T. M. MERCK.

TRUSS.

APPLICATION FILED OCT. 10, 1911.

1,031,724. Patented July 9, 1912.

Fig. 1.

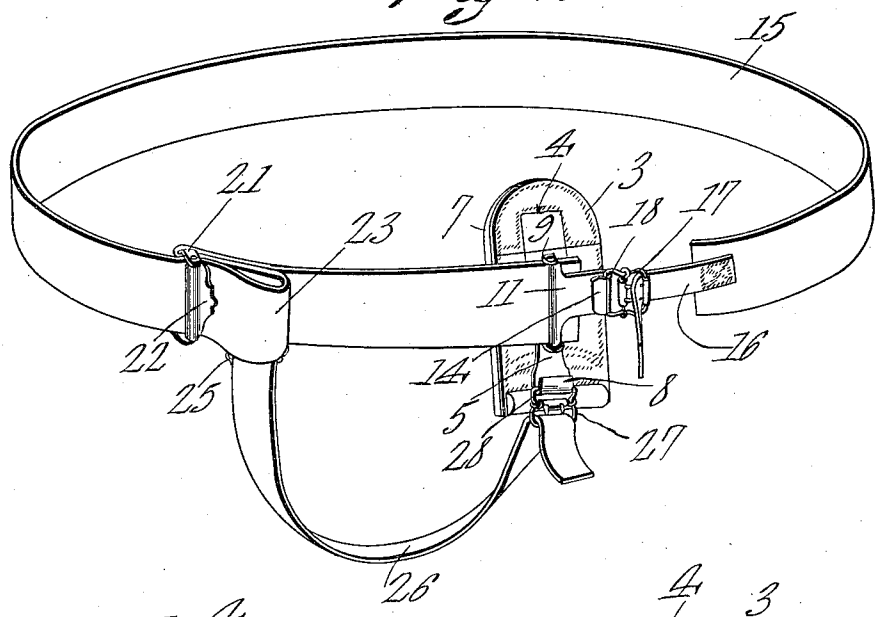


Fig. 2.

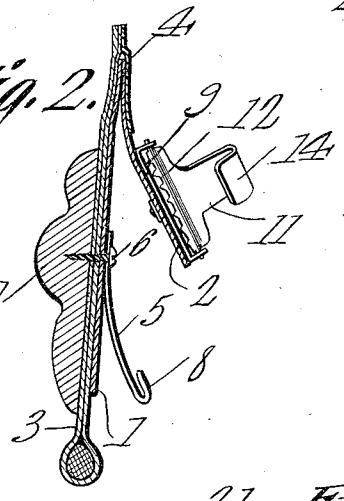


Fig. 3.

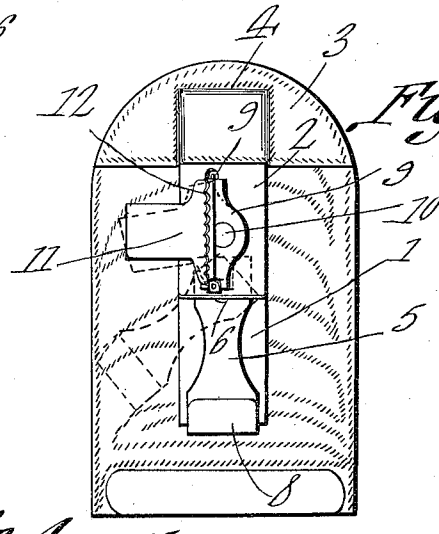
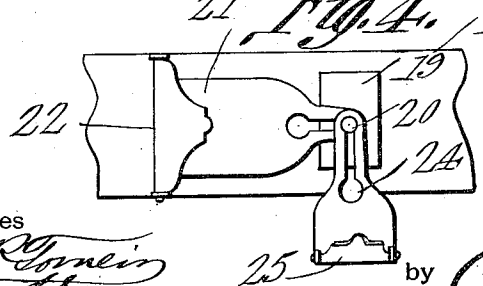


Fig. 4.



Witnesses

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TRUSS.

1,031,724. Specification of Letters Patent. Patented July 9, 1912.

Application filed October 10, 1911. Serial No. 653,905.

To all whom it may concern:

Be it known that I, THOMAS M. MERCK, a citizen of the United States, residing at Gainesville, in the county of Hall and State of Georgia, have invented a new and useful Truss, of which the following is a specification.

The device forming the subject-matter of this application, is a truss, of the general form shown in my prior Patent, #537,122.

The objects of the present invention are, to provide means for securing the perineal belt to the pad-holding member, whereby the perineal belt will be rendered inefficient to tilt the pad-holding member, and thereby to draw the pad from the rupture; to provide novel means for pivotally connecting the pad and the spring tongue wherewith the perineal belt is connected, with one arm of the pad-holding member; and to provide means whereby one end of the body-encircling belt will serve to hold the other end of the body-encircling belt engaged with the pad-carrying member.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings,—Figure 1 shows the invention in perspective, Fig. 2 is a section through the pad-carrying member; Fig. 3 is an elevation of the pad-carrying member; and Fig. 4 is a fragmental elevation of a portion of the body-encircling belt, showing certain securing devices which the belt carries.

The pad-holding element of the present invention comprises a V-shaped spring which includes diverging, resilient, primary and secondary arms, denoted by the numerals 1 and 2, respectively, these arms 1 and 2 being connected at their meeting ends. The primary arm 1 rests against a padding 3, and the arms 1 and 2 at their points of union, are inserted into the padding as shown at 4. A spring tongue 5 is applied to the inner face of the primary arm 1, the spring tongue 5 diverging from the primary arm. The spring tongue 5 is attached to the primary arm 1 by means of a screw 6, or other securing element, the element 6 passing through the primary arm 1, into engagement with the truss pad 7, which is applied to the outer face of the primary arm 1. The construction is such that both the spring tongue 5 and the pad 7 may have pivotal movement upon the screw 6. At the lower end, the spring 5 terminates in a hook-shaped member 8 having functions to be set forth hereinafter.

A supporting plate 9 is pivotally connected through the instrumentality of a rivet 10, with the outer face of the secondary spring arm. A lever 11 is fulcrumed upon the supporting plate 9, adjacent the edges of the plate, the lever 11 having a series of rectangularly disposed teeth 12, adapted to coöperate with a supporting plate 9, in gripping one end of the body-encircling belt 15, in a manner to be described hereinafter. The free end of the lever 11 terminates in a hook 14.

The body-encircling belt is denoted generally by the numeral 15, the belt 15 preferably being fashioned from material which is flexible, but not resilient. One end of the belt 15 is inserted between the teeth 12 of the lever 11 and the supporting plate 9. When the free end of the lever 11 is swung into approximate parallelism with the supporting plate 9, the teeth 12 will bite into one end of the belt 15, and hold said end of the belt. The other end of the belt 15 is equipped with a reduced tongue 16, carrying a buckle 17, having an eye 18, adapted to be engaged with the hook 14. From the foregoing it will be seen that the tongue 16 will serve to hold the lever 7 against displacement, thereby binding the belt 15 at one end, against the supporting plate 9.

As will be readily understood, the engagement between the tongue 16 and the buckle 17 serves to provide for a decrease in the size of the belt 15. Other means, however, are provided for decreasing the size of the belt. Noting Fig. 4 it will be observed that a reinforcing strip 19, preferably fashioned from leather, is attached by means of a rivet 20 to the belt 15. Upon the rivet 20 is pivoted a supporting plate 21, equipped with a lever 22. The belt 15 is looped as shown at 23, this looped portion 23 being thrust between one end of the lever 22 and the plate 21, whereupon, if the lever is

swung down into the position shown in Fig. 1, one end of the lever will engage the loop 23, and prevent the loop from slipping. Pivotally carried by the rivet 20, is a supporting plate 24, to which is pivoted a lever 25. One end of a flexible perineal belt 26 is adjustably bound between the lever 25 and the plate 24. The other end of the perineal belt 26 carries a buckle 27, provided with an eye 28, adapted to be engaged by the hook 8 of the spring tongue 5 which is carried by the primary spring arm 1 of the pad-supporting member.

From what has been stated hereinbefore, it will be noted that the coöperation of the elements 16, 17, 18, 14 and 20 is such that one end of the belt will serve as a means for retaining the other end of the belt bound securely against the pad-supporting member.

In trusses of this character, considerable difficulty has been experienced, by reason of the fact that when the trunk portion of the body of the wearer is swung laterally from the waist line, the perineal belt 26 will tend to pull the pad 7 off the rupture. If, with the device of the present invention, the body of the wearer is swung laterally from the hips, the spring tongue 5 will move upon its pivotal mounting 6 and thus the perineal belt 26 will be prevented from pulling the pad 7 off the rupture. Owing to the fact that the tongue 5 is resilient and spaced at one end from the arm 1, the perineal belt 26 will be held taut.

It is to be noted that the spring tongue 5 is free to swing independently of the body belt 15. Especial attention is directed to this feature, since thereby the perineal belt 26 will be prevented from chafing the body of the wearer when the torso is inclined to one side.

Having thus described the invention, what is claimed is:—

1. In a device of the class described, resilient, diverging, primary and secondary arms; a pad carried by the outer face of the primary arm; a body-encircling belt united with the secondary arm; a perineal belt connected with the body-encircling belt; and a spring tongue with the free end of which the perineal belt is connected, the spring tongue being pivotally connected with the inner face of the primary arm adjacent the center of the pad for swinging movement independently of the body-encircling belt, the spring tongue diverging from the primary arm to tighten the perineal belt.

2. In a device of the class described, resilient, diverging, primary and secondary arms; a pad carried by the outer face of the primary arm; a body-encircling belt united with the secondary arm; a perineal belt connected with the body-encircling belt; and a spring tongue with the free end of which the perineal belt is connected, the spring tongue being pivotally connected with the inner face of the primary arm adjacent the center of the pad for swinging movement independently of the body encircling belt, the spring tongue diverging from the primary arm to tighten the perineal belt; and a single element constituting at once the connection between the primary arm and the pad and the pivotal mounting for the tongue.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS M. MERCK.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."