end and driven by a motor.

50 If the shaft *c* is shifted with relation to

shaft *f* in the direction of its axis, the globes *d* and *g* will alter their angular position. For this purpose a nut *l* is fixed to the handle *b* and receives a hollow spindle *k*, which may be turned by hand at its end *m*. As the shaft  
55 is rotatably connected with the screw-spindle *k* and cannot move axially with relation to it, it may be axially shifted by turning the screw-spindle *k*, and thereby the momentum of the shocks is altered without altering the  
60 speed or shutting off the motion. The position representing the maximum momentum is indicated in dotted lines.

Now, what I claim, and desire to secure by Letters Patent, is—

1. In a massage device, the combination of a plurality of rigidly-supported weights maintained at all times at a fixed distance from the center of rotation of said weights, means to rotate the weights and means for adjusting  
70 the position of the weights with relation to each other and in the action of the device and means for maintaining the weights in such adjusted position during the rotation thereof, substantially as described. 75

2. In a massage device, the combination of a plurality of rotating weights maintained at all times at a fixed distance from the center of revolution of said weights with means for shifting the position of the weights with relation to each other and maintaining the same  
80 in the shifted position by turning the same relatively to each other around their axis of rotation in the action of the device, substantially as described. 85

3. In a massage device the combination of two rotating weights with a hollow and a solid concentric shaft fixed to the weights respectively and connected by a pin and slot  
90 substantially as described. 90

4. In a massage device the combination of a hollow shaft rotatably fixed to a case and carrying a weight with a solid shaft rotatably fixed in the hollow shaft and connected with it by a transverse slot and pin and means to  
95 shift the solid shaft in an axial direction substantially as described. 95

5. In a massage device the combination of a hollow shaft rotatably fixed to a case and carrying a weight with a solid shaft rotatably  
100 100

fixed in the hollow shaft and connected with  
it by a transverse slot and pin and rotatably  
connected but locked against axial motion to  
a hollow screw-spindle guided in a nut fixed  
5 to the handle of the device substantially as  
described.

In testimony whereof I have signed my

name to this specification in the presence of  
two subscribing witnesses.

AUGUST ANDREAE.

Witnesses:

GUSTAV SPEISS,  
CHARLES A. SCHUFF.