July 14, 1953 W. E. CARTER 2,645,221

SURGICAL TRUSS

Filed Jan. 2, 1952

FIG. 1

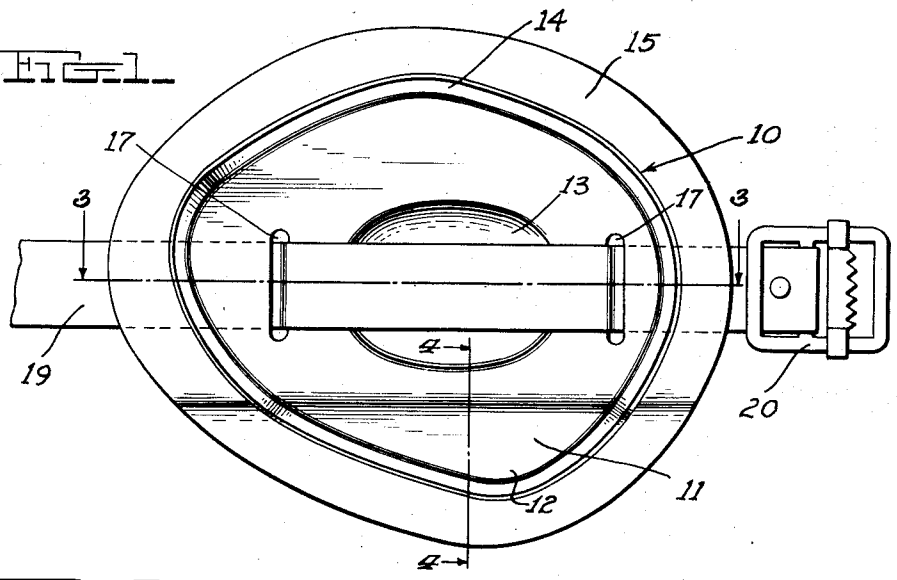


FIG. 2

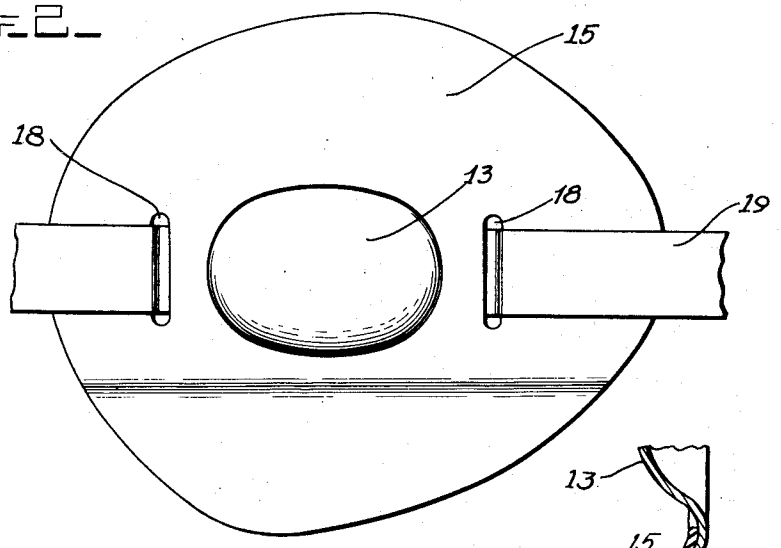


FIG. 4

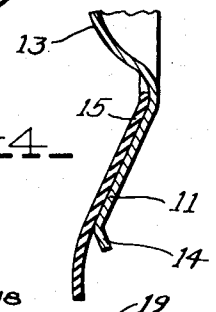
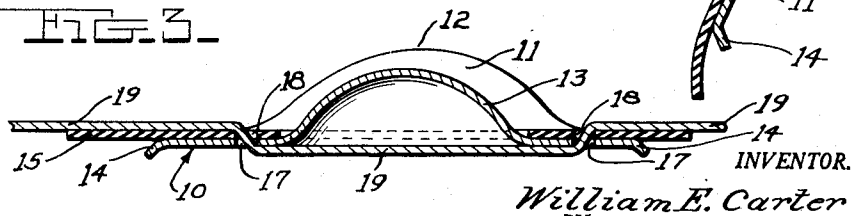


FIG. 3



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SURGICAL TRUSS

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4 Claims. (Cl. 128—100)

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This invention relates to improvements in a surgical truss.

It is an object of this invention to provide a new and improved truss wherein simplified means are provided for holding the elements thereof in assembled relationship.

It is a further object to provide a truss of simple and economical nature requiring the minimum of parts.

Still another object of the invention is to provide a lightweight truss which may be quickly disassembled for replacement and cleaning of parts.

Another object of the invention is to provide a pressure plate of improved configuration, providing more efficient and more comfortable support.

A final object of this invention is to provide a truss wherein the pressure element is slidable along said belt and will be held in adjusted position when the belt is tightened.

With the above and other objects in view, as will be presently apparent, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings and particularly claimed.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and

Figure 1 is a fragmentary front elevational view of the truss showing the elements in assembled relation for application to a hernia;

Figure 2 is a fragmentary rear elevational view of the device and showing those portions of the truss structure which are directly applied to the rupture area;

Figure 3 is a fragmentary cross-sectional view taken on the line 3—3 of Figure 1; and

Figure 4 is a fragmentary cross- sectional view taken on the line 4—4 of Figure 1 and particularly showing the manner in which the lower portion of the truss is bent inwardly for upward pressure on the hernia.

In the form of the invention shown herein, the numeral 10 designates the shaped plate which forms the pressure element of the truss. The plate 10 is generally ovaloid in shape, the lower portion, however, being extended and tapered, as shown in Figures 1 and 2, to form a projecting tongue 11 having a blunt rounded end 12. The tongue 11 is bent inwardly as shown in Figure 4. Thus, the tapered tongue is well adapted to project down into the side of the body crotch and being inwardly turned serves to exert

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pressure inwardly and upwardly immediately below the rupture area.

The center portion of the plate 10 is cupped inwardly as at 13. The projecting, rounded boss thus formed is placed directly on the rupture point, and serves to hold inwardly with minimum irritation the displaced body portions.

To prevent the marginal edges of the plate 10 from digging into the body, and especially upon movement or change in body position of the wearer, the said marginal edge is bent slightly outwardly to form a continuous marginal flange 14. The plate 10 is preferably formed from metal, such as aluminum, but may be formed of plastic or any suitable, sufficiently stiff material.

To further protect the body from cutting or irritation by the plate there is provided the resilient pad 15. This pad is of the same shape or outline as the plate 10 but slightly larger, as shown, so that the marginal edge of the pad will extend beyond the marginal edge of the plate. At the center of the pad 15 is formed the opening 16, this opening being of the same shape and very slightly larger than the cupped center portion 13 of the plate 10. This permits the cup to pass through the resilient pad for direct, firm pressure on the rupture.

In the plate 10 on either side of the cupped center portion 13 are formed the elongated slots 17. The pad 15 has a similar set of slots 18 and these directly overlie the slots 17 in the plate.

Through these cooperating slots is drawn the flexible strap 19 which has the usual buckle 20. The strap enters one pair of slots from the inner face of the truss, runs along the outside of the plate 10 and again passes to the rear face of the truss by means of the second set of slots 17 and 18.

It will thus be clearly seen that the pressure elements and resilient pad will not only be adjustably slidable along the strap but when pressure is applied by tightening of the strap, the strap will engage the edges of the holes for locking action.

The strap also securely holds the separate elements in firm assembled relation, and at the same time ready and instant disassembly for cleaning may be effected simply by withdrawing the strap.

While there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What is claimed is:

1. In a truss structure including a pressure member and flexible supporting belt; a shaped pressure plate, and a flexible protective pad adjacent said plate, said plate and pad having at least two sets of overlying slots therein to receive the flexible belt, said belt thereby simultaneously supporting the truss and holding said plate and pad in assembled relationship.

2. In a truss structure including a pressure member and flexible supporting belt; a plurality of overlying pressure member elements, and at least two sets of overlying slots therein to receive said flexible belt, said belt thereby simultaneously supporting the truss and holding said plate and pressure member elements in assembled relationship.

3. In a truss structure including a pressure member and flexible supporting belt; a shaped pressure plate having an inwardly cupped center, an outwardly directed marginal flange and an inwardly and downwardly turned supporting tongue extending from the lower portion of said plate, a flexible cushion element adjacent said plate, and at least two pairs of overlying slots formed through said cushion element and said plate to receive said belt and hold said cushion element and plate in assembled relationship.

4. In a truss structure including a pressure member and flexible supporting belt, the improvement comprising a substantially ovaloid plate having the lower portion thereof elongated and tapered downwardly and inwardly to form a blunt supporting tongue, said plate and tongue having an outwardly directed marginal flange, said plate further being cupped inwardly at the center to form a dome-shaped pressure point and having a slot on either side of said pressure point, a flexible protective pad adjacent said plate and of the same shape as and slightly larger than said plate and having slots therein corresponding to and overlying the slots in said plate, said pad further having an aperture therein to receive said dome shaped pressure point, said belt passing through said sets of overlying slots to thereby hold said pressure member elements in assembled relationship.

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