

(No Model.)

C. F. STORRS.
TRUSS.

No. 418,660.

Patented Dec. 31, 1889.

Fig. 1.

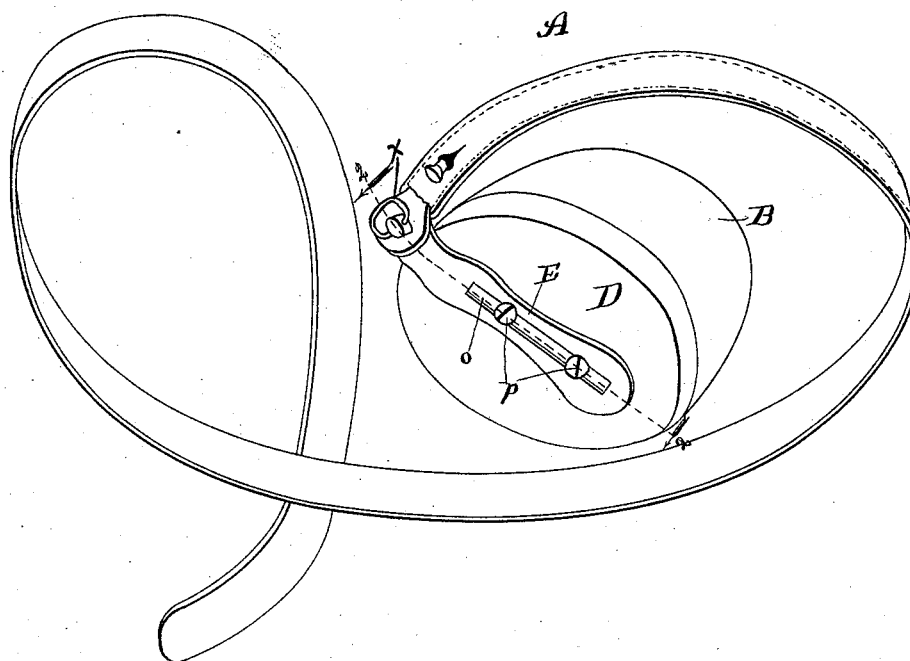
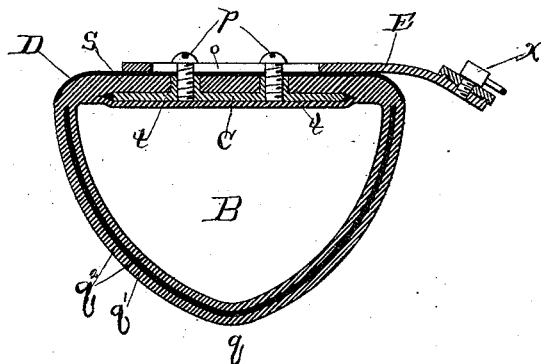


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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TRUSS.

SPECIFICATION forming part of Letters Patent No. 418,660, dated December 31, 1889.

Application filed January 15, 1889. Serial No. 296,421. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. STORRS, a citizen of the United States, residing at Wheaton, in the county of Du Page and State of Illinois, have invented a new and useful Improvement in Trusses, of which the following is a specification.

My invention relates particularly to an improvement in inflated rubber pads for hernial trusses.

My object is to provide a pad of this class which shall be capable of exerting a firm but gentle pressure against the hernia, to contribute to the comfort of the wearer, and avoid all danger of injury to the delicate parts of the body upon which the pressure is exerted.

It is also my object to construct the pad of material which shall itself be inelastic to prevent its becoming permanently stretched under the effect of constant pressure, but render the pad yielding to a desirable degree; and it is still further my object to provide an improved retaining and re-enforcing plate which shall render the pad steady in its adjusted position upon the body, whereby during the various movements of the wearer the same even and comfortable pressure of the pad shall be maintained.

My invention consists in the general construction of my improved device, and also in details of construction and combinations of parts.

In the drawings, Figure 1 is a spring-bow truss provided with a pad of my improved construction; and Fig. 2, a section on the line 2 2 of Fig. 1, and viewed in the direction of the arrows.

A is the truss, which may be of any desired form, though I prefer to employ a spring-bow, and shall describe my improvements in connection with a truss of that kind.

B is a hollow inflated soft-rubber pad. In shape the pad may be hemispherical and slightly conical, as shown, ovoidal, or of any other form desirable in special cases of hernia. In the base *s* of the pad B is a metal plate C, having, preferably, two projecting screw-sockets *t t*. The plate C is completely embedded in the rubber constituting the base *s*, a layer of rubber intervening between it

and the inflated interior of the pad, while the base *s* is thickened to cause its exterior side to be flush with the extremities of the projections *t*.

A serious objection to the employment of inflated rubber pads as heretofore constructed has existed, owing to the elastic quality of the rubber, which would cause the pad in a comparatively short time, owing to the more or less constant pressure against it in use, to become permanently stretched and produce a permanent indentation at the point of pressure. To overcome this difficulty, I employ in the construction of the rounded or cushion portion *q* of the pad canvas or other inelastic textile fabric *q'*, covered, preferably, inside and out with soft rubber *q*². As thus constructed the pad, when properly inflated, will possess the necessary yielding quality and retain its shape for an indefinite time. The plate C, being embedded in the rubber forming the base, as described, stiffens and strengthens that part and constitutes, virtually, an integral portion of the pad, by means of which the latter may be firmly secured in its operative position, as hereinafter described.

The base *s* of the pad is preferably rounded off at the edge, and a flanged metal plate D is provided to fit snugly over the base and its rounded edge, as shown.

The pad is secured to the spring-bow of the truss by means of a curved pad-arm E, provided with a longitudinal slot *o*. The arm may be adjusted to different angles with relation to the bow and secured in adjusted position by means of the thumb-screw *x*, all in a common manner. The pad is fastened to the arm E by means of screws *p p*, which pass through the slot *o* in the arm and perforations in the plate D and into the screw-sockets *t* of the plate C. The slot *o* is longer than the distance between the screws *p*, which enables the pad to be adjusted, to a limited extent, toward and from the bow.

The plate D affords a stiff foundation for the pad, and, as it extends over the curved portion of the base, prevents any lateral play or wobbling of the pad, which is an objection common to rubber pads as heretofore constructed. Owing to the snug fit within the

flanged plate D of the base s, the body of the wearer is kept free at all times from contact with the metal.

My improved pad, connected as described, permits the end of the spring-bow to extend close to the body, which is a very desirable feature, as it adds to the comfort of the wearer and tends to avoid interference with the free movement of his body.

What I claim as new, and desire to secure by Letters Patent, is—

1. An inflated air-tight truss-pad comprising a molded integral base and rounded portion of soft rubber having permanently adhering to it, as by being embedded in the rounded portion, an inelastic fabric, whereby stretching of the rubber element of the said rounded portion is prevented, substantially as described.

2. In a truss, an inflated air-tight truss-pad B, comprising, in combination, a base portion s, of soft rubber, having embedded therein, substantially as described, a metal plate C, provided with screw-sockets t, and a rounded portion g, formed of an integral sheet composed of layers of soft rubber and an inelastic fabric permanently cemented together throughout their entire contiguous surfaces, whereby stretching of the rubber element of the said rounded portion is prevented, substantially as and for the purpose set forth.

CHARLES F. STORRS.

In presence of—

J. W. DYRENFORTH,

M. J. BOWERS.