No. 715,331. Patented Dec. 9, 1902.

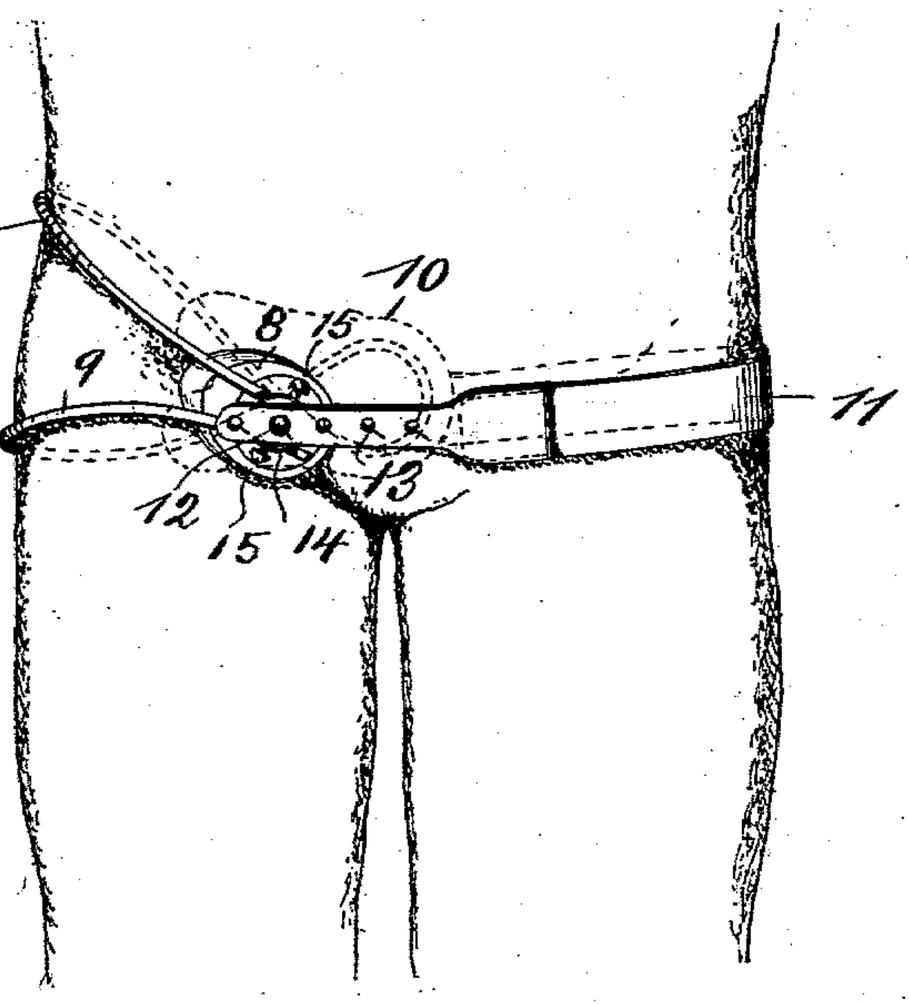
J. U. ADAMS.

TRUSS.

(Application filed June 30, 1902.)

(No Model.)

Fig. 1.



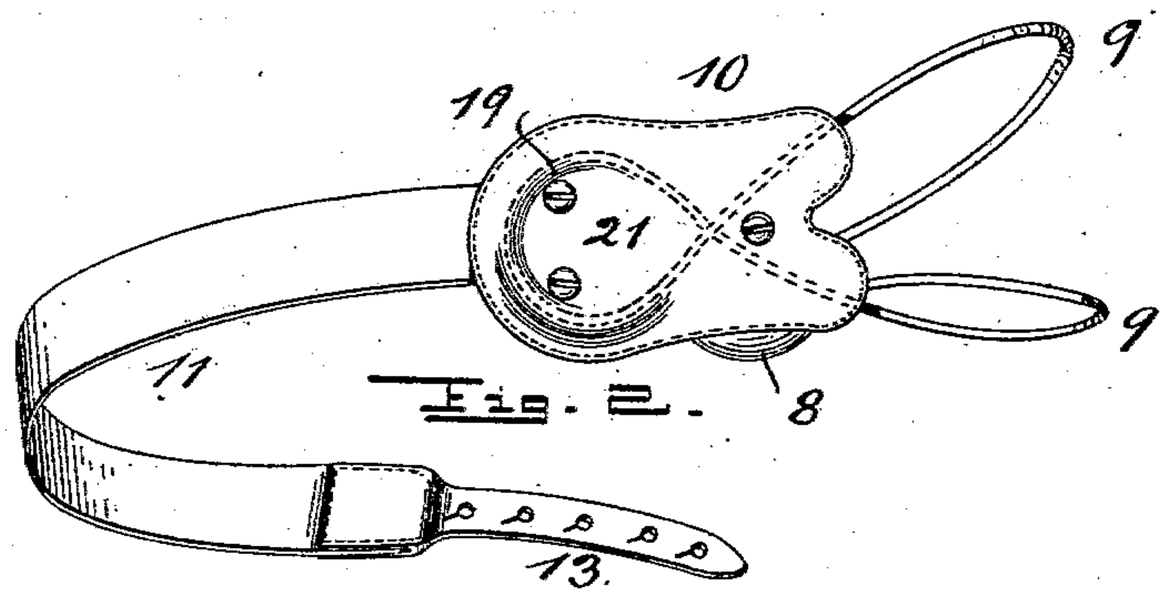


Fig. 2.

Fig. 3.

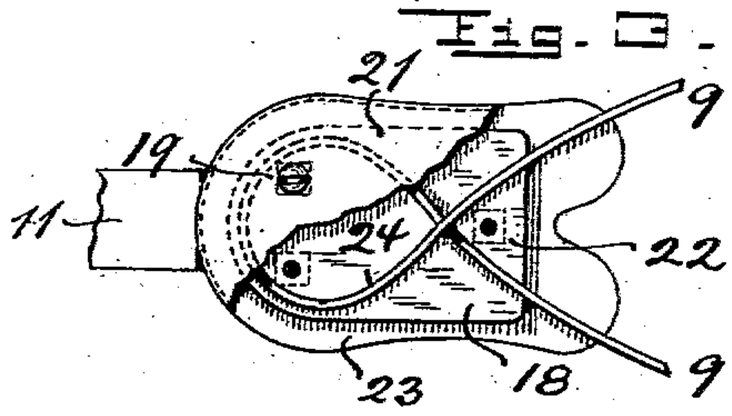


Fig. 4.

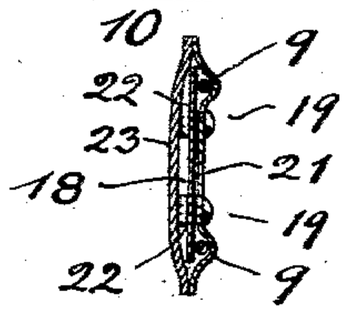


Fig. 5.

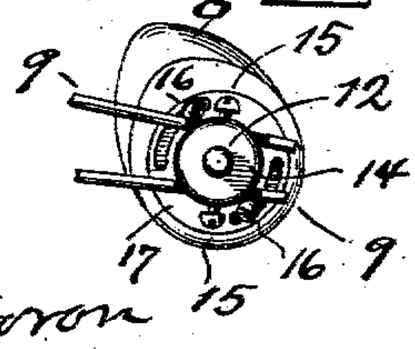
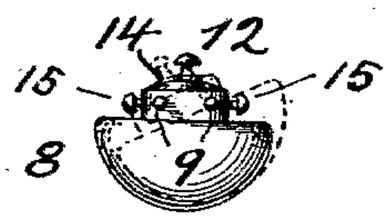


Fig. 6.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOEL U. ADAMS, OF CINCINNATI, OHIO.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 715,331, dated December 9, 1902.

Application filed June 30, 1902. Serial No. 113,718. (No model.)

To all whom it may concern:

Be it known that I, JOEL U. ADAMS, a citizen of the United States, residing in the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Trusses; and I do declare the following to be a clear, full, and exact description thereof, attention being called to the accompanying drawings, with the reference-numerals marked thereon, which form also a part of this specification.

This invention relates to improvements in so-called "trusses," which are appliances to support, in cases of hernia, the ruptured parts. In such devices a pad is used which is applied directly over the rupture and held thereagainst by certain means—braces and supports. The invention relates more particularly to these means which so hold the pad in position, the object being to prevent twisting or shifting of this latter on its support; and it consists of the construction as hereinafter described and claimed, and as illustrated in the accompanying drawings, in which—

Figure 1 shows my improved truss applied in position. Fig. 2 is a rear view of the same detached. Fig. 3 is a view of the back pad with parts broken away. Fig. 4 is a vertical section of the same. Fig. 5 shows the outside of the front pad, and Fig. 6 is an end view of the same.

8 is the front pad, of the usual shape, which is such as to render it adaptable for application against the ruptured parts, and of any customary construction and material. It is carried and supported by two supporting-braces 9 9, which are spaced apart and curved to reach partly around the body on one side and terminate at a point about diametrically opposite—that is, behind the front pad—and at which point the rear pad 10 is attached. Of these two braces the lower one reaches out and passes around the body in a direction nearly horizontal, so as to be somewhat below the hip. The other one is inclined upwardly and passes around the body above the hip, so that the pad is firmly held against displacement in two directions by the ends of the two braces. The encompassment of the body is completed by a strap 11, which passes from the rear pad around the body on the other side and attaches to the front pad by means of a suitable fastening device, which may be simply a button 12 on the front pad, and is received by one of a number of eyelets 13 at the end of the strap. This latter may be of leather or any other suitable fabric and also elastic, if desired or if the nature of the case requires such. The necessary pressure of the front pad against the rupture and in a direction toward the rear pad may be attained by fixing rigidly the shape of the curve of braces 9 9 to fit the body, the metal for them and the size of the same being selected accordingly, or it may be a yielding pressure, in which case braces 9 9 would be of material more or less elastic. The front pad may attach to these braces in any suitable way and either directly or indirectly. By preference, however, I provide a hub 14 on the outer side of the pad, having perforations which receive these ends, and in which position they are held by set-screws 15.

This attachment is adjustable, the adjustment being in a longitudinal direction on braces 9 9 and also transversely or angular thereto, (see Fig. 6,) so that the position of the pad with reference to the rupture and the direction of its action thereagainst may be accurately adjusted. The range of adjustment may be further increased by having the connection of the pad to hub 14 on a swivel-joint, the adjusted position being secured by means of set-screws 16, passing through slots in a flange 17 on the hub. The attachment between braces 9 9 and the rear pad may be in any suitable way, since this latter pad has no further function except to cushion the contact where the rear ends of the braces bear against the body. An efficient manner of doing this is by clamping these ends against a metal base-plate 18 by means of screws or bolts 19, which pass through an outer covering 21 and said base-plate with the ends of the braces between. Nuts 22 are covered by an inner covering 23, which as to outline is coincident with the outer covering, the two being stitched together at their edges. These nuts are also best soldered to the base-plate to prevent them from turning when the screws are inserted.

By having the metal for the two braces in one piece and bending the same, as shown,

the attachment to the rear pad is facilitated. By forming a loop 24 at the point where this one piece is doubled up, the attachment may be made by using only three bolts 19. By the use of these two braces, diverging between their ends where they connect to the pads, the attachment and the securing of the front pad for the purpose of holding the same in position on the body is practically perfect. Being held at and between the ends of these two braces, it can move neither up nor down nor sidewise, while the strap holds it in position against lateral displacement. While it is thus held immovable, it does not interfere with the free movement of the body, and being so held irritation of the lesion is also prevented. At the same time, by reason of this connection of the pads to the braces being a rigid one, these latter are held in proper position with reference to each other.

Having described my invention, I claim as new—

1. In a truss, the combination of two supporting-braces a pad having a flanged hub, one being capable of a rotary adjustment on the other, slots in this flange, screws passing through them and into the pad to secure the adjusted position of this latter on the hub, two lateral perforations in this latter adapted to receive, one each, one of the ends of these braces and set-screws seated in the side of this hub and intersecting the perforations to engage the inserted ends of the braces.

2. In a truss, the combination of two supporting-braces spaced apart and a front and back pad secured to their ends, the braces being formed of one piece which is bent and doubled up on itself to form the two braces, the back pad being secured at the point where this one piece is bent to form the two braces and the front pad being attached to the separated ends and supported between them.

3. In a truss, the combination of two supporting-braces being formed of one piece bent and doubled up on itself to form the two braces which are spaced apart and form a loop at the point where the one piece is so bent, a back pad attached to this loop and a front pad attached to the separated ends of the braces and supported by and between them.

4. In a truss, the combination of two supporting-braces and a front and back pad secured to their ends, a metallic base-plate within this latter, a covering therefor and screws holding this covering to the base-plate by passing through the former into this latter with the inserted ends of the braces clamped between them.

5. In a truss the combination of two supporting-braces spaced apart and shaped so as to pass partly on a substantially semicircular curve around the body and diverging between their ends so as to be farthest apart about midway thereof, and a pad at each point where these ends approach each other and to which pad both ends are rigidly secured in each case so as to maintain the braces in properly-spaced position with reference to each other.

In testimony whereof I hereunto set my signature in the presence of two witnesses.

JOEL U. ADAMS.

Witnesses:
C. SPENGEL,
ARTHUR KLINE.