

(No Model.)

W. H. PAYNE.
ELECTRIC BODY WEAR.

No. 502,753.

Patented Aug. 8, 1893.

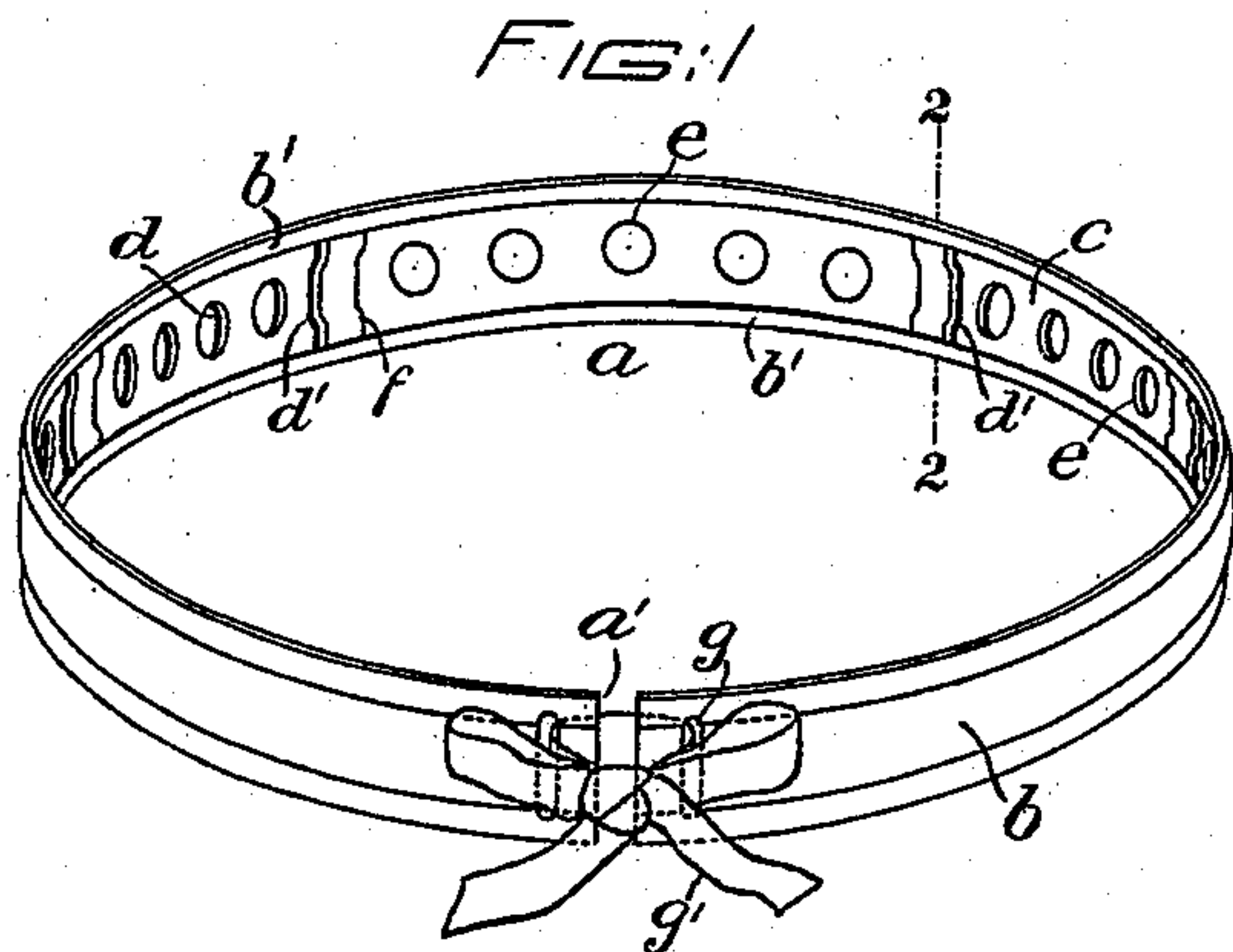


FIG: 2

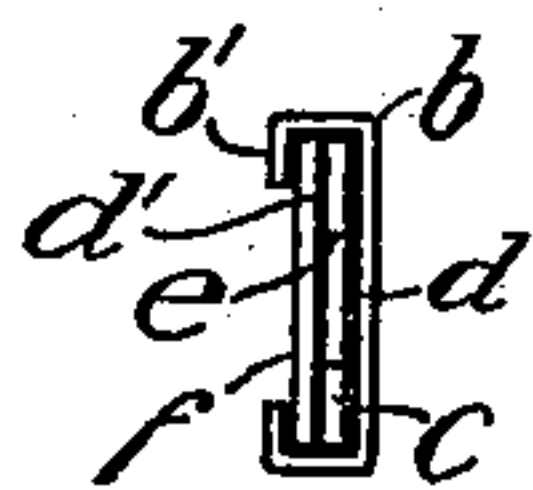


FIG: 3

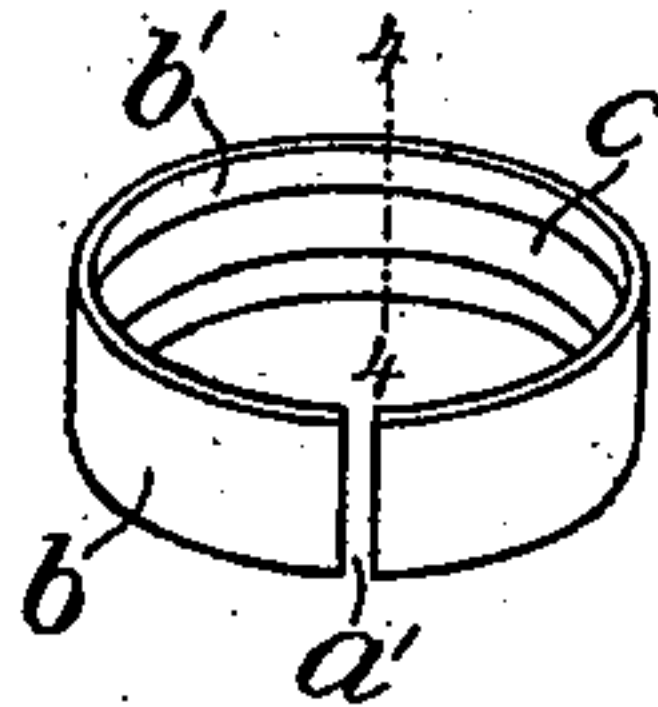
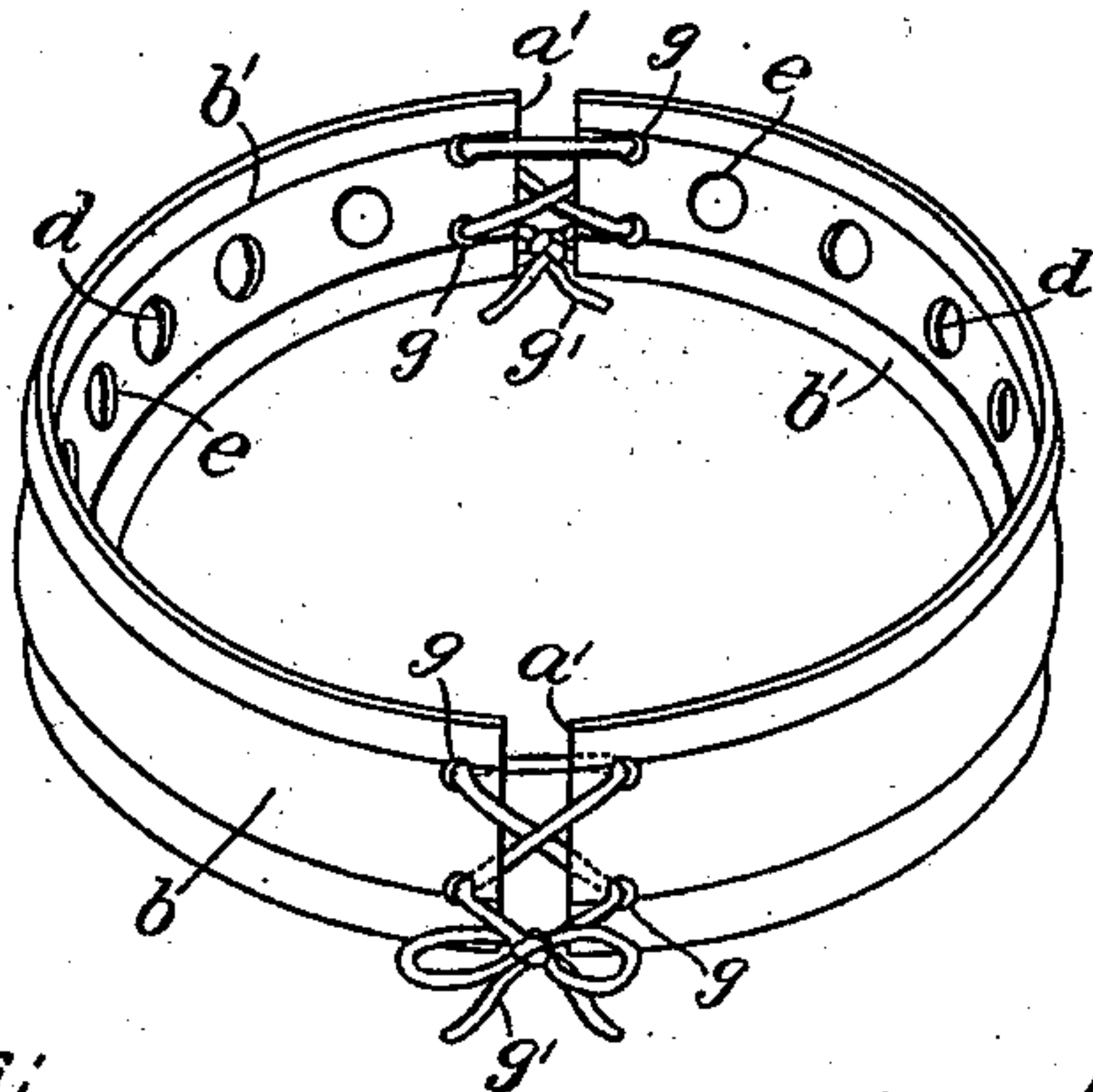


FIG: 4



FIG: 5



WITNESSES:
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ATT'Y.

UNITED STATES PATENT OFFICE.

WILLIAM H. PAYNE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO GUSTAV G. ALTORFER, OF SAME PLACE.

ELECTRIC BODY-WEAR.

SPECIFICATION forming part of Letters Patent No. 502,753, dated August 8, 1893.

Application filed February 18, 1893. Serial No. 462,821. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PAYNE, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Rheumatic Remedial Body Devices, of which the following is a specification.

The principal object of my invention is to provide a simple, durable, efficient, reliable and comparatively inexpensive remedial article of apparel, as a finger ring, anklet, bracelet or somewhat similar article constructed of such materials and arranged in such manner that a galvanic or other electric action is established, for relieving as well as curing rheumatism, neuralgia and other kindred diseases or ailments.

My invention consists of a remedial article adapted to be worn in contact with the skin and comprising a band or annulus having a gap or hiatus and consisting of superposed strips of electro positive and negative materials separated from each other by interposed insulating material and arranged in such manner that the electro positive and negative materials thereof contact with the skin of the wearer.

My invention further consists of a remedial article adapted to be worn in contact with the skin and comprising a band or annulus having a gap or hiatus and consisting of superposed strips of electro positive and negative materials separated from each other by an interposed layer of insulating material and the edges of the external strip folded over onto the internal strip to permit both strips to contact with the skin of the wearer.

My invention further consists of a remedial article adapted to be worn in contact with the skin and comprising a band or annulus having a gap or hiatus and consisting of superposed strips of electro positive and negative materials separated from each other by interposed insulating material and the edges of the external strip folded over onto the internal strip and the insulating material and internal strip perforated to permit both strips to contact with the skin of the wearer.

My invention further consists of a remedial article adapted to be worn in contact with the

skin and comprising a band or annulus having a gap or hiatus and consisting of a superposed strip of electro positive and negative materials, whereof the edges of the external strip are folded over onto the internal strip, bars of a different electro positive or negative material inserted beneath the folded edges of the external strip and insulating material interposed between each of the electro positive and negative materials; and my invention further consists of the improvements in remedial body devices hereinafter described and claimed.

The nature, characteristic features and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof; and in which—

Figure 1, is a perspective view of an anklet embodying features of my invention and having a gap or hiatus spanned by a ribbon. Fig. 2, is a sectional view taken on the line 2—2, of Fig. 1. Fig. 3, is a perspective view of a finger ring embodying features of my invention. Fig. 4, is a sectional view taken on the line 4—4, of Fig. 3; and Fig. 5, is a perspective view of a two part anklet or bracelet connected or spanned to each other by ribbons.

In the drawings *a*, is a band or annulus having a gap or hiatus as at *a'*, and consisting of superposed strips *b* and *c* of electro positive and negative materials. In the present instance the strip *b*, is of aluminium, and the strip *c*, is of copper, although other electro positive and negative metals or materials may be employed.

d, is a layer of insulating material as paper or parchment, interposed between the strips *b* and *c*. The edges *b'*, of the strip *b* and of the layer of insulating material *d*, are folded over on to the strip *c*, and thus serve to retain the component parts of the band or annulus *a*, to place, and to permit portions of both of the strips *b* and *c*, to contact with the skin of the wearer, for a purpose to be presently described.

In Figs. 1 and 2, the strip *c*, and layer of insulating material *d*, are perforated as at *e*, in order to permit the skin of the wearer to contact with a comparatively large portion of

the strip *b*, and use is made of bars *f*, of a third electro positive or negative material ranging transversely of the band or annulus *a*, and having their extremities inserted beneath the folded edges *b'*, of the strip *b*, and the layer of insulating material *d*. These bars *f*, are insulated from the strip *c*, by means of an interposed layer *d'*, of insulating material. In this instance the annulus or band *a'*, is intended for application to the ankle and is provided with slots *g*, for the reception of a ribbon or lacing *g'*, by means of which the complete anklet is secured to place upon the limb of the wearer. The anklet or bracelet illustrated in Fig. 5 is made in two parts and the parts connected with each other by means of spanning lacers or ribbons *g'*. The advantage of such a construction is that an inelastic or non-yielding metal or material may be used in such cases and by means of the lacers or ribbons *g'*, such a device can be made to more completely conform and adhere to the shape of the limb.

The mode of operation of the hereinabove described band or annulus when placed in contact with the skin, is as follows:—All of the electro positive and negative elements of the band or annulus *a*, are in contact with the skin, and the heat and moisture of the latter acting upon these elements give rise to a difference of potential at the end portions of the band or annulus *a*, and adjacent to the hiatus or gap *a'* thereof, and also at other portions, so that a current or currents due to such differences of potential circulate from the end portions of the band or annulus and also from other parts thereof through, over and around portions of the body of the wearer, and these currents either by their action upon the circulation of the blood or in other respects effect a cure or relief to those suffering from rheumatism, neuralgia and other kindred diseases.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A remedial battery and electrode adapted to be worn in contact with the skin and comprising a band or annulus consisting of superposed strips of electro-positive and electro-negative materials separated from each other by interposed insulating material and the edges of the external strip and insulating material folded over onto the inner face of

the internal strip, whereby both strips contact with the skin of the wearer and create a difference in potential, substantially as and for the purposes set forth.

2. A remedial battery and electrode adapted to be worn in contact with the skin and comprising a band or annulus having a gap or hiatus and consisting of superposed strips of electro-positive and electro-negative materials separated from each other by interposed insulating material and the edges of the external strip and insulating material folded over onto the inner face of the internal strip, whereby both strips contact with the skin of the wearer and a difference in potential is created near the gap or hiatus, substantially as and for the purposes set forth.

3. A remedial battery and electrode, comprising a band or annulus having a gap or hiatus and consisting of superposed strips of electro-positive and electro-negative materials separated from each other by interposed insulating material and the edges of the external strip and insulating layer being folded inward onto the internal strip and the insulating layer and internal strip being perforated, whereby both strips contact with the skin of the wearer, substantially as and for the purposes set forth.

4. A remedial battery and electrode, comprising a band or annulus having a gap or hiatus and consisting of superposed strips of electro-positive and electro-negative materials, whereof the edges of the external strip are folded inward onto the internal strip, and whereof the internal strip is perforated, bars of a different electro-positive or electro-negative material inserted beneath the folded edges of the external strip, and layers of insulating material interposed between each of said electro-positive and electro-negative materials and the insulating material perforated opposite the perforations in the internal strip to permit all of said strips to contact with the skin of the wearer, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

WILLIAM H. PAYNE.

Witnesses:

THOMAS M. SMITH,
RICHARD C. MAXWELL.