

(No Model.)

J. W. MADDEN.  
FOOT BELT.

No. 571,488.

Patented Nov. 17, 1896.

Fig. 1

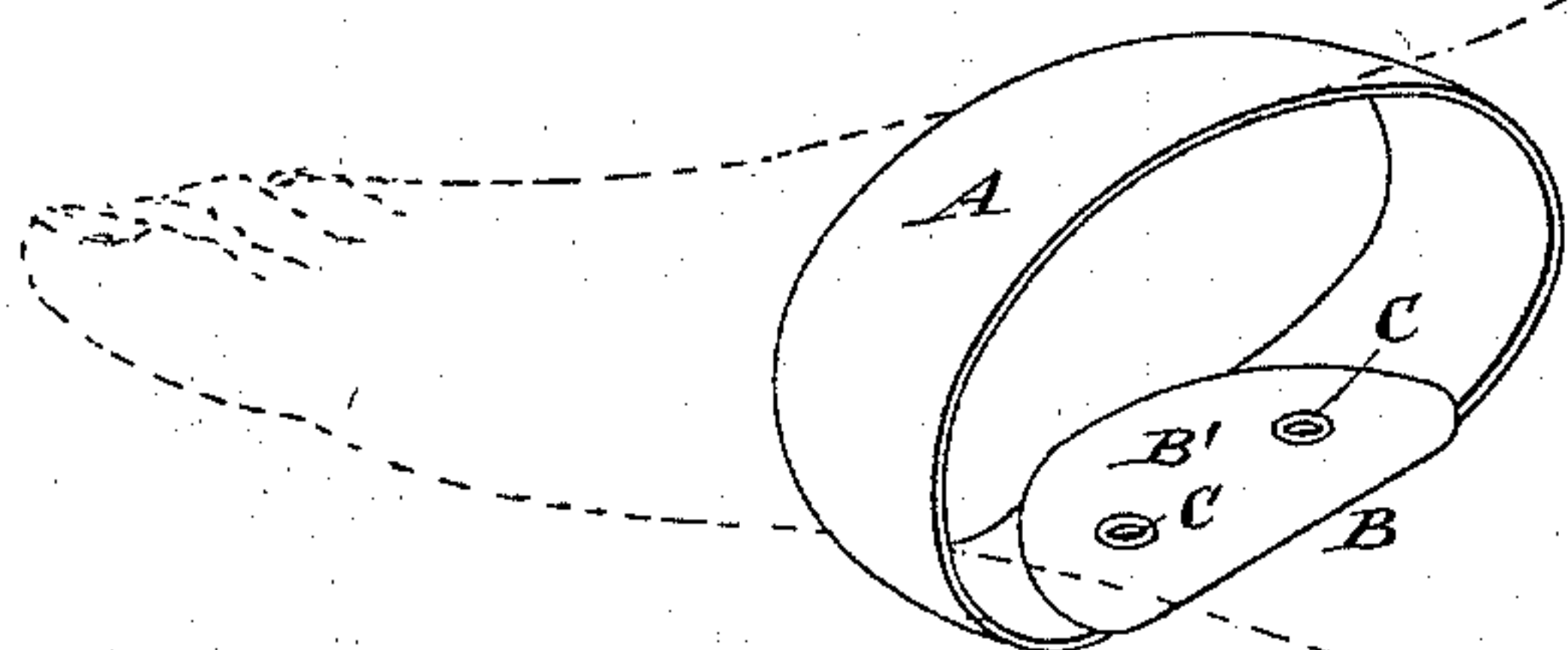


Fig. 2.

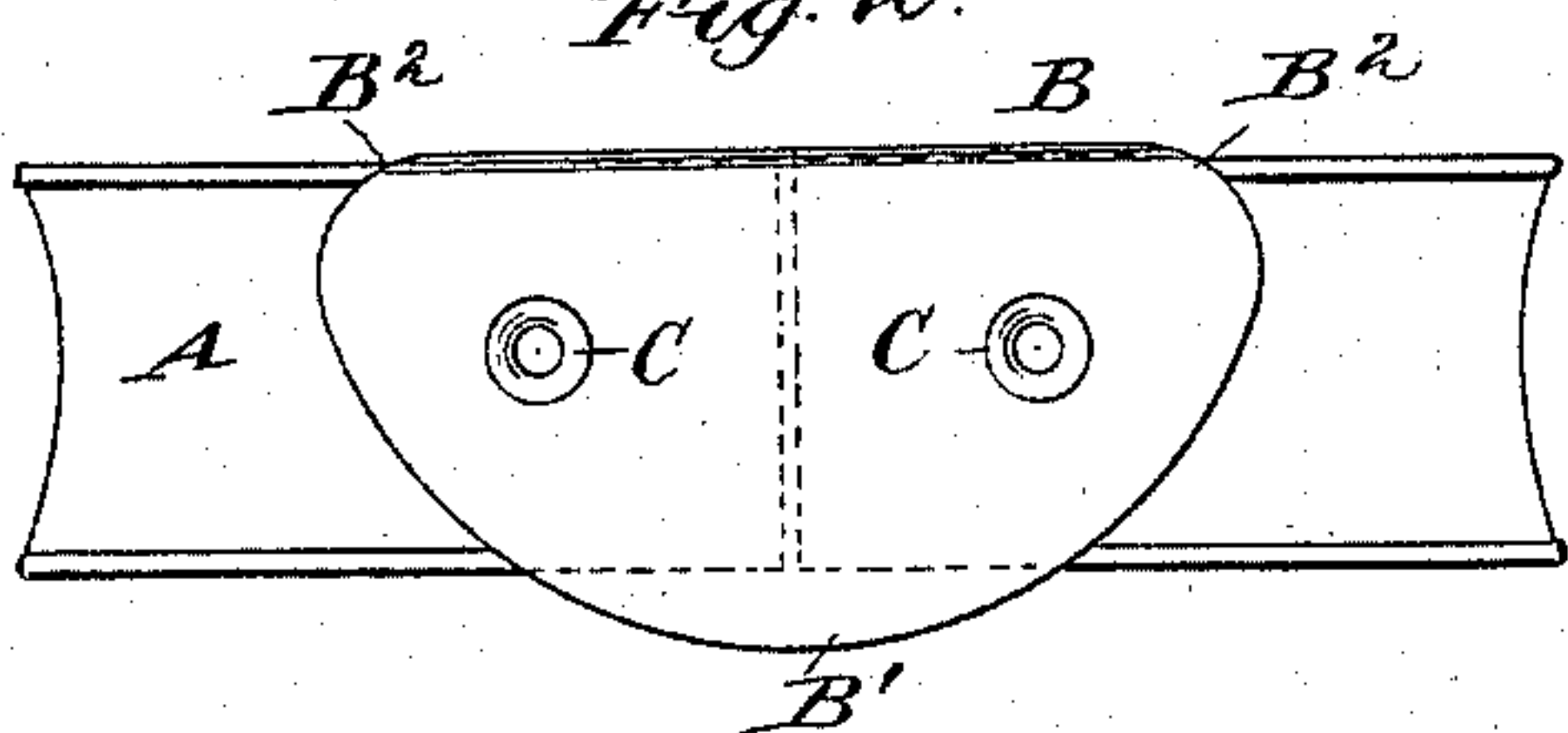


Fig. 3.

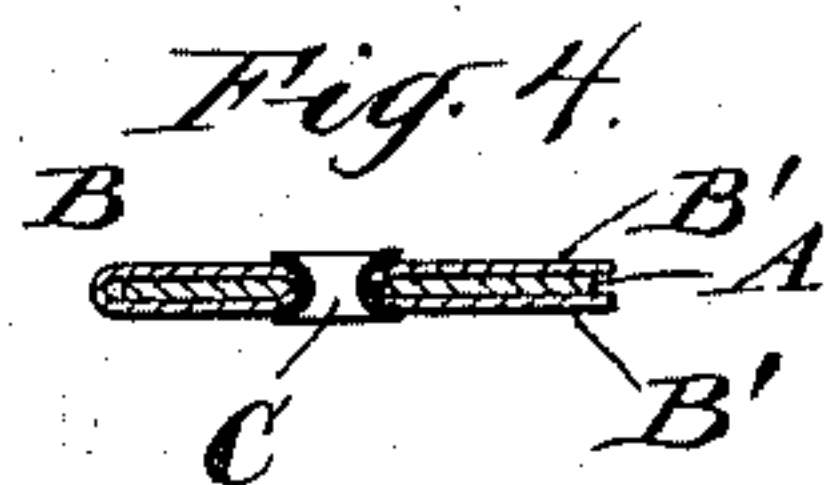
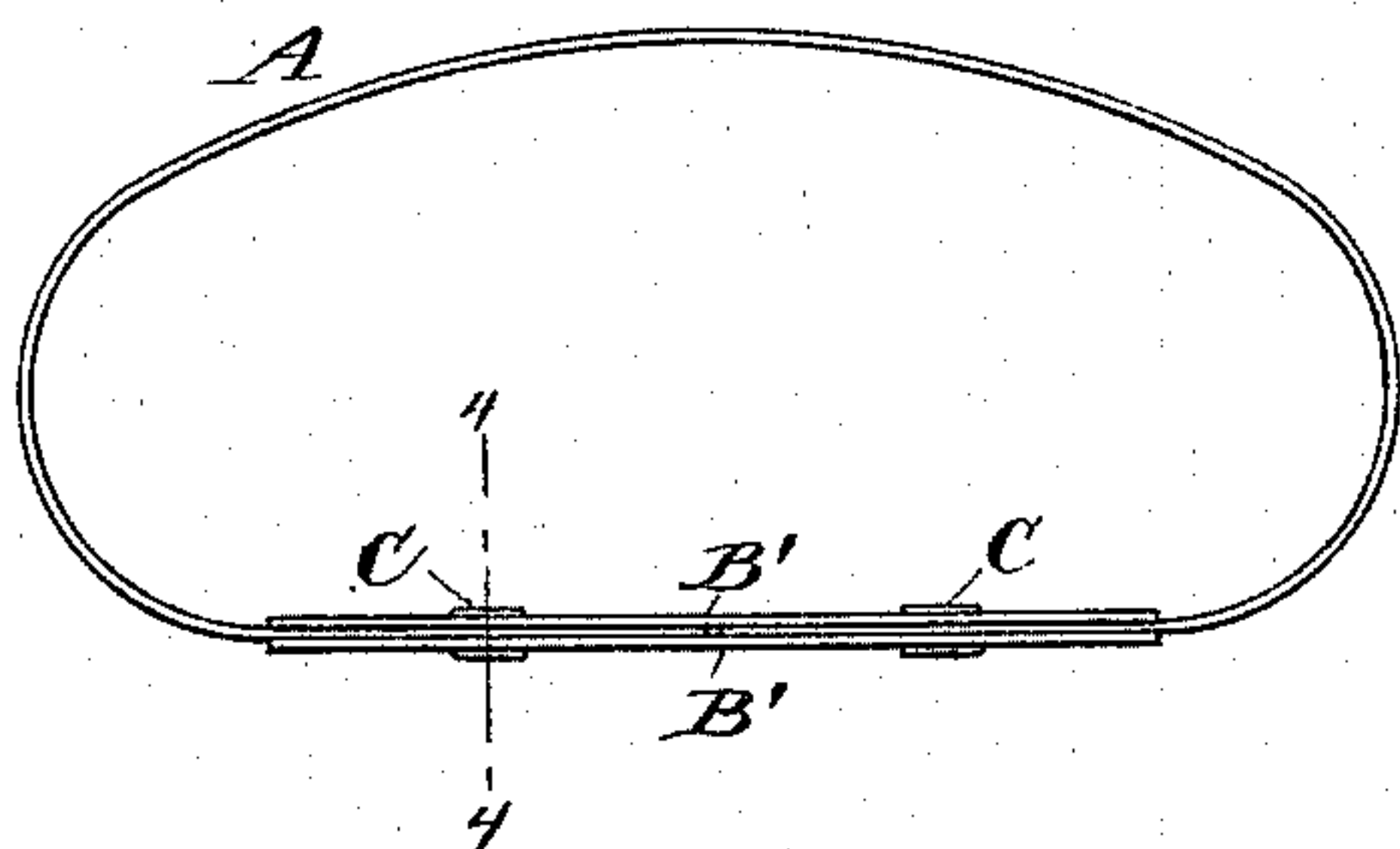


Fig. 5.

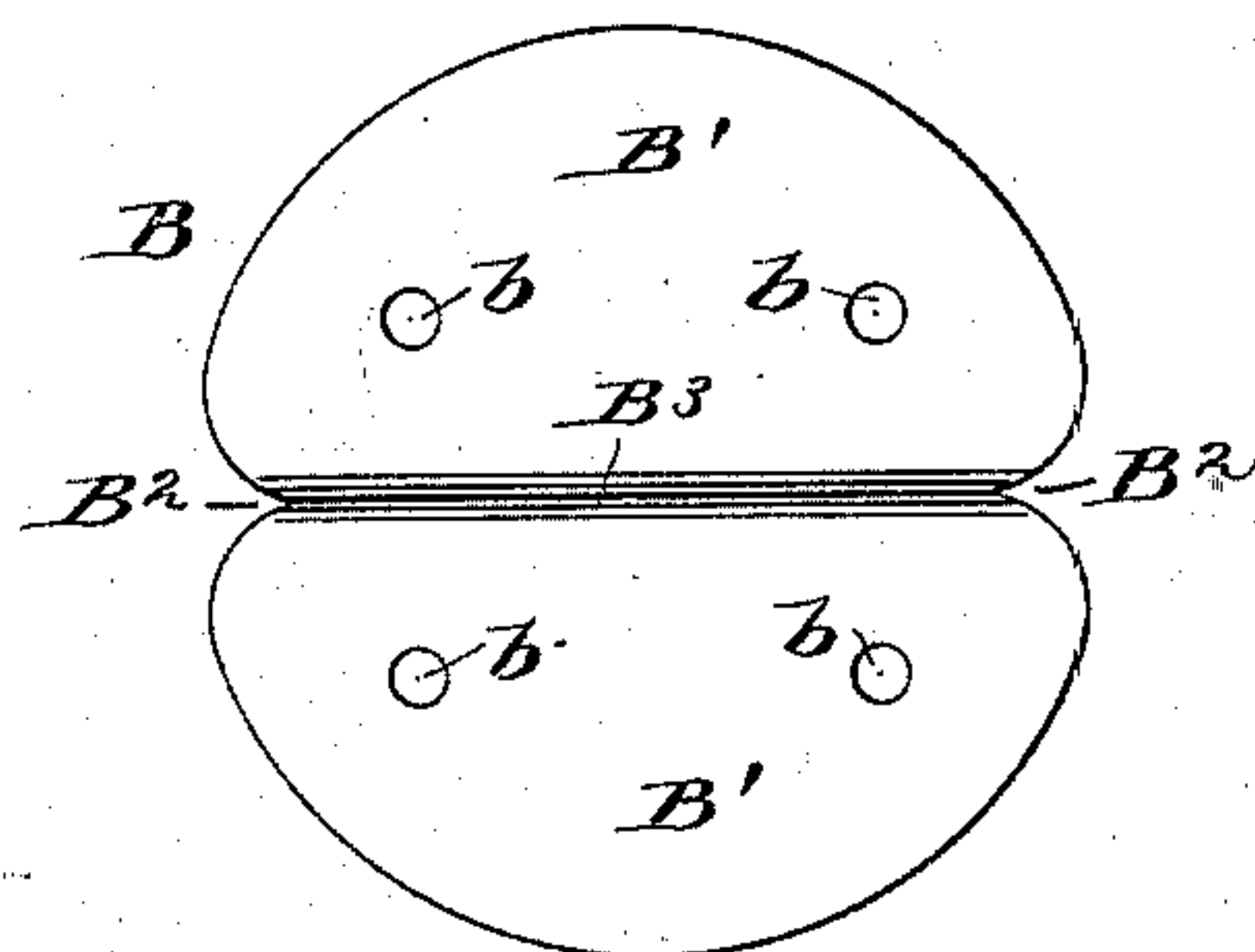
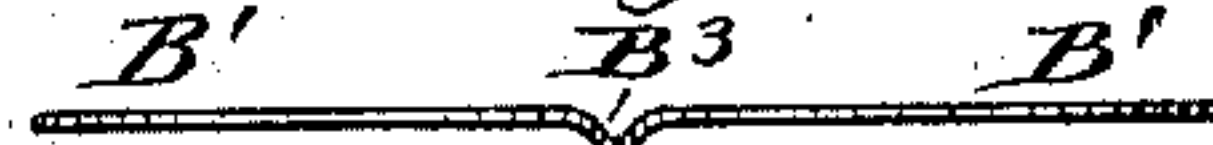


Fig. 6.



Witnesses:

*W. H. Brown*  
*P. E. Collier*

Inventor:

*James W. Madden,*  
*by his attorney*  
*Charles R. Searle.*



# UNITED STATES PATENT OFFICE.

JAMES WHEATON MADDEN, OF BROOKLYN, NEW YORK.

## FOOT-BELT.

SPECIFICATION forming part of Letters Patent No. 571,488, dated November 17, 1896.

Application filed July 11, 1896. Serial No. 598,855. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WHEATON MADDEN, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Foot-Belts, of which the following is a specification.

The invention relates to means for applying plates of metal to the soles of the feet.

It consists of an elastic band adapted to fit closely around the foot in advance of the instep, carrying the piece of metal and holding it in gentle but direct contact with the sensitive portion of the sole between the heel and ball.

The plate is stamped or cut from sheet metal in an approximately circular form and is folded upon the ends of the elastic band to hold the latter and also to present two semicircular faces either of which may be applied to the sole.

The accompanying drawings form a part of this specification and represent the manner in which I have carried out the invention.

Figure 1 is a perspective view showing the belt in place, the foot being shown by the dotted lines. Fig. 2 is a plan view seen from below. Fig. 3 is a corresponding elevation. Fig. 4 is a section on the line 4 4 in Fig. 3. Fig. 5 is a face view of the plate before folding, and Fig. 6 is a corresponding edge view.

Similar letters of reference indicate the same parts in all the figures.

A is a strip of elastic webbing of a length sufficient to extend around the foot in front of the instep, and B a piece of sheet metal cut by dies or otherwise into an approximately round form. At two opposite points in the periphery are V-shaped notches B<sup>2</sup>, having the angular corners of the metal forming the sides of the notch smoothly rounded off, dividing the plate B into two semicircular wings B' B'.

B<sup>3</sup> is a groove formed by dies at the same or a subsequent operation by depressing the metal from one side on the line connecting the angles of the notches and correspondingly ridging the opposite side, as shown.

The ends of the webbing are abutted together on the face of one wing adjacent to the groove B<sup>3</sup>, and the other wing is then folded over and down upon the first, inclosing

and securely holding the ends of the band, the fold being initiated and its line determined by the groove.

To insure against any danger of withdrawal of the ends, holes b are punched through the plate at two or more points in each wing B', so situated as to register when the fold is made and receive eyelets C, inserted in one face, driven through the webbing A, and clenched or upset on the opposite face.

The belts are used in pairs, one being worn on each foot within the stocking. Each is of a different metal, preferably zinc and copper, and when so worn produce an appreciable effect on the nervous system. My experiments show that rheumatism and kindred diseases are greatly alleviated by the continuous use of the belts and in some instances have produced a permanent cure. I believe the action to be galvanic in its nature.

The effect is more pronounced when the surfaces in contact with the foot are bright. This condition is maintained by occasionally turning or reversing each belt and applying to the skin the surface which has been brightened by friction against the stocking, allowing the dulled or oxidized face to be in turn subjected to the rubbing action.

The rounded corners of plate are formed by the sides of the notches B<sup>2</sup> in folding, and the projecting ends of the eyelets C should be flattened and smoothed down to avoid discomfort to the extremely sensitive parts against which the metal applies.

The elastic action of the webbing serves to hold the plate gently but reliably in contact with the sole and enables one size of belt to apply over a considerable range of differing sizes and shapes of feet.

I claim—

1. A foot-belt comprising a flexible strip and a metallic plate, punched and folded as shown to engage the ends of the strip, combined and arranged to serve substantially as herein specified.

2. A foot-belt comprising the strip of elastic webbing A and punched, notched and folded plate B, combined and arranged to serve substantially as herein specified.

3. The plate B having the wings B' and oppositely-situated notches B<sup>2</sup>, in combination with the webbing A having its ends in-

closed between and held by the wings when the latter are folded one upon the other, all adapted to serve as and for the purposes herein specified.

5 4. The plate B having the wings B', oppositely-situated notches B<sup>2</sup>, and groove B<sup>3</sup> connecting the angles of the notches to determine the folding-line and initiate the fold, in combination with the elastic webbing A having  
10 its ends inclosed between and held by the wings when the latter are folded one upon the other, all adapted to serve as and for the purposes herein specified.

15 5. The plate B having the wings B', oppositely-situated notches B<sup>2</sup>, holes b, and groove

B<sup>3</sup> connecting the angles of the notches to determine the folding-line and initiate the fold, in combination with the webbing A having its ends inclosed between and held by the wings when the latter are folded one upon  
20 the other, and the eyelets C engaged in said holes and passing through the webbing, all substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses. 25

JAMES WHEATON MADDEN.

Witnesses:

JOS. G. HUNTINGTON,  
THOS. P. MOFFAT.