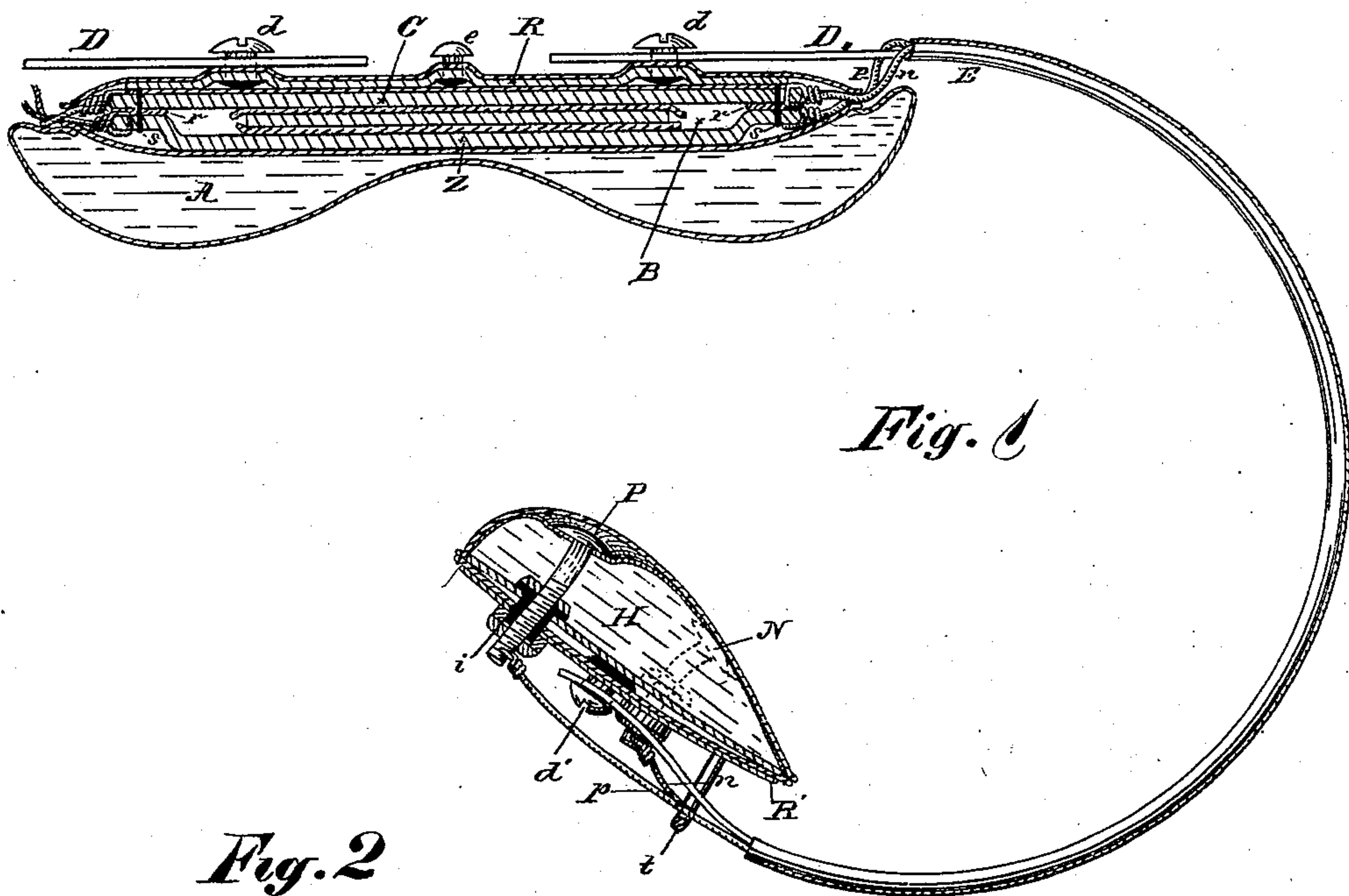


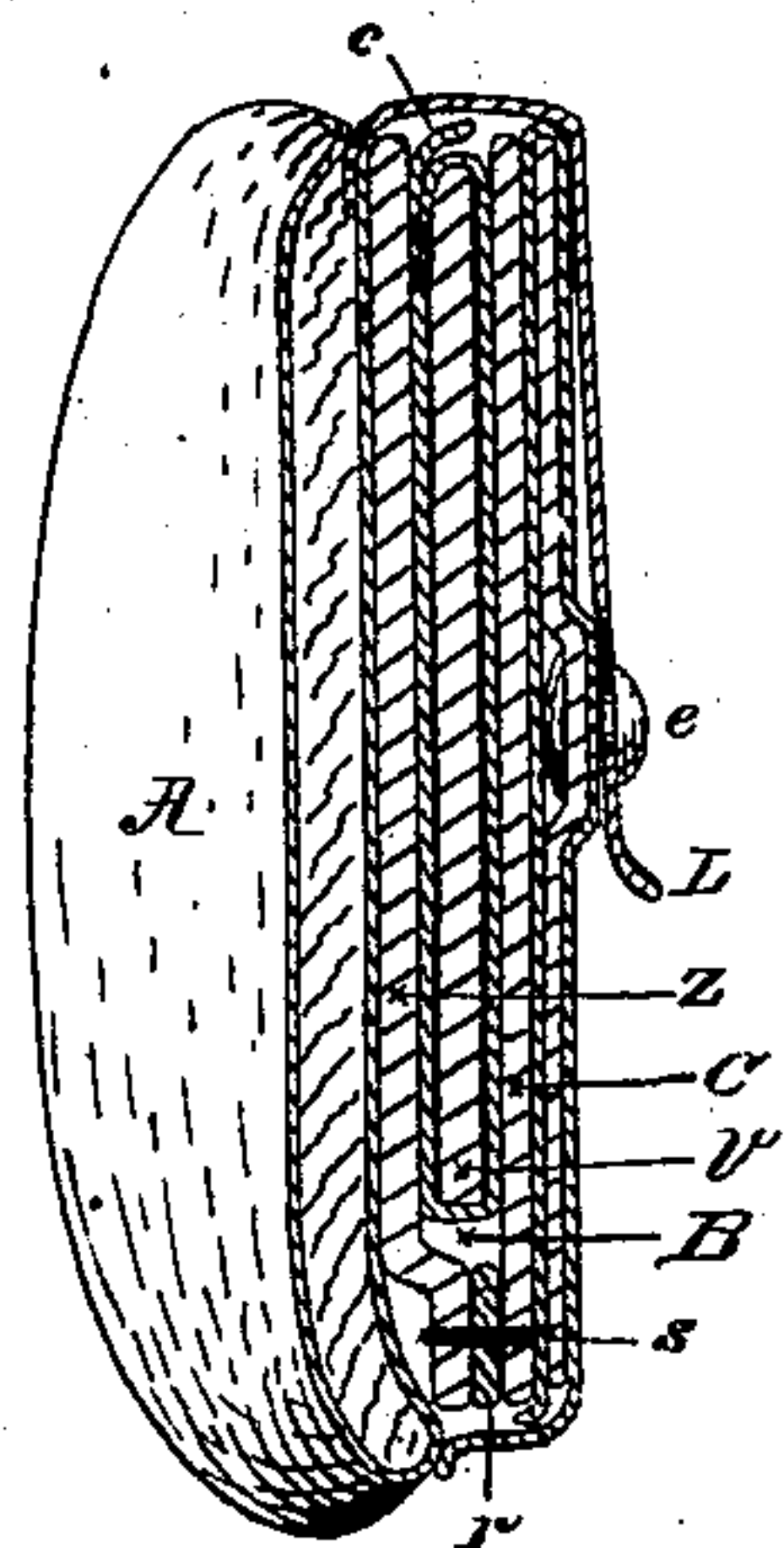
J. V. EPPLE.  
Abdominal-Trusses.

No. 208,079.

Patented Sept. 17, 1878.



*Fig. 2*



Witnesses:  
Jesse Cox Jr.  
Wm M. Stanley.

Inventor:  
Jules V. Epple  
Per. M. E. Dayton  
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# UNITED STATES PATENT OFFICE.

JULES V. EPPLÉ, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN ABDOMINAL TRUSSES.

Specification forming part of Letters Patent No. **208,079**, dated September 17, 1878; application filed April 15, 1878.

*To all whom it may concern:*

Be it known that I, JULES V. EPPLÉ, of Chicago, Illinois, have invented certain new and useful Improvements in Hernial Trusses, of which the following is a full and exact description, reference being made to the accompanying drawing, which forms a part thereof.

My invention has its rationale in two principal facts, namely: First, the analogy between galvanic electricity and the nervous energy; and, second, the fact that hernia is often conditional upon the absence of nervous energy in the relaxed or ruptured parts.

It has for its object to supply galvanic electricity to the affected parts in connection with force for the continued repression of the tumor for the purpose of thereby restoring proper tension to the relaxed integuments surrounding a natural aperture, or of promoting the reunion of ruptured tissues.

My invention consists in locating a suitable battery in the body of a truss or abdominal supporter, with its poles in the inner or bearing face of the hernial or supporting pad, in such manner that the electric circuit will be closed by the application of the pad to the person through the tissues underlying the pad.

Figure 1 of the drawing shows a back-pad and one hernial pad of a hernial truss joined movably by the usual steel arm and insulating connecting-wires. The pads are shown in horizontal section near their median lines. Fig. 2 is a vertical section of the back or lumbar pad through the line *x x* of Fig. 1.

A is the lumbar pad, stuffed to properly fit the back, and stiffened by the base-plate R and the other metallic plates inserted between R and the cushion. Z and C are respectively zinc and copper plates, joined at their side and bottom edges, with the insulating-packing *r* between them, and held by the fastenings *s s*, of waxed thread or other non-conducting material. Between these plates is left a narrow chamber, B, open at the top, for the introduction of the chemical excitant, and covered by the leather flap or lapel L, buttoned at *e*.

H is a hernial pad, of the usual form and general construction, and D is a steel arm, adjustably connected to both pads, and formed to compress the person between them when applied.

Connected with the respective plates Z and C are the insulated wires *p* and *n*, which extend along the arm D, beneath the covering E, to the pad H. Here they connect, through

the insulating-rings *i i*, with the broad metallic buttons P and N, which are located in the cushion-face of the pad, and constitute the poles of the battery, placed, as described, in the lumbar pad. A cloth wet with dilute acid being placed in the chamber B, and the truss being applied to the person, an electric current is induced, finding its circuit through the nerve plexus compassed by the poles P N.

In the case of a double truss the current may, if desired, be established from one to the other hernial pad, to encircle the body; but it is believed that better results will be attained by the present direction of the circuit.

The intensity of the electric action may be increased by placing in the chamber B a voltaic series composed of slips of wet cloth and thin plates of zinc and copper, in proper alternation with each other and with the plates Z and C, between which they are embraced.

V in the drawing represents a rigid plate of zinc or other material, surrounded by a cloth, *c*, the plate being mainly useful to give form to the cloth surface and secure proper contact between the cloth and the surrounding plates.

The vessel formed by the plates Z and C, when joined as described, may be so placed within the pad as to be removable with little trouble. This will be occasionally necessary for their replacement by new plates.

The poles P and N may be arranged to come into direct contact with the skin, or they may have a thin porous covering. In either case they should be plated with gold or silver, to prevent corrosive action produced by the moisture of the body.

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

A hernial truss or abdominal supporter, having a lumbar pad and a supporting pad or pads, and provided with a galvanic battery, said battery being located in the lumbar pad, the poles thereof in the bearing-face of the supporting pad or pads, and the electric connection between each pole and the battery complete in the truss, or otherwise, exterior to the body of the wearer, substantially as shown and described.

J. V. EPPLÉ.

Witnesses:

M. E. DAYTON,  
JESSE COX, Jr.