

(No Model.)

A. STEPHENSON & J. BACKSTROM.  
ELECTRIC BELT.

No. 503,811.

Patented Aug. 22, 1893.

Fig 1

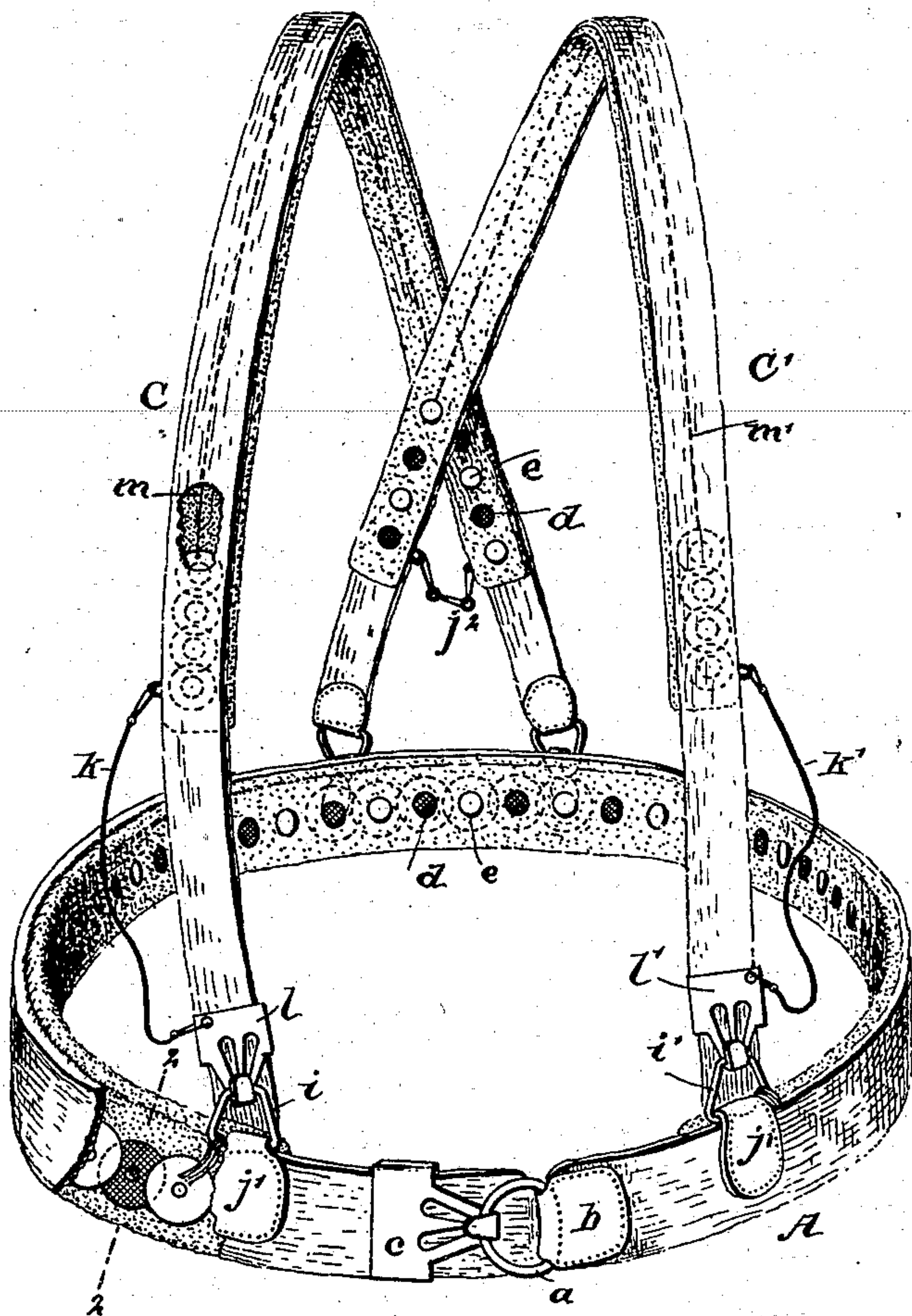
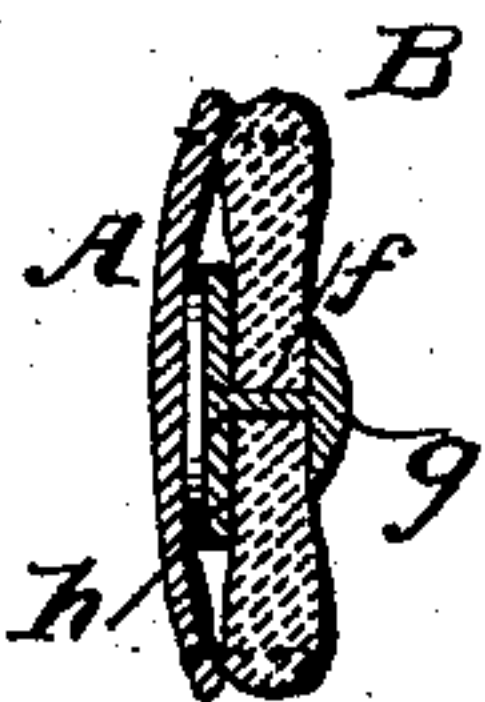


Fig 2



WITNESSES:

*H. Walker*  
*C. Sedgwick*

INVENTORS

*A. Stephenson*  
*J. Backstrom*  
BY *Munn & Co*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

ADOLF STEPHENSON AND JONAS BACKSTROM, OF STROMSBURG, NEBRASKA.

## ELECTRIC BELT.

SPECIFICATION forming part of Letters Patent No. 503,811, dated August 22, 1893.

Application filed February 23, 1893. Serial No. 463,460. (No model.)

*To all whom it may concern:*

Be it known that we, ADOLF STEPHENSON and JONAS BACKSTROM, both of Stromsburg, in the county of Polk and State of Nebraska, have invented a new and Improved Electric Belt, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a perspective view of our improved electric belt; and Fig. 2 is a transverse section taken on line 2—2 in Fig. 1.

Similar letters of reference indicate corresponding parts in both views.

The object of our invention is to provide an electric belt to be worn on the person for remedial purposes.

Our invention consists in a belt formed of elastic webbing furnished with a lining of flannel or equivalent material and provided with series of studs or buttons of copper and zinc, the said copper and zinc buttons alternating with each other in position, with the larger portions of the buttons in contact between the flannel lining and the elastic webbing.

It also consists in the combination with a belt constructed in the manner described, of shoulder straps connected with the belt by loops and buckles, and provided with series of copper and zinc buttons having their heads in contact, the convex portions of the buttons being in contact with the skin when the belt is worn, all as will be hereinafter more fully described.

The belt A, is preferably formed of elastic webbing and is furnished at one end with the ring *a* secured to the belt by the leather end piece *b*, and is furnished at the opposite end with a snap buckle *c*. The belt A is provided with a lining B, formed of flannel folded together to make a lining of several thicknesses. In the said lining are inserted studs *d*, *e*, of copper and zinc, each being formed with a neck *f* connecting the rounded head *g* with the back *h*. The back *h* is larger in diameter than the front of the stud, and the zinc and copper studs are placed in such relation to each other as will permit the larger part of one stud to overlap the corresponding part of the adjacent stud, thus completing the elec-

tric circuit through the entire series of zinc and copper studs. The terminal studs of the series are connected with the metallic loops *i*, *i'*, secured to the belt by straps *j*, *j'*.

To the belt A are attached the shoulder straps C, C', which are made of elastic webbing and provided with a flannel lining which is practically the same as the lining of the belt A. The shoulder straps C, C', are provided with zinc and copper studs *d*, *e*, inserted in the lining in the same manner as the belt, the studs being arranged in groups of four or more at the front and rear portions of the shoulder straps, and the rear groups of studs are connected by a metallic connection *j*<sup>2</sup>. The lower studs of the front groups in the shoulder straps are connected by flexible cords *k*, *k'*, with the snap buckles *l*, *l'*, placed on the front ends of the shoulder straps, and the front and rear groups of studs are connected by flexible wires *m*, *m'*, running between the belt lining and the webbing.

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

1. In an electric belt, the combination of elastic webbing, a textile lining such as flannel, and a series of copper and zinc studs inserted in the lining with their larger portions overlapping between the lining and the elastic web, with the convex ends of the studs projecting inwardly through the lining in position to contact with the surface of the body of the wearer, substantially as specified.

2. In an electric belt, the combination, with a belt formed of elastic webbing and provided with a lining of textile material and studs inserted in the lining, of shoulder straps formed of elastic webbing and provided with textile lining and having zinc and copper studs inserted in the lining, with the larger portions overlapping between the lining and the webbing, and the electrical connections for completing the circuit between the series of zinc and copper studs, substantially as specified.

ADOLF STEPHENSON.

JONAS BACKSTROM.

Witnesses:

ISAAC BOOSTROM,  
J. H. COLEMAN.