

(No Model.)

B. H. VELLINES.
ELECTROTHERAPEUTIC BAND.

No. 569,529.

Patented Oct. 13, 1896.

Fig. 1.

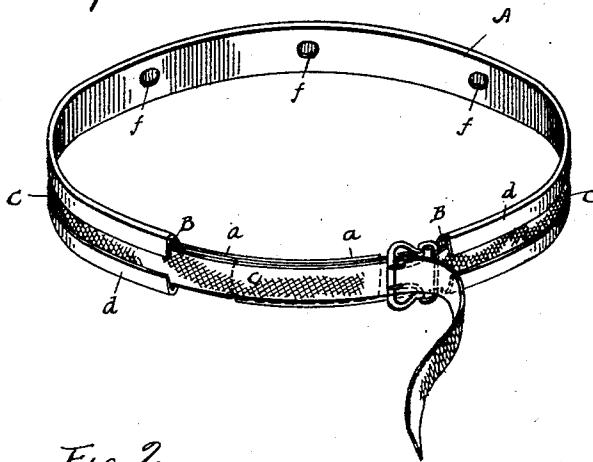
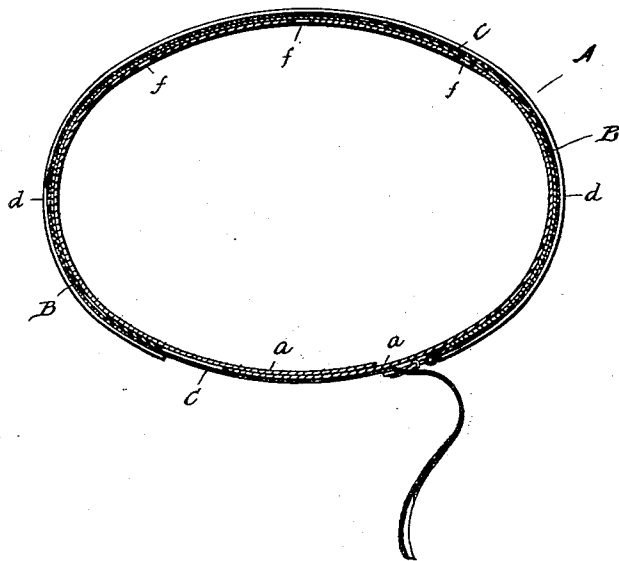


Fig. 2.



WITNESSES

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BENTON H. VELLINES, OF NORFOLK, VIRGINIA.

ELECTROTHERAPEUTIC BAND.

SPECIFICATION forming part of Letters Patent No. 569,529, dated October 13, 1896.

Application filed November 30, 1895. Serial No. 570,623. (No model.)

To all whom it may concern:

Be it known that I, BENTON H. VELLINES, a citizen of the United States, and a resident of Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Therapeutic Bands for Personal Wear; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view of the band. Fig. 2 is a central longitudinal section through the band.

The invention has relation to therapeutic bands of that class which are capable of electrogalvanic action and designed for wear by persons suffering from rheumatism, neuralgia, or other diseases, and is designed to provide a band of this character which can be readily adjusted and secured to limbs of different sizes, and which is of simple and durable construction.

With this object in view the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claim.

Referring to the accompanying drawings, the letter A designates a flexible metallic strip or body portion, preferably of copper, which is bent into circular or band form, its end portions being reduced in width and thickness to form tongues *a*, which overlap each other to a greater or less extent.

B is a second strip, usually of zinc, which is placed upon the outer face of the copper strip and is made to conform to the curvature thereof. This zinc strip is equal in length to the unreduced portion of the copper strip and extends only from the base of one of the tongues *a* to the base of the other tongue.

Placed over the zinc is a tape or web band C, one end portion of which is provided with a buckle D, and the other end with a free portion *c*, adapted to engage the said buckle.

To secure the zinc and the tape band securely in place, the upper and lower edge portions of the copper are turned outwardly and over closely upon the tape, as seen at *d*.

Formed through the copper at suitable intervals are small perforations *f*, which serve to admit to the zinc the acid exhalations of the body to excite galvanic action between the two metals and also to bring the skin into contact with the zinc.

The band, being flexible, can be readily sprung open and clasped around a limb, and will fit limbs widely varying in size. The tape band and buckle form a convenient means for securing it in place.

I do not wish to limit myself to copper and zinc as the two metals employed, as any two metals capable of galvanic action and possessing the requisite flexibility may be employed.

I do not, however, claim, broadly, a therapeutic band of circular form, composed of superposed strips of metal of opposite character so arranged that each is partially in contact with the skin of the wearer, as such bands have heretofore been patented, as shown in the patent to Payne, No. 502,753, dated August 8, 1893. The present device, however, is distinguished from that shown and described in the said patent in the feature of the inner strip having the reduced overlapping adjusting-tongues at its ends, and also in the tape band, which extends entirely around both strips of metal and is provided with fastening devices, said tongues and tape band forming means whereby the band has a wide range of adjustment in its application. Another novel feature of the present band is that of turning the upper and lower marginal portions of the inner strip outwardly and downwardly over the edge portions of the outer strip and of the tape band, whereby the said strip and band are secured in place and the inner strip has a perfectly plain inner surface, except where it is broken by perforations. I also dispense with the insulating-strips and the supplemental bars of electropositive or electronegative material, as employed in the device shown in said patent.

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

In a therapeutic band for personal wear, the combination with a circular perforated band of metal, such as copper, having its end

portions reduced in thickness to form extended overlapping adjusting-tongues *a*, of a second strip B of opposite character, such as zinc, placed around the said copper band, and of the same length as the unreduced portion thereof, and a tape band placed entirely around the zinc and the tongues of the copper, and provided at its end portions with means for their adjustable connection, the

upper and lower edge portions of the copper 10 being bent outwardly and over upon the zinc and tape, substantially as specified.

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

BENTON H. VELLINES.

Witnesses:

M. H. HALL,

T. F. MILLER.