(No Model.)

A. T. SHERWOOD.

ELECTRIC BELT AND TRUSS.

No. 335,638. Patented Feb. 9, 1886.

Fig. 3.

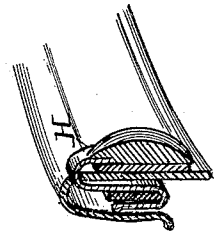


Fig. 1.

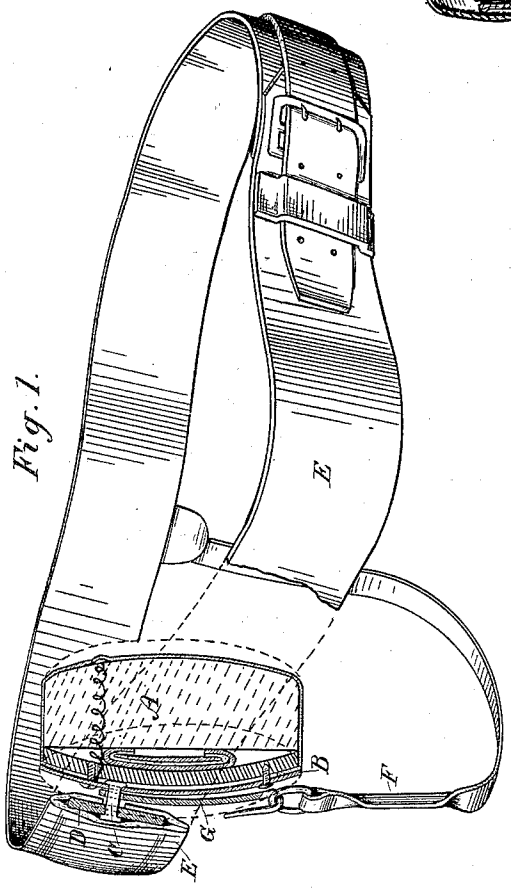
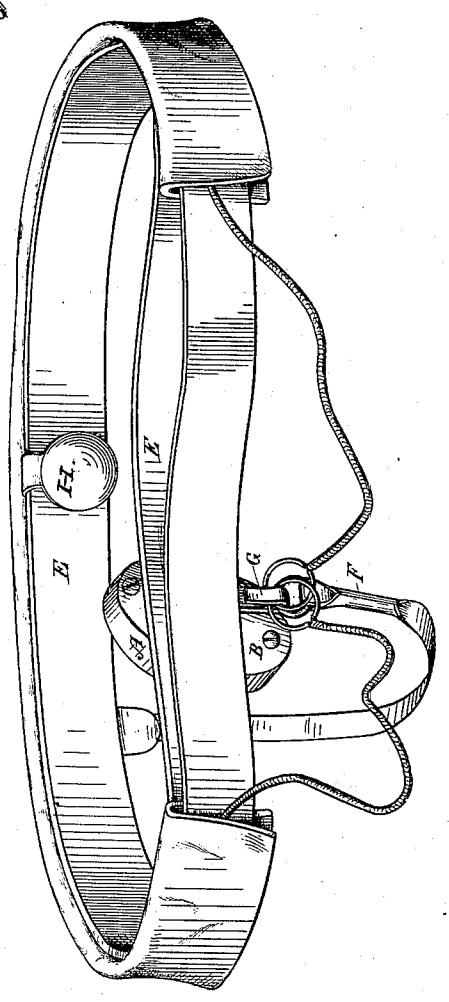


Fig. 2.



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UNITED STATES PATENT OFFICE.

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ELECTRIC BELT AND TRUSS.

SPECIFICATION forming part of Letters Patent No. 335,638, dated February 9, 1886.

Application filed February 9, 1885. Serial No. 155,437. (No model.)

To all whom it may concern:

Be it known that I, ANDREW T. SHERWOOD, of the city and county of San Francisco, State of California, have invented an Improvement in Electric Belts and Trusses; and I hereby declare the following to be a full, clear, and exact description of the same.

In a former application made by me I described and claimed an electric truss-pad combined with a galvanic battery which formed an integral part of the pad—that is, the battery was secured in the body of the pad.

My present invention, however, contemplates the employment of an independent electric belt, such as is used for therapeutical purposes, in connection with a truss pad and belt, and so combining and connecting the two that the electric current generated in the battery of the electric belt is passed through the truss-pad and used for an adjunct for healing rupture. These belts are independent of each other, so that either can be worn separately; or, when desired, they can be connected so as to act conjointly.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a view showing the attachment of my truss-pad to the truss-belt and the swiveled connection of the leg-strap. Fig. 2 shows the manner of connecting or detaching the electric belt with the truss belt and pad. Fig. 3 is a detail showing the plate H and means for attaching the same.

A is a truss-pad, which I form and construct of elastic and flexible material, so that it will yield and conform itself to the part to which it is applied, and also adapt itself to the movements of the person without creating undue pressure and inconvenience. This pad is preferably covered with a membranous or animal tissue, which, when moistened, will be a good conductor of electricity, and the whole is secured to a rigid back piece, which I have shown in the present case as consisting of a heavy piece of leather having an exterior metallic plate, B, secured to it by screws or otherwise. From a convenient point upon the back plate, B, a stout pin, C, projects, and is attached to an elastic metallic plate, D, which is supported within the flexible belt E, so that when the latter is placed about the person the elastic metallic plate may act to press the pad against the part to be treated. The rivet or pin C is fixed so tight that the pad cannot be turned without considerable force, but it may be adjusted to any angle with relation to the supporting-belt, so that it can be applied to the person in any desired position, and will then remain in place.

In order to hold the belt and pad in proper position, it is usual to employ a strap, F, which passes beneath the thigh, and its ends are attached at or near the pad and to the rear portion of the belt. In order to make this connection so that the strain will come upon the pivot-pin, to which the pad is adjusted, I employ a swivel-hook, G, one end of which is loosely attached to the pin C, so that it may turn in any direction without influencing or changing the position of the pad itself. The anterior end of the leg-strap has a ring or other device by which it may be connected with this hook, and by this arrangement it will be seen that the movements of the person or the leg-strap will cause the swivel-hook to yield and move about the pin without in any way disarranging the adjustment of the pad itself, because they both move on a common center.

In order to apply the voltaic current through the pad to the parts affected, I use a secondary or additional belt which is composed of a series of voltaic elements, such as is commonly known as an "electric belt." The cells are taken in two groups, and connected in multiple-arc relation. The poles of the two batteries connect at the middle of the belt with a metallic plate, H, which is so constructed that it can hook over the middle of the truss-belt and come in contact with the naked spine of the wearer when the belt is put on. To this end the plate is provided with a large hook, which hooks into the electric belt, so as to connect with the poles of the batteries, thus admitting the truss-belt to pass between the plate and electric belt, as shown at Fig. 2. The other poles of the two batteries are connected by flexible wires with the swivel-hook G.

In order to admit of the current being applied at certain intervals or to be cut off, when desired, without removing the truss, I connect one pole of the battery which forms a part of the electric belt with the metallic plate B or pin C, and through this pin with the swivel-hook G at the back of the pad by means of

wire or other flexible conductors, which can be hooked or unhooked as occasion requires.

By this construction it will be seen that the voltaic current may be caused to pass through the part to be treated for any desired length of time, after which the flexible-wire connection may be detached from the swivel-hook and the current stopped without removing the truss, which may remain continuously in its position. The voltaic belt, which is independent of and lies over the truss-belt, may, however, be removed when its services are no longer required.

By this construction I am enabled to apply the electrical current through the pad for any desired length of time, and then cut it off, the pad meantime remaining in position until the rupture has been retained a sufficient length of time.

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

1. An elastic flexible truss-pad having a rigid base, a swivel-pin connecting it with a supporting-belt, about which pin the pad may be turned and adjusted, as shown, in combination with a hook or connection loosely swiveled to the pin, and to which the leg-strap may be attached, substantially as herein described.

2. An elastic flexible pad with a rigid back and swivel-pin connecting with the supporting-belt, so that it may be adjusted upon the pin, and a swivel-hook loosely attached to said pin, in combination with a metallic plate fixed in the anterior portion of the pad, a flexible elastic conductor between said plate and the swivel-hook, and a voltaic belt or battery having one of its poles applied to the person and the other so formed as to be connected to or detached from the swivel-hook, so that the voltaic current may be used or cut off, substantially as herein described.

3. A plate having an extension by which it is connected with a voltaic belt, and a curved hook or loop forming a recess between the plate and voltaic belt to allow its being passed over the truss-belt without removing or disturbing the latter, substantially as herein shown and described.

In witness whereof I have hereunto set my hand.

ANDREW T. SHERWOOD.

Witnesses:
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