(No Model.)

L. A. & C. SMITH.

TRUSS.

No. 455,771. Patented July 14, 1891.

Fig. 1.

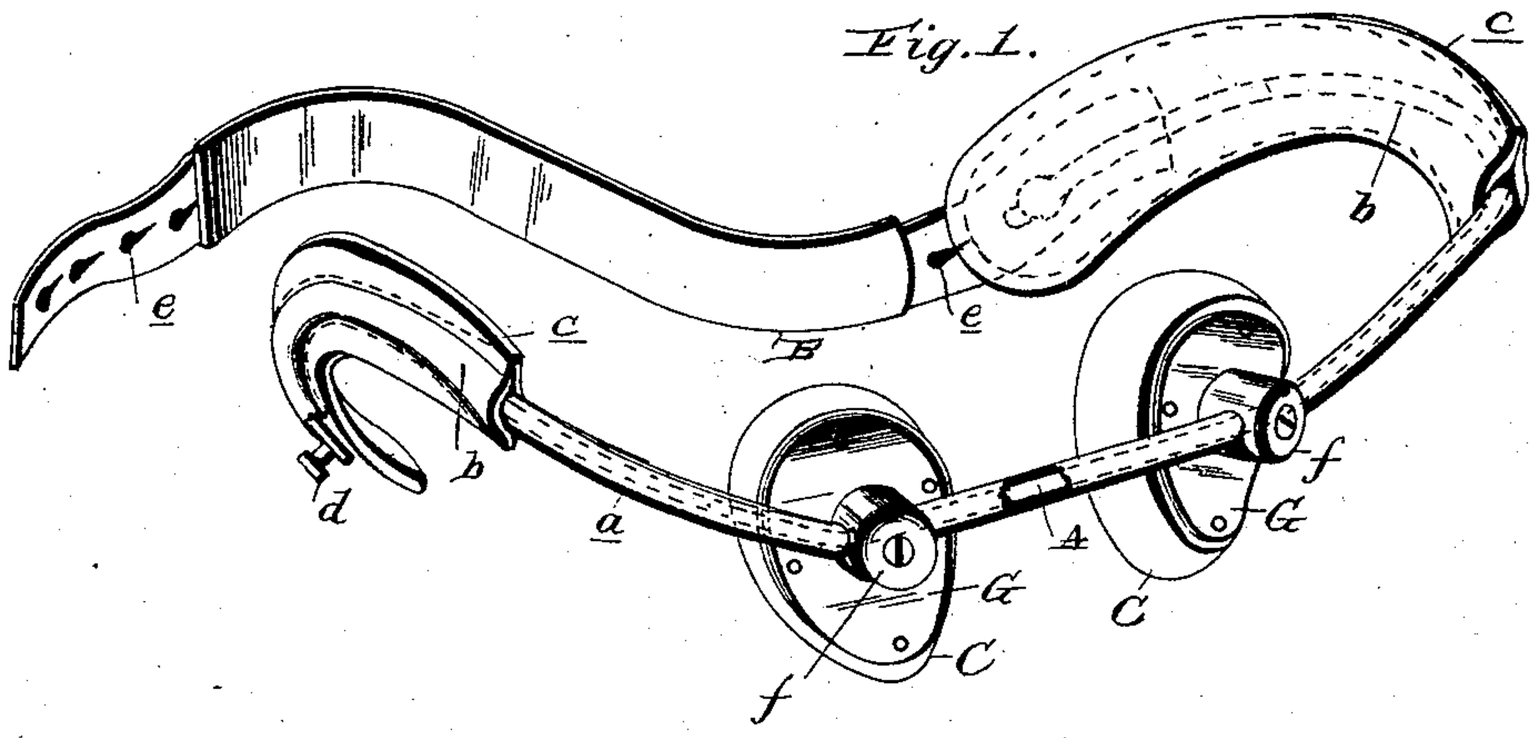


Fig. 2.

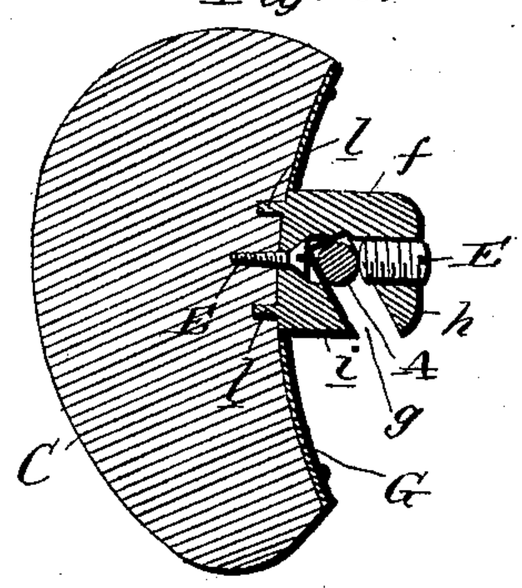
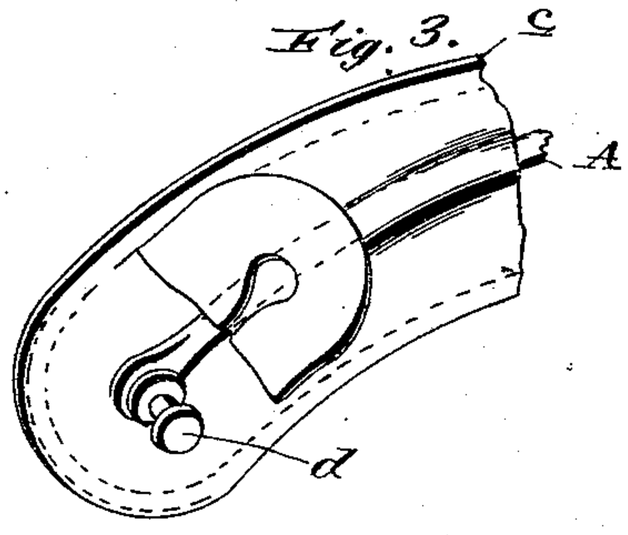


Fig. 3.



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UNITED STATES PATENT OFFICE.

LUCIUS ANTON SMITH AND CLEMENT SMITH, OF TOPEKA, KANSAS.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 455,771, dated July 14, 1891.

Application filed March 18, 1891. Serial No. 385,473. (No model.)

To all whom it may concern:

Be it known that we, LUCIUS ANTON SMITH and CLEMENT SMITH, citizens of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Trusses; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to an improvement in trusses to be used for hernia on one or both sides, and the novelty will be fully understood from the following description and claims, when taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of our improved truss, showing two pads in position thereon. Fig. 2 is a sectional view of one of the pads, showing the connection or stud also in section and the rod or holder therein; and Fig. 3 is a view of a portion of one of the arched or curved end pieces.

Referring by letter to said drawings, A indicates the body-spring, which we have here illustrated as of wire, although it may be made of flat material, as is usual. This spring, which is designed to come in front of the body or over the ruptured parts, is curved its length, substantially as shown, so as to be brought in proper position on the wearer, and may be covered with rubber or other suitable material, as shown, so as in a measure to prevent the metal from chafing the skin or rusting by the cutaneous perspiration of the body, although we do not limit ourselves to covering the spring, as in some cases it may, if desired, be left exposed. This spring, after being suitably shaped in front to receive one or both of the pads, has its ends carried slightly upward, as shown at *a*, and its opposite ends terminate in laterally-disposed and downwardly and rearwardly curved portions or arches *b*, the free end of each arch or curved portion coming down to a point for the attachment of a back strap, which in position will be on an altitude approximately with that of the front of spring or pad-holder. By having these curved or arched ends to the spring we are enabled to place them above the leg of the wearer in such a position as to in no manner interfere with the free and unlimited movements of the limbs, and another advantage following from such construction lies in the fact that the back strap passes nearly parallel, and bringing the ends down to a line nearly horizontal with the point of pressure in front we are able to bring the pads properly over the rupture, and after being once adjusted in position the device is not liable to become displaced, inasmuch as the legs are free to move without in any manner acting upon the strap behind or the spring in front. The curved or arched ends *b* are covered with leather *c* or other suitable material, so as to render the device more comfortable or durable to the wearer, and the end of each curved portion carries a headed stud or button *d* to receive a button-hole in the back strap.

B indicates the back strap, which is provided at opposite ends with a suitable number of button-holes *e* for the adjustable attachment to the ends of the spring, as shown.

C indicates the pads, which may be of the form usually employed. These pads have secured to their outer sides and at a suitable point posts or studs *f* for their attachment to the spring A. These attaching studs or posts are provided with a central hole, which is intersected by an oblique slot *g* for the reception of the spring A. The outer portion *h* of this hole, or that portion above the slot *g*, is screw-tapped and receives a screw E, which is designed to bind or impinge upon the spring when seated in the notch *g* and secure the pad thereto. The lower portion or half *i* of the hole passing through the post or stud *f* may have a plain bore, and is designed to receive a screw F, which passes into the body of the pad and fixes said post or stud *f* thereto. As an additional means of fixing the post *f* to the pad said post may have studs *l l*, which also enter the pad, as shown in Fig. 2 of the drawings.

In the illustration we have shown the large ends of the pads up; but by the construction described it will be seen that either the large or small end may be placed up and the pads may be quickly removed and replaced when desired. The plate G, which covers the outer side of the pads, may be formed from metal or leather or other suitable material, according to the fancy of the manufacturer, although

in some cases it may be left off entirely. When the hernia is on but one side of the body, one of the pads can be removed by simply loosening the binding-screw E in one of the posts.

With a device of the construction described we are able to use a comparatively light spring, and it is designed that such spring can be bent in or out at any desired point, so as to fit the contour of the body. The pad is so constructed and applied as to close the internal ring or spring of the hernia and press the walls of the inguinal canal together. It is also elevated or rounded up at either end to avoid the corners that otherwise would chafe and irritate, especially when worn by a fleshy person. The pad, closing as it does the opening at which the hernia commences its descent, allows its application higher in front than with the ordinary truss, thereby avoiding pressure upon the spermatic cord, which is injurious to the testicle, and it also avoids pressure upon the pubic bone.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A truss, substantially as described, consisting, essentially, of the body-spring having its ends curved rearwardly in an arched manner and brought down to an altitude approximating that of the pad-receiving portion, the pad, the post having the oblique slot, the screw-tapped hole above the slot and the screw-hole beneath the slot, the screw for securing the post to the pad, and the screw for securing the pad to the spring, substantially as specified.

2. The pad, in combination with the post having the oblique slot, the screw-tapped hole above the slot and the screw-hole beneath the slot, the screw for securing the post to the pad, and the screw for securing the pad to the spring, and the spring, all substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

LUCIUS ANTON SMITH.
CLEMENT SMITH.

Witnesses
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