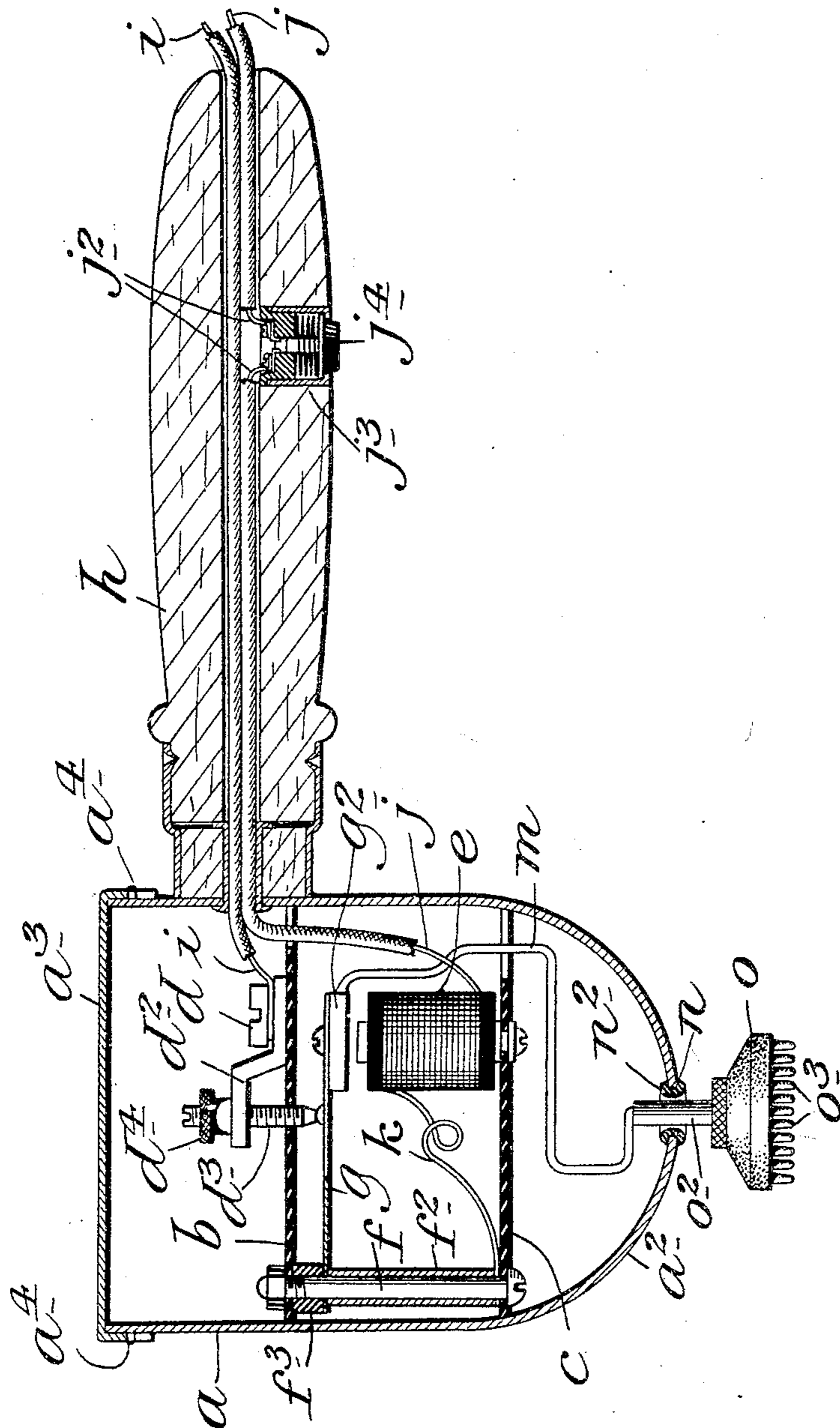


A. H. ARNOLD & A. F. FURBUSH.

VIBRATORY MASSAGE DEVICE.

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WITNESSES

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VIBRATORY MASSAGE DEVICE.

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To all whom it may concern:

Be it known that we, ASA H. ARNOLD and ALBOURNE FRANCIS FURBUSH, citizens of the United States, and residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Vibratory Massage Devices, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to what are known as vibratory massage devices, and the object thereof is to provide an improved device of this class which is simple in construction and comparatively inexpensive, and which may be manipulated by one hand and passed over or used in connection with the face or any part of the body.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, said drawing being a sectional side elevation of my improved massage device.

In the practice of our invention, we provide a case *a* which is preferably circular in cross section and of a length slightly greater than its transverse diameter, and said case at one end is convex or semi-spherical in form as shown at *a*² and the opposite end thereof is provided with a cap or cover *a*³ detachably connected therewith by means of a bayonet joint at *a*⁴, or by means of a screw thread, or in any other way.

The case *a* is provided with two equally spaced transverse partition plates or supports *b* and *c* composed of insulating material, and secured to the upper side of the upper plate *b*, when the device is held as shown in drawing, and by means of a binding post *d* is an angular arm *d*² through which is passed an adjustable screw *d*³ which also passes centrally through the plate *b*, and said set screw is provided with a set nut *d*⁴ by which its position in the plate *b* may be regulated.

Secured to the upper side of the plate *c* and a little to the right of the screw *d*³ is an electro-magnet *e*, and passing through the plates *b* and *c* is a binding and spacing rod or post *f* provided, in the form of construction shown, with a sleeve *f*² and collar *f*³, and connected with the post *f* is a spring armature arm *g* provided with an armature *g*², and which operates in connection with the inner end of the screw *d*³.

Secured to the right hand side of the case *a*

adjacent to the plate *b* is a handle *h* through which is passed two feed wires or cables *i* and *j*, and the wire *j* is divided at *j*² and connected with a push button circuit making and breaking device *j*³, the button *j*⁴ of which projects slightly from the surface of the handle *h*.

The wire *i* passes through the handle *h* and into the case *a* and is connected with one end of the electro-magnet *e*, and another wire *k* connects the other end of said magnet with the post *f*. A curved spring hammer arm *m* is connected with the armature *g*² or with the end of the armature arm *g*, and in the front of the case *a* is an aperture *n* having an insulating collar *n*², and we also provide a hammer *o* having a shank *o*² which passes through the aperture *n* and is connected with the spring hammer arm *m*, and the shank *o*² of the hammer *o* is in line or substantially in line with the screw *d*³, and said hammer is provided with flexible teeth or projections *o*³ in the form of construction shown, but the hammer *o* may be of any desired construction, or may be similar to those of other devices of this class.

It will be understood that the outer ends of the wires *i* and *j* are connected with a suitable battery or any other source of electricity, and in order to close the circuit through the device and operate the hammer *o* all that is necessary is to grasp the handle *h* in such manner as to press the button *j*⁴ inwardly and close the open circuit at *j*². This operation completes the circuit through the wire *i*, the arm *d*², the screw *d*³, the armature arm *g*, the post *f*, the wire *k*, the electro-magnet *e* and the wire *j*, and the spring armature arm *g* is rapidly vibrated, and the vibration of this arm *g* is transmitted to the spring arm *m* and to the hammer *o*, and said hammer is rapidly vibrated.

The vibratory movement of the hammer *o* is in line with the axis of the shank *o*² thereof, and said hammer is also given at the same time a slight lateral motion or movement, and during this operation the hammer *o* is moved about over the face or other part of the surface of the body and the motion of the hammer is transmitted thereto in the usual manner.

My invention is not limited to the exact details of construction herein shown and described, and various changes therein and modifications thereof may be made, within the scope of the appended claims, without

departing from the spirit of my invention or sacrificing its advantages.

Having fully described our invention, what we claim as new and desire to secure by Letters Patent, is:—

1. In a massage device of the class described, a casing provided in one end with an aperture, said casing being provided with transverse supports composed of insulating material, an electro-magnet placed between said supports and connected with one of them, an adjustable screw device passing through the other support into the space between said supports, a binding post connected with both of said supports, a spring armature arm connected with said post and operating in connection with said screw device and provided with an armature which operates in connection with said magnet, a curved spring hammer arm connected with the armature arm, a hammer provided with a shank which passes loosely through the aperture in one end of the case and is connected with said hammer arm, a handle connected with said case, circuit wires passing through said handle, and one of which is connected with said adjustable screw device, and the other with said magnet, said magnet being also electrically connected with said binding post, and said handle being provided with a push button circuit making and breaking device.

2. In a massage device, a casing provided at one end with an aperture and two trans-

verse supports composed of insulating material and dividing said casing into a central and two end compartments, an electro-magnet placed in the central compartment and secured to one of said supports, an adjustable screw device passing inwardly through the other support, a binding post connecting both of said supports, a spring armature arm secured to said binding post and operating in connection with the adjustable screw device and provided with an armature adapted to operate in connection with said magnet, a curved spring hammer arm connected with the end of the armature arm, and a hammer provided with a shank which passes through the aperture in one end of the case, and is connected with said hammer arm, said case being also provided at one side of the handle with circuit wires passing therethrough, one of said wires being connected with said adjustable screw device and the other with said magnet, and said magnet being also electrically connected with said binding post, and said handle being provided with a push button circuit making and breaking device.

In testimony that we claim the foregoing as our invention we have signed our names in presence of the subscribing witnesses this 11th day of April, 1908.

ASA H. ARNOLD.

ALBOURNE FRANCIS FURBUSH.

Witnesses:

GEORGE WOOD,

HENRY B. TURNBULL.