J. Coon,

Truss.

No. 54,299. Patented May 1, 1866.

Fig: 1.

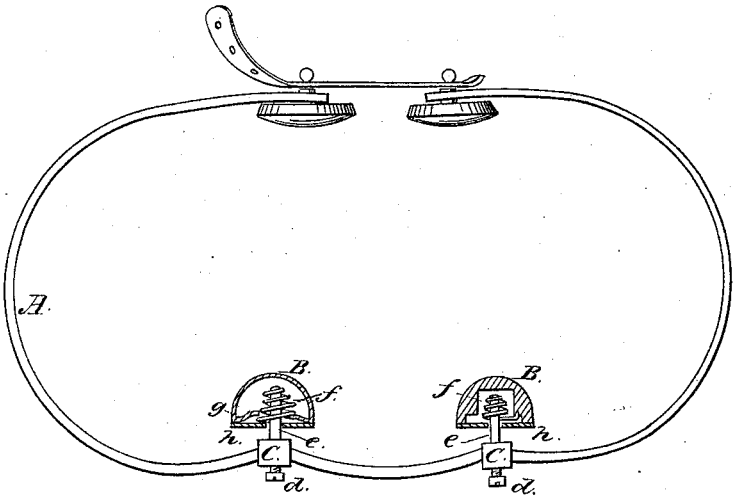


Fig: 2.

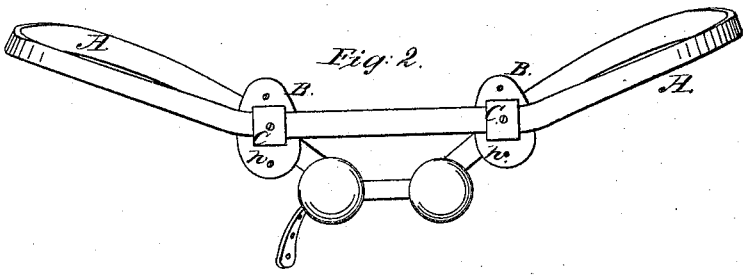
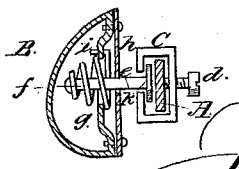


Fig: 3.

Fig: 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES COOP, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **54,299**, dated May 1, 1866.

To all whom it may concern:

Be it known that I, JAMES COOP, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Trusses; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of my improved truss. Fig. 2 is a front view of same. Figs. 3 and 4 are detail views.

Similar letters of reference indicate corresponding parts.

This invention relates to certain improved modifications in trusses for sustaining and relieving from strain abdominal ruptures, whereby the sustaining parts or pads of a truss may be more perfectly adjustable to the requirements of an individual case, and to various cases generally.

My improvements consist, first, in the manner of attaching the pad or pads to the hoop of a truss, so that they may be readily set at any degree or plane of rotation; and, second, in an improved method of suspending the pads to their standards, whereby they are held at any particular plane of rotation in an elastic manner, so as to accommodate themselves to any sudden or undue strain, be it a rotative or side strain.

Having described the nature of my invention, I will proceed to describe its construction and operation.

A A, Figs. 1 and 2, is the hoop and C C are slides which slide laterally on the hoop, and are set at any point thereon by the set-screws *d d*, Fig. 2.

The pads B B are of an oblong form, as seen in Fig. 2, and are supported on the ends of the standards *e e* by means of helix or spiral springs *f f*, the crown end of each spring being fixed to the point of the standard and its other end being secured to an internal flange or diaphragm *g*, at the base of the pad B, Fig. 1, the base or front of the pad being then covered by a metallic plate, *h*, Figs. 1 and 2.

The hoop ends of the standards are provided each with a flange or head, K, Figs. 3 and 4, which slips laterally into the slides C C, as shown in Fig. 4, and is firmly secured therein by set-screw *d*.

The pads are of an oblong form, as shown by a view of their base or rear sides in front view of truss, Fig. 2, so it will be seen that their rotative set should be completely under control, that they may be accurately adjusted in the groin of the wearer, or so they may be slightly changed at any time, as dictated by the circumstances of the case. This is the object of the flanged head *k* of the standards *e e*.

By slackening the set-screws *d* the rotative set of the pads may be readily changed or varied to suit the nature of the case, thereby increasing the general adaptability of the pads. By this peculiar manner of suspending the pads to their standards they yield in all directions with but little friction, and return promptly to their original position when the accidental pressure is discontinued.

In general action the arrangement of the springs *f* is such that the connection between the pads and their standards is substantially an elastic universal joint, admitting of elasticity in all directions.

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

1. The arrangement of the flanged-headed standards *e e*, slide C, and set-screw *d*, in combination with the hoop A, constructed in the manner and for the purpose herein specified.

2. The helix-springs *f f*, with their crowns fixed to points of the standards and their base ends hooked or secured to the pads in such manner as to allow of rotative elasticity without rotative displacement of the pads, and when acting as elastic universal joints for supporting the pads, substantially in the manner and for the purpose set forth.

The above specification of my invention signed by me this 15th day of November, 1865.

JAMES COOP.

Witnesses:

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