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M. SCHUPPERT.

Improvement in Galvanic Trusses.

No. 122,917.

Patented Jan. 23, 1872.

Fig. 1.

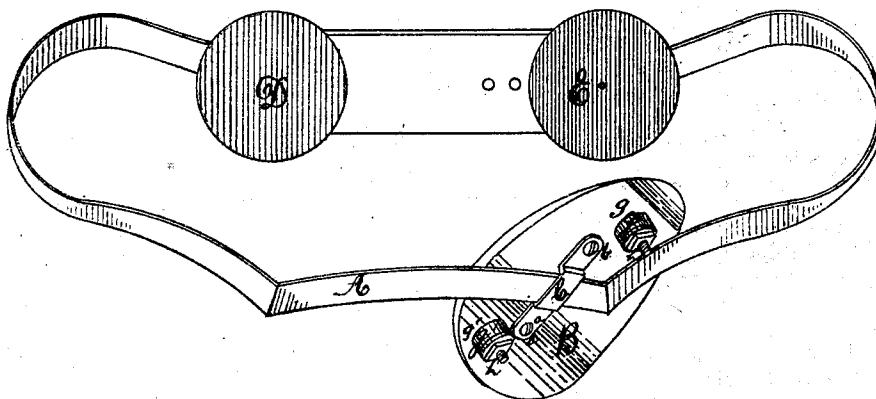


Fig. 2.

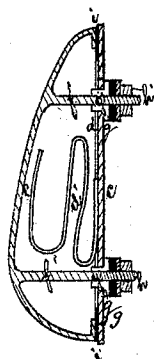
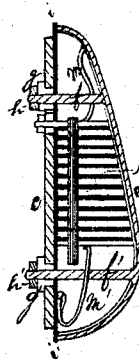


Fig. 3.



WITNESSES.

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IMPROVEMENT IN GALVANIC TRUSSES.

Specification forming part of Letters Patent No. 122,917, dated January 23, 1872.

Be it known that I, MORITZ SCHUPPERT, of the city of New Orleans and State of Louisiana, have invented a new, useful, and Improved Truss; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing constituting a part of this specification, on which it is exhibited in connection with the strap which holds it in position on the body of the subject.

This invention relates to a truss wherein the pad is made galvanic, and thereby capable of transmitting an electric current to the parts of the body of the person to which it is applied. The means by which this result is accomplished are exceedingly simple, and as will be clearly understood by reference to the accompanying drawing, whereon all that pertains to my device is very clearly shown, and in which—

Figure 1 is my truss as complete and ready to be applied to the subject. Fig. 2 is a longitudinal section of a pad wherein the electricity is produced in a very simple but effective manner, as will be hereinafter more particularly described. Fig. 3 is a longitudinal section of a pad wherein the electrical current is produced by the ordinary voltaic pile placed therein, as will likewise be hereinafter particularly explained.

In the construction of my truss proper I do not intend to deviate materially from the usual manner of constructing trusses, except in the particulars which relate to the pad and to the insulation of the frame-bars, and the construction of the back-pads.

My improved galvanic pad may be applied to frame bars of almost any truss which is now in common use, as will be perceived from the manner in which it is connected to the frame-bar shown on the drawing.

A shows this frame-bar, and the manner in which the pad B is secured thereto is shown by the staple-plate C and the screws *a* and *b*. The frame-bar A aforesaid is furthermore provided with back-pads D and E, the said back-pad D being a conductor, while the back-pad E is a non-conductor of the electric current produced within the pad B aforesaid and conveyed thereto by the frame-bar A, which is insulated by any suitable non-conducting material wound thereupon. In this truss the galvanic pad B is composed principally of the flat silver, copper, or brass plate *c*, to which

the flat zinc plate *d* and the doubled or folded zinc plate *d'*, as shown in Fig. 2, are attached, and of the egg-shaped silver, brass, or copper plate *e*, which is to be placed in contact with the body of the wearer. These two plates are united by pins *f f'* passing through the tubular collars *g g'*, and thereat held in position by the nuts *h h'* screwed upon their extremities. The collars *g g'* aforesaid must be of some suitable non-conducting material, such as wood, glass, bone, &c. The plates *c* and *e* are separated by the India-rubber packing *i i'* so as to disconnect or isolate the positive plate *e*, which is in contact with the subject, from the negative plate *c*. The positive plate *e* aforesaid, while it may be made of brass, silver, or copper, as above stated, if not made of silver, the material of which it is made should be lined upon its interior surface with a coating of silver. Fig. 3 shows the pad, in which is placed an ordinary voltaic pile, *k*, wherein the positive end of the voltaic pile is connected with the pad by means of the copper wire *m*, and the negative end of the voltaic pile is connected with the plate *c* aforesaid by means of the copper wire *m'*. The voltaic pile *k* is isolated from the positive and negative plates *c* and *e* simply by any non-conducting agent, such as India rubber, bladder-skin, or any other suitable material.

The pad B, when constructed as above described, must now be filled with some liquid or mixture, either of water and salt or of sulphuric acid, or of any other suitable agent necessary, in combination with the zinc and silver, to produce the galvanic current, which is conveyed from the said pad B by means of the isolated frame-bar A to the back-pad D aforesaid, and thence to and through the body of the wearer, whereby the circuit is complete and the results sought to be attained are effectually and successfully accomplished.

Having thus described my invention, what I desire to secure by Letters Patent is the following claim:

A galvanic truss-pad, constructed substantially as described, and for the purposes set forth.

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Witnesses:

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