

(No Model.)

J. E. LUCE.
ELECTRIC BAND.

No. 569,649.

Patented Oct. 20, 1896.

Fig. 1.

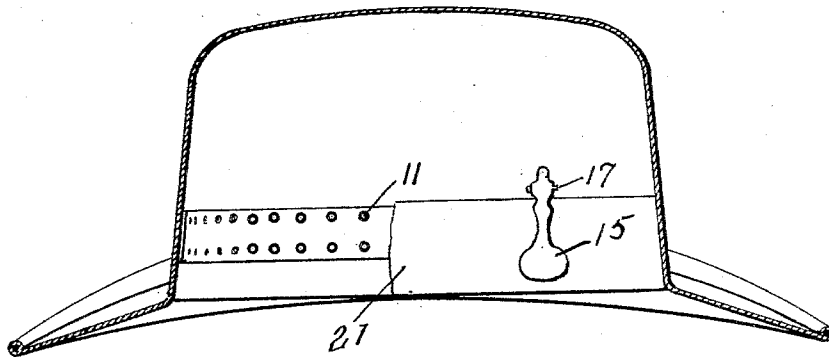


Fig. 2.

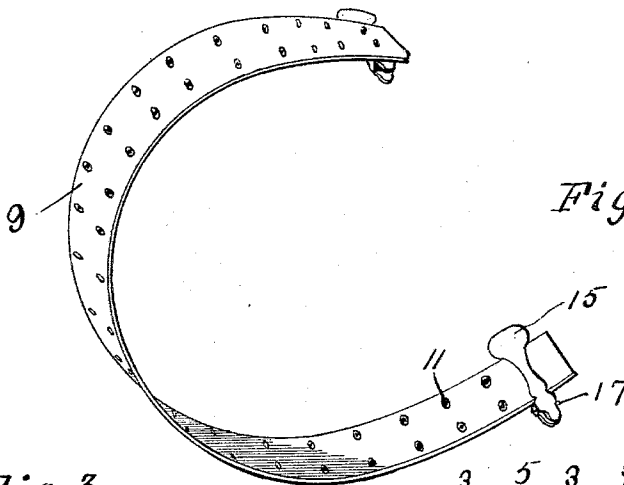


Fig. 3.

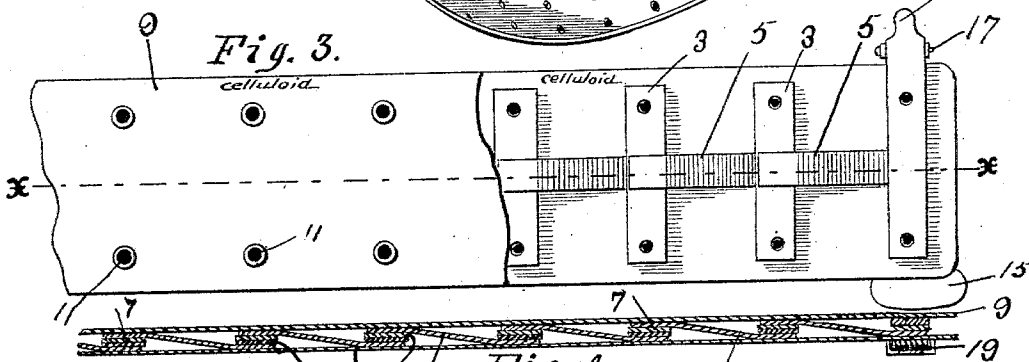


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN EDWIN LUCE, OF MINNEAPOLIS, MINNESOTA.

ELECTRIC BAND.

SPECIFICATION forming part of Letters Patent No. 569,649, dated October 20, 1896.

Application filed October 11, 1895. Serial No. 585,394. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDWIN LUCE, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Electric Bands, of which the following is a specification.

This invention relates to an improved electric band designed especially to be worn in the hat, but applicable for other purposes, such as for use as a body band or belt.

The invention consists generally in the constructions and combinations hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a sectional elevation of a hat having my electric band arranged therein. Fig. 2 is a perspective view of the band. Fig. 3 is a detail sectional elevation. Fig. 4 is a detail section on the line *xx* of Fig. 3.

In the drawings, 3 represents suitable strips or sheets of zinc, to which are soldered or otherwise secured the longitudinal strips 5, formed of copper. These two different metals being connected in this manner are arranged in series, with the free end of the strip of copper overlying the next strip of zinc and on the opposite side thereof from the end of the next copper strip. A strip of felt 7 or other suitable material is arranged between the free end of the copper strip and the succeeding zinc strip. These strips are arranged in succession and are of any desired length to form a belt of any size.

9 9 represent sheets of celluloid or like suitable material arranged upon opposite sides of the metal strips, and these celluloid sheets are preferably secured together and the metal strips are secured thereto by means of suitable eyelets 11, which pass through the celluloid strips and through the ends of the zinc strips and also through the layers of felt, whereby the whole is preferably secured together.

At the end of the belt or band the zinc strip is preferably provided with a prolongation or ear 13, to which is pivotally secured the metal plate 15, this plate being preferably

hinged to the plate 13 by means of a suitable pin or pintle 17, and a spring 19 is arranged upon this pin between the end of the zinc plate and the free end of the plate 15. The opposite end of the plate 15 is preferably enlarged, so as to form a broad flat bearing-surface.

In using the device in a hat it is saturated with vinegar or other suitable acid before being put in place, and the band is then placed inside of the sweat-band or leather of the hat, the plates 15 projecting over the sweat-band 21, as shown in Fig. 1, and the spring 19 serves to press the plate 15 against the sweat-band, thereby securing the electric band in position and preventing it from falling out when the hat is turned upside down. The plates 15 also form the poles at the opposite end of the band, and these are preferably so arranged that when the hat is in position upon the head of the wearer these plates come upon the opposite sides of the forehead at points about over the temples.

The electric band thus constructed will be found, when in place, to generate sufficient electricity to produce a soothing effect upon the wearer, and the device is especially applicable for the use of persons who are subject to headaches, neuralgia, grayness, and baldness.

As before stated, by using a different fastening device the band may be used as a body band or belt, and hence be applied to any part of the body.

I do not confine myself to the use of the particular metals specified, as others capable of producing galvanic action may be substituted therefor.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An electric band comprising two bands or strips of a material which is an electric insulator, a chain of thin cells provided between said bands or strips, permanent fastenings between the cells and the bands or strips, terminal electrodes, and the edges of said bands being separated to permit the introduction of an exciting fluid between the same, substantially as described.

2. The combination, in an electric belt or band, of a chain of cells composed of flat

copper or zinc parts separated by felt or like absorbent material, and the two bands or strips of material such as celluloid, by which the bands or cells are embraced and permanently secured, and contact or pole plates arranged on the surface of said bands or strips and electrically connected with the chain of cells, substantially as described.

3. The combination in an electric band or belt, of the strips of celluloid or like material, the chain of cells made up of flat copper and zinc parts suitably separated by an absorbent material, eyelets passing through said parts and the said strips, and suitable terminal electrodes, substantially as described.

4. The combination, of a suitable covering with the zinc strips 3, the copper strips 5 secured thereto, the interposed felt strips 7

arranged upon opposite sides of said metal strips, and the pole-plates 15 pivotally connected to the end strips, for the purpose set forth.

5. The combination, with the battery formed of the series of metal strips and the interposed felt strips, with the celluloid bands secured upon opposite sides thereof, of the pole-plates 15 pivotally connected to the end metal strips and provided with suitable springs 19, for the purpose set forth.

In testimony whereof I have hereunto set my hand this 1st day of October, A. D. 1895.

JOHN EDWIN LUCE.

In presence of—

RICHARD PAUL,
A. C. PAUL.