Improvements in apparatus for the electrotherapeutic treatment of the human body.

PATENT SPECIFICATION

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326,918

PROVISIONAL SPECIFICATION.

Improvements in Apparatus for the Electrotherapeutic Treatment of the Human Body.

I, DUNDAS SIMPSON, of 18, Ailsa Road, Westcliff-on-Sea, in the County of Essex, a British Subject, do hereby declare the nature of this invention to be as follows:—

The present invention relates to an improved apparatus for the treatment of the human body.

According to the present invention a roller having a cylindrical, oval, knobbed, spiral or irregular surface, is formed of a number of metal sections insulated from one another, and from a supporting hand or handles, which sections are adapted to be included in circuit with a source of high frequency electrical current.

This high frequency electrical current may be generated from an external battery in circuit with an induction coil and interrupter or trembler, but these parts will preferably be mounted within the apparatus itself.

It will consequently be seen that when the device is used for the treatment of the human body, the electric circuit will be completed through a separate pair or pairs of metal massage rollers and the current will therefore, be passed through the body at these places.

In a preferred form of construction, the device comprises a hand of insulating material, or of metal insulated from the frame of the device upon which it is mounted, a pair or pairs of metal rollers insulated from one another, and from the said handle which serve to enshroud an induction coil and trembler in circuit with a dry battery, small accumulator or the like source of electrical energy, which may be arranged on the same axis as the induction coil and trembler or the like interrupter for converting the direct current of the battery into high voltage high frequency current, or this battery may be received within the induction coil wound in the form of a hollow cylinder.

It is preferred that the battery is in the form of a detachable unit.

The metal rollers may be of similar metal, such as aluminium or of dissimilar metals, one of which is considerably electro-positive relatively to the other.

Dated this 11th day of January, 1929.

W. P. THOMPSON & Co.,
12, Church Street, Liverpool,
Chartered & Registered Patent Agents.

COMPLETE SPECIFICATION.

Improvements in Apparatus for the Electrotherapeutic Treatment of the Human Body.

I, DUNDAS SIMPSON, of 18, Ailsa Road, Westcliff-on-Sea, in the County of Essex, a British Subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to an improved apparatus for the treatment of the human body of the type in which knobbed, cylindrical or the like surfaced rollers or rollers carried by a handle are in circuit with a source of electrical energy.

An apparatus is known comprising a handle which encloses a dry cell and an induction coil provided with an automatic make and break, and has a roller or rollers mounted on it and insulated from it in circuit with said coil. An apparatus is also known comprising a pair of knobbed rollers carried on a frame provided with an external handle and enclosing a dry cell and an induction coil the circuit of which is made and broken by an interrupter operated by the rotation of the rollers in their bearings in the frame.

The device of this invention comprises

a handle enclosing an induction coil, provided with an automatic make and break, and a roller or rollers having a knobbed spiral or irregular surface, mounted on and insulated from the said handle and in circuit with the said coil.

The invention is more particularly described with reference to the accompanying drawings in which:—

Figure 1 is a sectional elevation of one form of construction.

Figure 2 is a bottom plan view.

Figure 3 is a corresponding end sectional view.

A casing 1 is provided with bearings 2, 3, one of which may be adjustable to receive a number of rollers 4, 5, 6. These rollers are insulated from the casing 1 where this is of metal, but normally it will be preferred to make the casing 1 of a moulded plastic material, such as a phenol condensation product or the like, which has insulating properties.

The two outer rollers 4, 6, are connected to a terminal 7 of a trembler coil 8, the primary circuit of which includes a dry cell 9 which may be interchangeable with the ordinary pocket flash lamp cell. This cell can be received within a small sheet metal casing 10 mounted within the casing 1, and is accessible by means of a detachable knurled cap 11.

This knurled cap can be screwed in to force the dry cell against internal contacts, thus closing the circuit through the primary of the induction coil, which may be formed as a switch head controlling this primary circuit.

It will consequently be seen that whenever the article is applied to the surface of the human body, a high frequency current will pass from the centre roller 5 through the body to rollers 4, 6, completing the circuit through the secondary of the induction coil.

The casing 1 is preferably moulded as shown to form a convenient hand grip.

The rollers 4, 5, 6, may be parallel sided, but preferably will be provided with concave and convex grooves, and flanges, respectively as shown. These rollers may be of aluminium or again may be of dissimilar metal, certain of the rollers being more electro-positive than others.

In the arrangement above shown, three separate rollers are used. In a modified form of construction, a single roller may be used formed of a number of separate sections insulated from one another, each pair of sections being arranged in circuit with an induction coil.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An improved apparatus for the treatment of the human body comprising a handle enclosing a dry cell, and an induction coil provided with an automatic make and break, and a roller or rollers having a knobbed, spiral, or irregular surface mounted on and insulated from the said handle and in circuit with the said coil.

2. An improved apparatus for the treatment of the human body as claimed in claim 1 in which each roller is formed of a number of separate sections insulated from one another the circuit being complete by a part of the human body shorting two sections.

3. An apparatus for the treatment of the human body as claimed in claim 1 in which the handle is of insulated material and partly enshrouds the rollers.

4. An apparatus for the treatment of the human body constructed and arranged to operate substantially as described with reference to the accompanying drawings.

Dated this 29th day of June, 1929.

W. P. THOMPSON & Co.,
12, Church Street, Liverpool,
Chartered & Registered Patent Agents.

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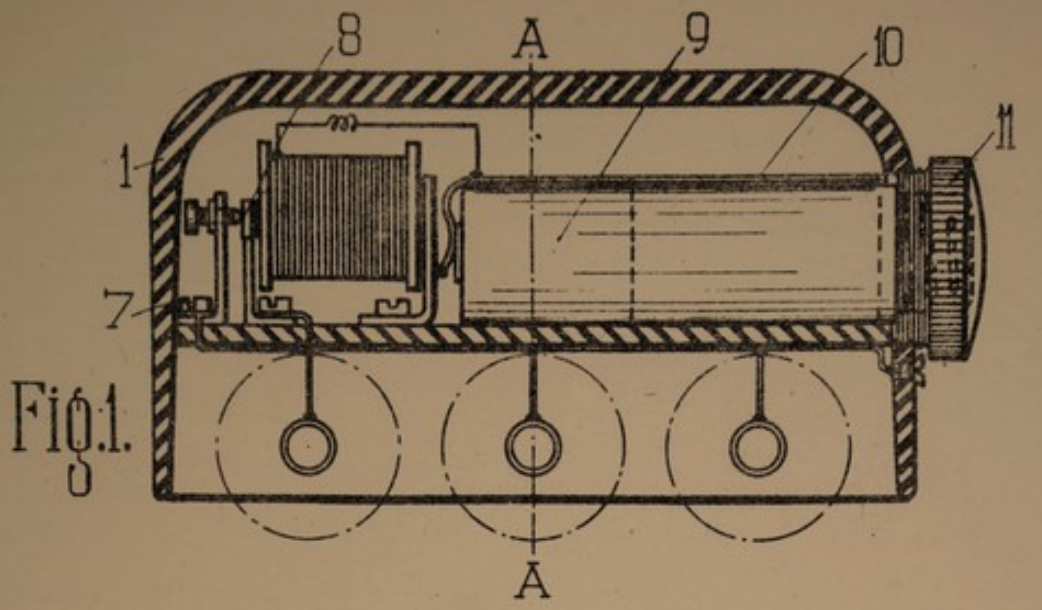

Fig.1.

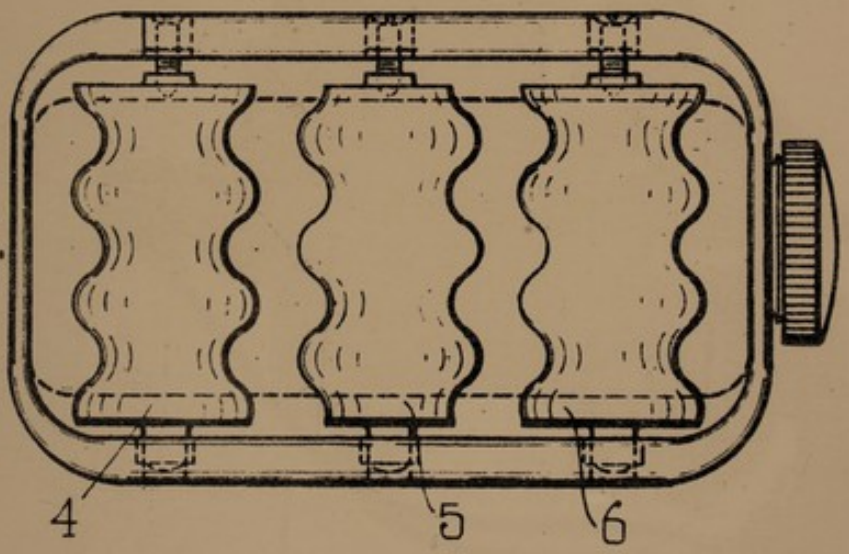

Fig.2.

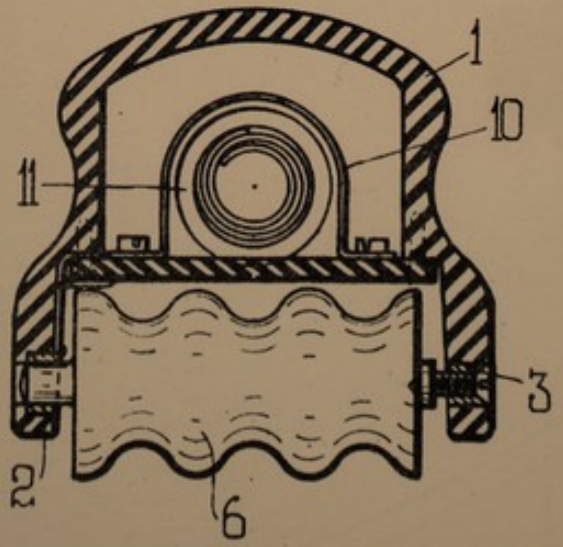

Fig.3.

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