

No. 682,936.

Patented Sept. 17, 1901.

G. V. HOUSE.
HERNIAL TRUSS.

(Application filed Feb. 21, 1901.)

(No Model.)

Fig. 1.

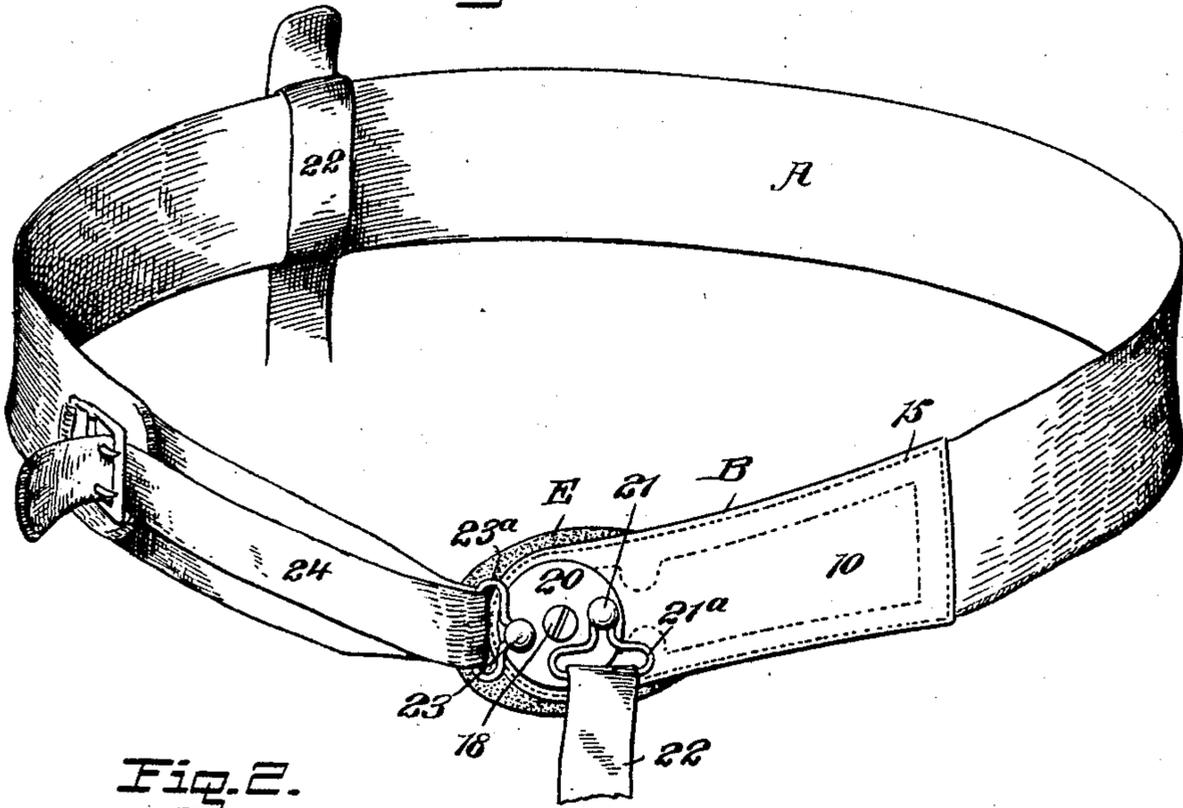


Fig. 2.

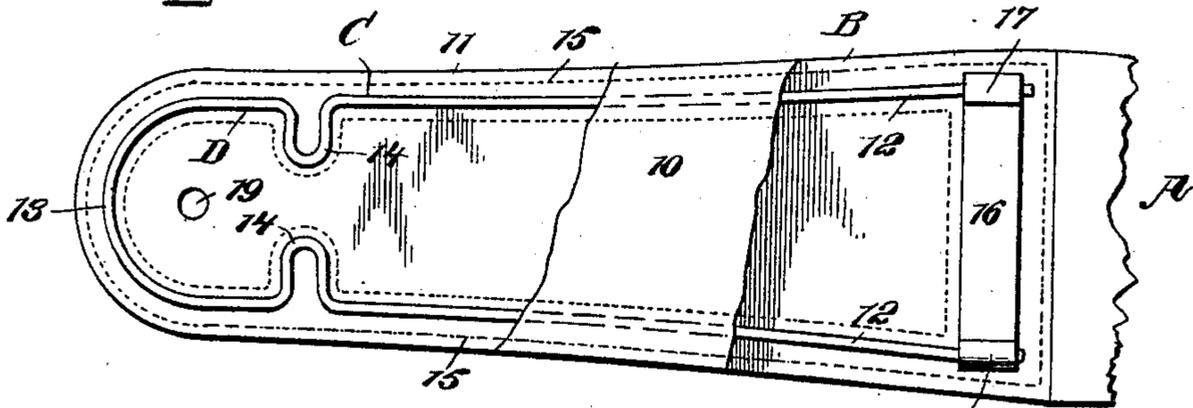
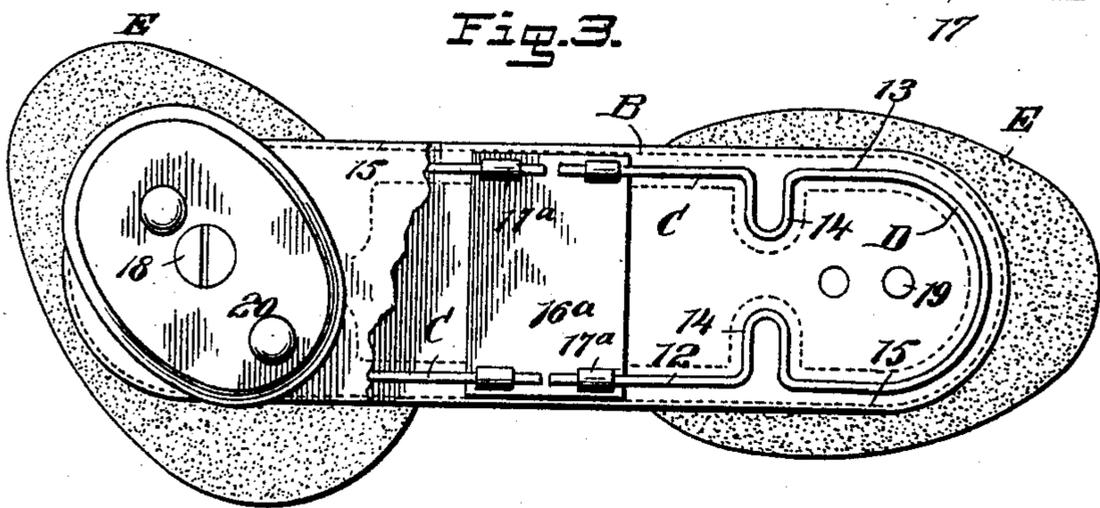


Fig. 3.



WITNESSES:

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HERNIAL TRUSS.

SPECIFICATION forming part of Letters Patent No. 682,936, dated September 17, 1901.

Application filed February 21, 1901. Serial No. 48,297. (No model.)

To all whom it may concern:

Be it known that I, GEORGE V. HOUSE, a citizen of the United States, and a resident of Mount Vernon, in the county of Westchester and State of New York, have invented a new and Improved Truss, of which the following is a full, clear, and exact description.

My invention relates to an improvement in trusses, particularly that class of trusses known as an "elastic truss," or a truss having an elastic body-band with a flexible non-elastic front piece, to which the truss pad or pads are attached, the truss being used with a perineal or under strap.

The purpose of the invention is to provide a front piece which sets across the abdomen, and the purpose of the front piece which rests across the abdomen is to keep the truss more steadily in position over the lower portion of the abdomen and provide more stable pressure to the pad than would be the case if the pad were attached directly to the web band or a material having no stiffening.

A further purpose of the invention is to provide a front piece for a truss having single or double pads, which front piece while not elastic is controlled by a spring or springs concealed within said front piece or attached thereto in any suitable manner, rendering the front piece stable and enabling it to be twisted or bent vertically or laterally to bring the pad or pads comfortably at the seat of the hernia, and thereby to increase or diminish the inward pressure of the pad or pads when the tines forming a portion of the regulating device for the front piece are adjusted, the front piece remaining in adjusted position until purposely disturbed.

Usually in the construction of trusses of the character described the front piece is made of thick leather or filled in with pasteboard or buckram to render it firm and flexible. In practice it has been found that this portion of a truss may give out before the rest and that when it loses its stiffness the truss shifts and wabbles, so that the hernia is not securely retained. I seek by my invention to overcome these difficulties and enable the front piece to be made stronger and narrower than heretofore and render the said front piece adjustable and spring-controlled in various directions, as by lessening the width of the

front piece the liability of crowding the surplus flesh of the abdomen over the front piece is reduced to a minimum.

It is a further purpose of the invention to provide each front piece in a single-pad truss with spring-tines controlling its adjustment and to provide the front piece of a truss carrying two or more pads with a set of connected spring-tines, the arrangement of the spring-tines in the front piece being such that pressure is brought to bear over a considerable portion of the pad or pads, and to provide a cap or caps connected with the pads, which have bearing upon opposite tines of the spring controlling device or devices, thus causing the said tines to act in unison on the pad or pads.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a truss and the improved front piece applied thereto. Fig. 2 is an enlarged front elevation of the front piece shown in Fig. 1, parts being broken away to illustrate the spring controlling device; and Fig. 3 is a front elevation of a front piece fitted with two pads, parts being broken away to illustrate the adaptation of the spring controlling device thereto.

A represents an elastic body-band of any approved construction or dimensions, and B represents a front piece which is secured to one end of the body-band. The front piece shown in Figs. 1 and 2 is adapted to be used in connection with a single pad E, whereas the front piece illustrated in Fig. 3 is intended to be used together with two pads E. The front piece B in either case may be constructed of any suitable material. Usually, however, it consists of a front section 10 of leather and an inner section 11 of velvet, chamois, or other soft material. In the single form of front piece illustrated in Figs. 1 and 2 a single spring controlling device C is employed to stiffen the front piece and render it adjustable vertically, laterally, and in other directions. This adjusting device extends longi-

tudinally of the front piece B and is constructed of wire of a suitable gage. This wire is bent upon itself to form two opposing tines 12, which extend longitudinally of the front piece near its longitudinal edges and are bifurcated at their free ends to a greater or less extent, and a connecting member 13, preferably semicircular, which at the opposite or front end of the said front piece connects the tines 12, as is shown best in Fig. 2. Near the connecting member 13 inwardly-extending indentations 14 are formed in the tines 12, the indentations 14 being opposite each other, as is also shown in Fig. 2, and through the medium of these indentations 14 in the tines a half-loop D is formed at the outer end portion of the spring controlling device for the front piece. The free or inner ends of the tines 12 are usually made to enter eyes 17, formed upon a plate 16, which extends transversely of the front piece. The spring controlling device is held in position by lines of stitching 15. (Indicated by dotted lines in the drawings.) This spring controlling device C may be located between the outer and inner faces of the front piece or may be applied to the outer face or inner face thereof, as may be found expedient, and suitably secured to said front piece. The pad E when applied to the single form of front piece shown in Figs. 1 and 2 is held in engagement with said front piece by a screw 18 or the equivalent thereof passed through an aperture 19 in the front piece at the half-loop section D and through a cap-plate 20, which is located at the outer face of the front piece and which extends over a part or the whole of the spring controlling device, engaging with the two tines thereof. This half-loop D, in connection with the cap-plate 20, gives the combination of vertical and lateral pressure to the pad E, and it is evident that the farther the indentations 14 in the tines are removed from the pad end of the front piece the less will be the strength of pressure of the spring controlling device. The cap-plate 20 is made circular, although it may be given any other form, and the said cap-plate carries a stud 21, to which a link 21^a is adjustably attached, the said link being connected to the free end of the perineal or under strap 22, the opposite end of the strap being secured to the band A. A second stud 23 is likewise carried by the cap-plate 20, to which a link 23^a is secured, and this link 23^a is adapted to receive a strap 24, which after being passed through said link 23^a is carried to a suitable buckle or other fastening device on the body-band A, and this connects the free end of the body-band to the pad end of the front piece B. I do not limit myself to this manner or method of attaching the free end of the body-band or the free end of the perineal strap to the front piece, as it is evident that other devices may be used for making such attachment. It is

obvious that when a front piece is constructed as has been described it may be made very narrow, and yet will be durable, and that the front piece may be given any desired inclination or vertical or lateral adjustment that may be required to bring the pad E in proper position over the seat of the hernia and contribute to the pressure on said pad. In Fig. 3 the front piece is shown as adapted to carry two pads E, and consequently two cap-plates 20 are employed, and two spring controlling devices C are also used, the half-loop portion of each spring controlling device being located at the end portions of the front piece, while the inner ends of the tine-sections 12 of the spring controlling devices are made to enter eyes 17^a, formed upon a plate 16^a, located at or near the central portion of the front piece. The action of the improved front piece when it carries two pads is identical with that of the front piece furnished with a single pad.

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

1. In a truss, a front piece formed of pliable material, and a spring controlling device therefor, consisting of a piece of wire bent upon itself to form tines and an approximately semicircular connecting member, the tines being formed with opposing inwardly-extending indentations near the semicircular connecting member, as set forth.

2. In a truss, a front piece formed of pliable material, a spring controlling device therefor consisting of a piece of wire bent to form tines and an approximately semicircular connecting member, the tines being formed with opposing inwardly-extending indentations near the semicircular connecting member, and a cap-plate located on the front piece over the curved end of the controlling device and with which the pad is adapted to be connected, as set forth.

3. In a truss, a pliable front piece formed of an inner and outer section, a spring controlling device arranged between the sections of the front piece and consisting of a piece of wire bent to form tines and a semicircular connecting end member, a retaining-plate for the free ends of the tines, a cap-plate located on the outer face of the front piece over the curved end of the controlling device, a pad on the inner face of the front piece, and a screw passing through the cap-plate and front piece and into the pad, as set forth.

4. In trusses, the combination, with a front piece constructed of pliable material, of a spring controlling device for the said front piece, consisting of wire of proper gage bent upon itself to form opposing tines, a connecting member at one end and opposing inwardly-directed indentations formed in the said tines near the connecting member, producing at that end of the spring controlling device a half-loop, a confining device for the

inner ends of the tines, and means for securing the spring controlling device to the said front piece, as described.

5 In trusses, the combination, with a front piece constructed of pliable material, of a spring controlling device for the said front piece, consisting of wire of a suitable gage bent upon itself to form opposing tines, a connecting member at one end and opposing
10 inwardly-directed indentations formed in the said tines near the connecting member, producing at that end of the spring controlling device a half-loop, a confining device for the inner ends of the tines, means for securing
15 the spring controlling device to the said front piece, a cap-plate located on the outer face of the front piece over a portion of the half-loop section of the spring controlling device, exerting pressure thereon, and a pad secured
20 to the front piece through the medium of the said cap-plate, for the purpose set forth.

6. In a truss having a pliable body-band, the combination with a front piece construct-

ed of pliable material, of a spring controlling device therefor, consisting of tines longitudi- 25 nally opposed to each other, and extending longitudinally of the front piece, the said tines being connected at the pad end by a semicircular connecting member, a confining device secured to the front piece and receiving the free ends of the tines, a pad located upon one surface of the front piece and bearing upon the opposite tines, and a cap-plate securing the pad to the front piece, located on the opposite surface of the front piece, and 35 extending over the opposite tines, and containing a device for connecting said cap-plate to one end of the pliable truss-band, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 40

GEORGE V. HOUSE.

Witnesses:

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