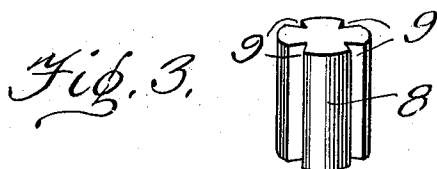
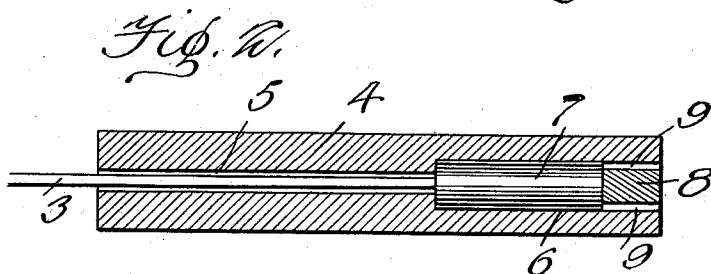
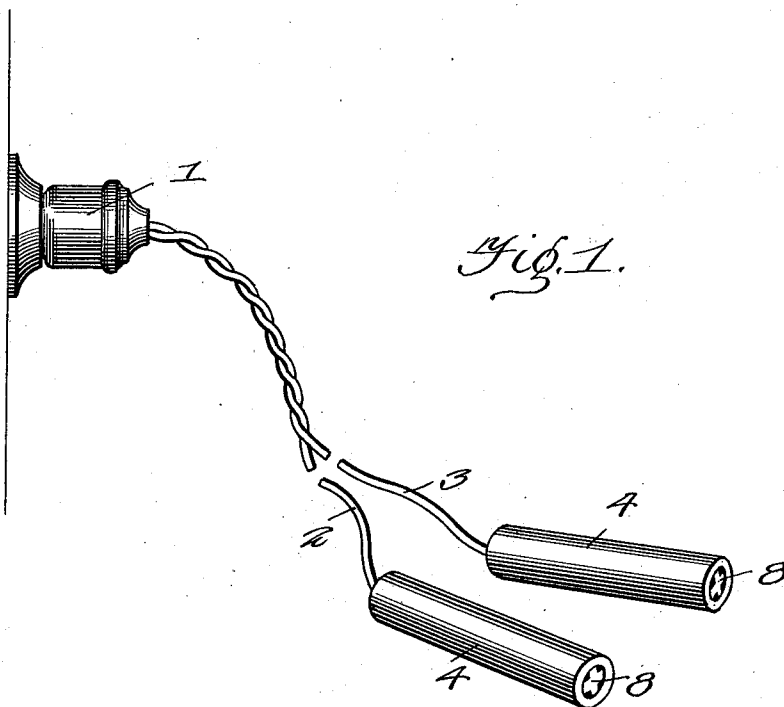


M. THULIN.
ELECTRIC APPLIANCE.
APPLICATION FILED APR. 1, 1910.

1,014,537.

Patented Jan. 9, 1912.



Witnesses

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MARTIN THULIN, OF EPHRAIM, UTAH.

ELECTRIC APPLIANCE.

1,014,537.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed April 1, 1910. Serial No. 552,890.

To all whom it may concern:

Be it known that I, MARTIN THULIN, a citizen of the United States, residing at Ephraim, in the county of Sanpete and State of Utah, have invented new and useful Improvements in Electric Appliances, of which the following is a specification.

The invention relates to an improved means for delivering an electric current to a patient for remedial effect, and more particularly improved handles forming the terminals of the respective conductors.

The main object of the present invention is the provision of a handle for electro-medical use constructed to permit the application of a conductor thereto in a simple and effective manner and made up of a non-conducting material to prevent the passage of the current to the patient except following the initial treatment of the handles.

The invention in its preferred details of construction will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a perspective view of the device complete. Fig. 2 is a longitudinal sectional view of one of the handles. Fig. 3 is a perspective view of the closing plug.

Referring particularly to the accompanying drawings, the improved device includes in its conventional features a plug 1 designed for connection to any energized socket, from which plug extend conductors 2 and 3 of any approved type. The terminals of the conductors are provided with handles 4 of identical construction, which handles form the novel feature of the present invention.

The handle 4 is centrally formed with a bore 5 which, adjacent what will be termed the forward or free end of the handle, is circumferentially enlarged, forming a recess 6 of materially greater diameter than the bore 5. The conductor terminal is preferably provided with a metallic body 7 having a size and shape corresponding with the similar dimensions of the channel 6 except that said body is of less length than the channel. The bore 5 is of a size to more or less loosely receive a conductor, while the body 7 fits more or less snugly in the channel. The body 7, which is preferably a metallic conductor, thus forms one of the terminals, and when in place, as shown in

Fig. 2, they prevent endwise movement of the conductor relative to the handle in one direction. That portion of the channel 6 in advance of the forward end of the body 7 is to be closed by a plug 8, snugly seating within the same and preferably bearing against the end of the body. The plug is formed on its peripheral surface with a series of longitudinal grooves 9 which, when the plug is in place, form a series of openings between the surface of the plug and the inner surface of the channel 6.

In use, with the plug connected in the socket, the free ends of the handles are dipped in the water, or if desired in any other medicinal liquid. Such liquid will thus fill the grooves 9 in the plug, establishing a path of conductivity between the body 7 and the hand or other portion of the patient. By this means the medicine is used as a conductor, and will therefore have increased effect in conjunction with the electric current. A small quantity only of the liquid is used and the presence or absence of the same may be readily determined by the presence or absence of the current to the patient, as in the absence of the liquid in the grooves 9 no current whatever will pass to the patient, as the handles and plug are of a non-conducting material.

The device has been found particularly efficacious in the treatment of rheumatism or the like in which one of the handles is brought into contact with the foot of the patient and the other grasped by the hand.

Having thus described the invention, what I claim as new, is:—

An electrode for electro-medical use comprising a non-conductive casing of uniform diameter having a bore loosely receiving a conductor, and a counter-bore snugly receiving an enlarged conductor terminal, a plug in the outer end of the counter-bore retaining said terminal against movement within the said casing, said plug having liquid-receiving grooves extending longitudinally from the enlarged conductor terminal to the exterior of the electrode.

In testimony whereof I affix my signature in presence of two witnesses.

MARTIN THULIN.

Witnesses:

ANDREAS OLSEN,
JAMES P. LARSON.