No. 650,714. Patented May 29, 1900.

H. FEHR.

HERNIAL TRUSS.

(Application filed Mar. 20, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

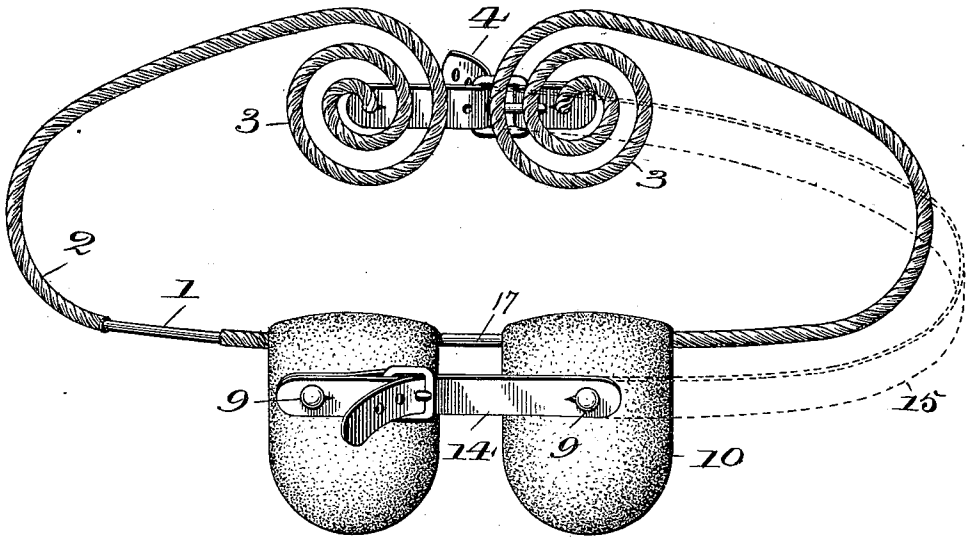


Fig. 2.

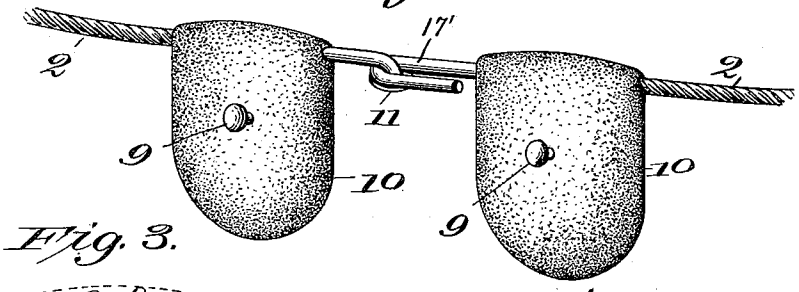


Fig. 3.

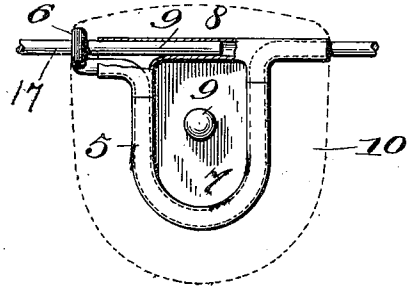


Fig. 4.

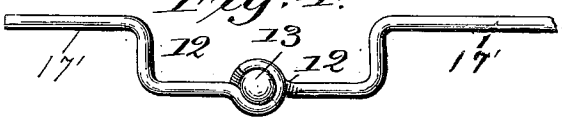


Fig. 5.

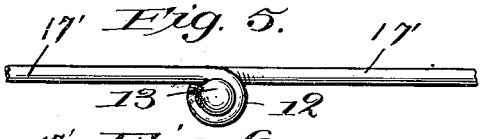
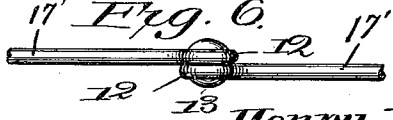


Fig. 6.



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No. 650,714. Patented May 29, 1900.

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HERNIAL TRUSS.

(Application filed Mar. 20, 1899.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 7.

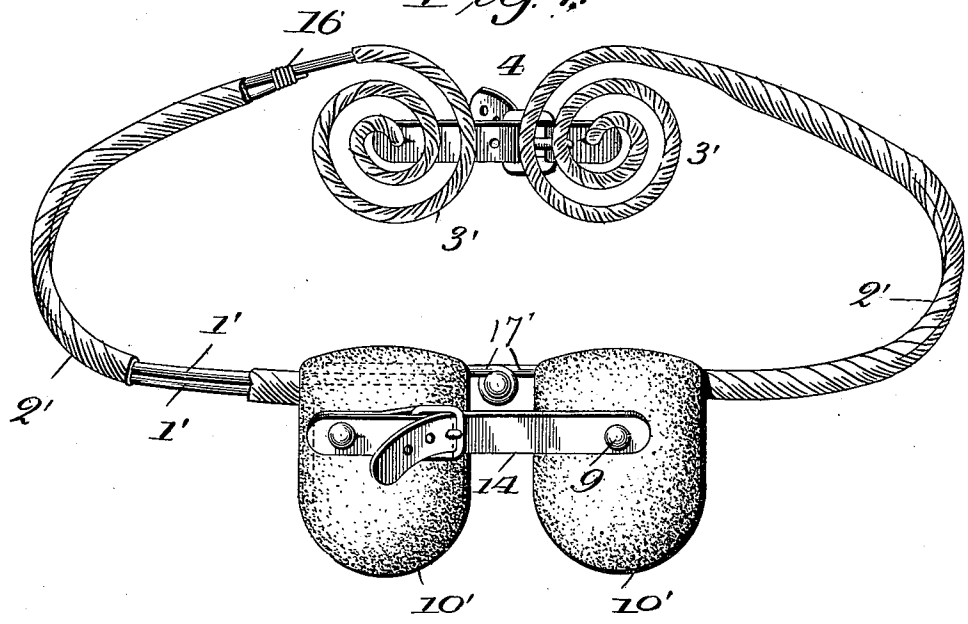
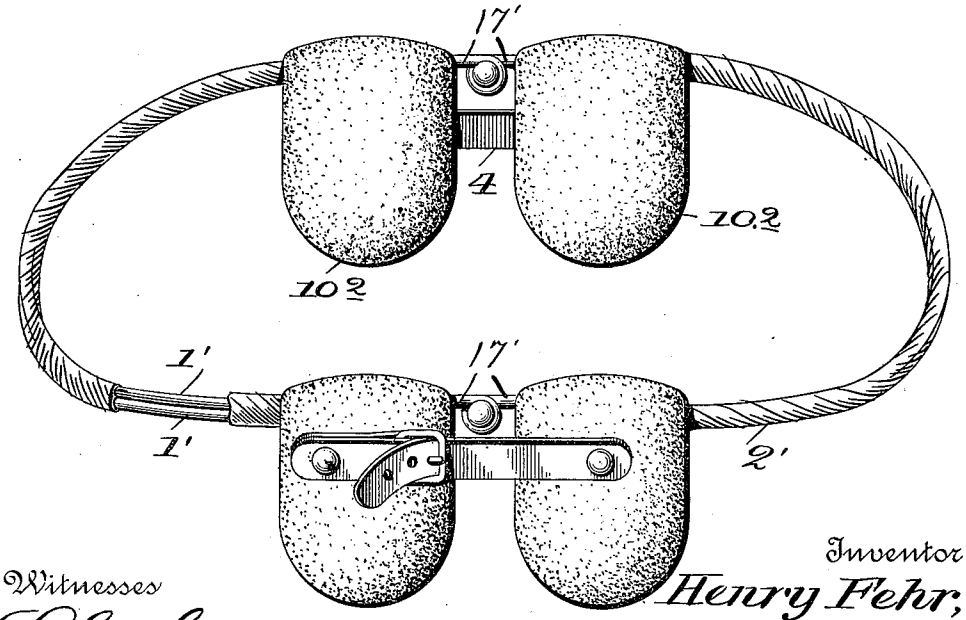


Fig. 8.



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UNITED STATES PATENT OFFICE.

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HERNIAL TRUSS.

SPECIFICATION forming part of Letters Patent No. 650,714, dated May 29, 1900.

Application filed March 20, 1899. Serial No. 709,699. (No model.)

To all whom it may concern:

Be it known that I, HENRY FEHR, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Trusses; and I do hereby 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.

My invention relates to certain new and useful improvements in trusses, and has for its object to produce a strong and efficient device of this character which shall be simple in its construction and easy and cheap to manufacture.

With this and other objects in view my invention further consists in the novel details of construction and combination of parts, to be fully described in the following specification and clearly set forth in the claims.

Referring to the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate similar parts throughout, Figure 1 is a perspective view of one form of my device. Fig. 2 is a perspective of the front portion of my truss, showing a modified form of connection. Fig. 3 is a detail view of a pad-frame. Fig. 4 is a plan view of a further-modified form of connection with wire ends bent. Fig. 5 is a similar view showing the wire ends straight. Fig. 6 is a side elevation of same. Fig. 7 is a perspective view of a modification of my truss, and Fig. 8 is a similar view of a further modification.

In the drawings, 1 represents spring-wires, preferably of steel, which have wound thereabout a covering 2, of flannel or any other suitable material, said wires being semicircular in form and having their rear ends bent to form spirals 3, which are connected at their centers by buckle-straps 4. The front end of each of said wires 1 is bent downward to form a U-bend 5, terminating in an eye 6, which is bent upward at right angles to the main line of the wire, and a web 7, of thin sheet metal, leather, or the like, is secured to the rear face of the U-bend 5, with its edges turned over the wire and forming a tube 8 along its upper part registering with the eye 6. A short piece of stiff wire 17 has its ends passed through the eye 6 and embedded within the tubes 8 of the two pads to maintain their relative positions. Buttons 9 are riveted to the middle parts of the webs 7, and a padding 10, with a covering of suitable material, such as chamois-skin, is secured to the frame formed by the U-shaped bends with their webs, leaving the buttons 9 projecting forward therethrough. Buckle-straps 14 engage the buttons 9 for the purpose of regulating the distance between the pads. When this form of truss is applied, the spirals 3 bear against the small of the back of the wearer, with the curved wires surrounding the waist, and being of spring-steel they press the pads firmly against the rupture. The pads being formed on a U-shaped bend of the wire it is impossible for them to become displaced, and as their frame is integral with the supporting-wires there is no danger of their becoming loose and turning.

In case of single rupture but one wire, with its pad, is used, and then a strap 15, as shown in dotted lines in Fig. 1, connects the center of the spiral with the pad by passing around the other side of the body.

In the modification shown in Fig. 2 instead of the straight end and eye connection I have bent one end downward at right angles and formed a head 11 thereon, while the end of the other wire is bent to form an elongated hook to engage said head.

In Figs. 4, 5, and 6 a further modification of connection is shown, in which pairs of short wires 17′ are bent to form hooks 12, engaging the shank of a loose rivet 13, and are adapted to have their straight ends engaged in the eyes and tubes of two pads in lieu of the wires 17, forming a hinge connection between them to permit free and easy movement of the body. In addition the form shown in Fig. 4 is provided with its ends bent outwardly at right angles and then toward each other for the purpose of pressing the inner edges of the pads more tightly to the body of the wearer.

In the modification shown in Fig. 7 each wire 1′ after forming the frame for the pad 10′ has both its ends passed to the rear under the same covering 2′, with one end terminating and bound by a fine wire 16 at the beginning of the spiral 3′, formed by the other.

In Fig. 8 the construction is identical with

that just described for Fig. 7, with the exception of the rear ends, which instead of being spiral are continuous and form rear pads 10^2, similar in all respects to the front pads.

The advantages of the latter forms of truss are that by doubling the wire passing around the body of the wearer the device is made stronger and the pads are less liable to become bent out of their proper position.

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

1. In a truss, a wire having its end bent to form a U-shaped frame, a web secured to the frame with its edges turned over the wire, and a padding covering the frame, substantially as described.

2. In a truss, a pair of pads, wires connected at one end to the pads, hooks formed on the other ends of the wires, and a loose rivet passing through the hooks, substantially as described.

3. In a truss, a pair of pads, wires engaged at one end to the pads, hooks formed on the other ends of the wires, and a loose rivet passing through the hooks, forming a hinge connection between the wires, said wires being bent to offset the hinge connection, substantially as described.

In testimony whereof I affix may signature in presence of two witnesses.

HENRY FEHR.

Witnesses:
JOSEPHINE BUTTERFIELD,
D. S. POLLARD.