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W. A. WESTPHAL

2,180,332

TRUSS

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Fig. 1.

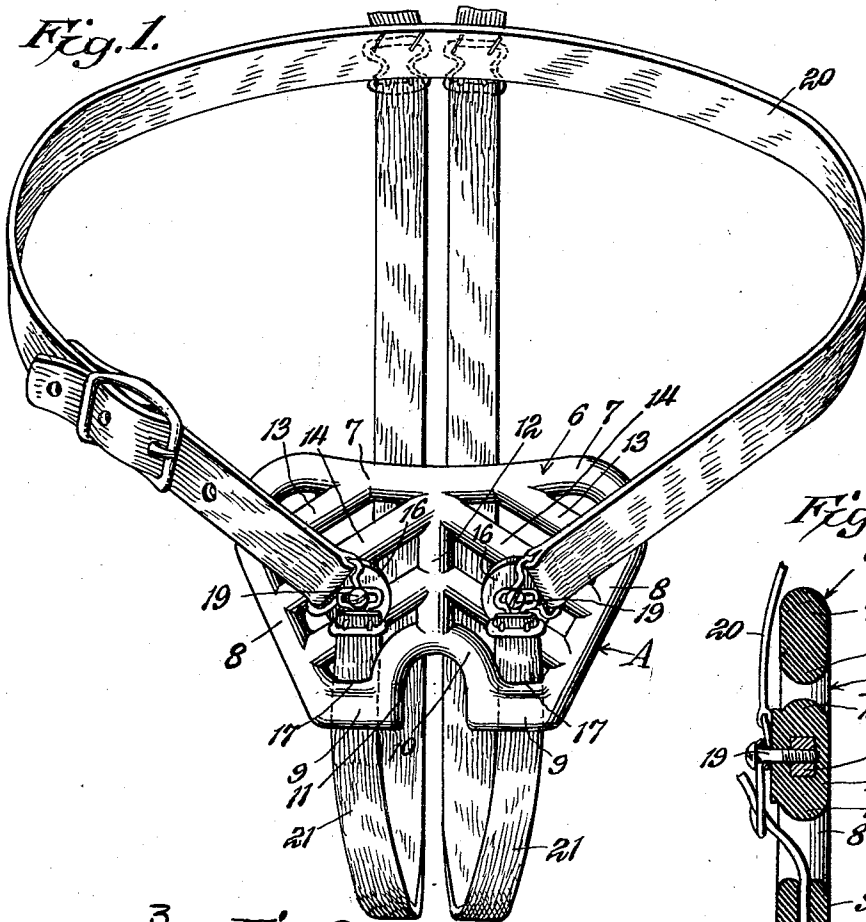


Fig. 3.

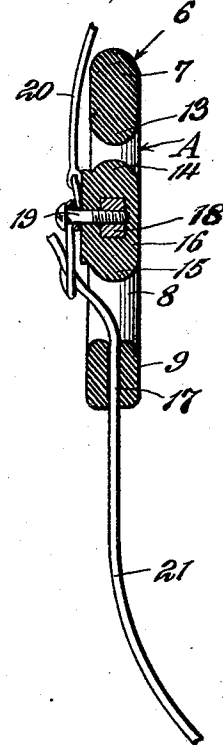
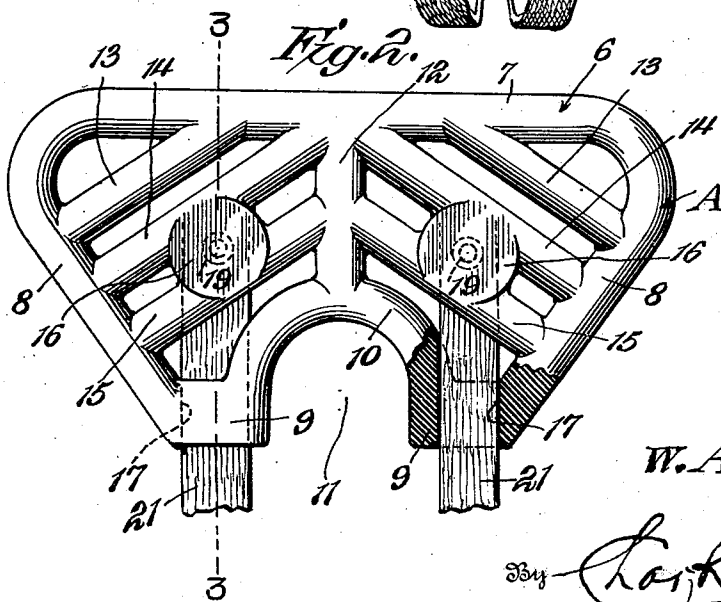


Fig. 2.



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TRUSS

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3 Claims. (Cl. 128—117)

This invention relates generally to truss devices and more particularly to those truss devices used in the treatment of hernias in the abdominal region, especially in the treatment of inguinal hernias.

The primary object of this invention is to provide a resilient truss of medicated material which will afford a certain means for effecting a distribution of pressure across the line of a hernia, thereby retaining the hernia in position and reducing it in size.

Another object of this invention is to provide a ventilated truss for hernias whereby free circulation of air is permitted thereby preventing devitalizing the abdominal muscles.

Another object of this invention is to provide a truss for inguinal hernia having sufficient area whereby all portions of the hernia will receive beneficial support.

Another object of this invention is to have the belt fastening parts placed directly over the inguinal canals, thereby allowing additional pressure to be maintained at those places.

With these and other objects in view which will more fully appear, the nature of the invention will be more clearly understood by following the description, the appended claims and the several views illustrated in the accompanying drawing.

In the drawing—

Figure 1 is a perspective view of the truss in normal wearing position,

Figure 2 is a rear elevation of the pad structure, parts thereof being shown in section, and

Figure 3 is a vertical section taken on the line 3—3 of Figure 2, parts being shown in elevation.

Like reference numerals designate corresponding parts throughout the several figures of the drawing.

Referring to the drawing in detail, a truss pad A which is molded of medicated soft rubber or other yieldable material, includes a continuous rim 6 of substantially circular cross section which consists of an upper horizontal section 7, downwardly and inwardly inclined sections 8, 8, and a lower horizontal section 9 having a centrally disposed upwardly extending arch 10 forming a resultant medial recess 11. A medial rib 12 of substantially circular cross section joins the upper horizontal section 7 and the arch 10. Upwardly inclined ribs 13, 13 of substantially circular cross section join the sections 8, 8 and the upper horizontal section 7 on opposite sides of the medial rib 12. Ribs 14, 14 and 15, 15 of substantially circular cross section are respectively located on opposite sides of the medial rib

12, and join the sections 8, 8 and the medial rib 12, said ribs 14, 15 being disposed in parallelism with and in spaced relation to the ribs 13, 13. A circular web 16 joins each pair of ribs 14, 15 and is disposed substantially midway between the medial rib 12 and the section 8. These webs 16 are of such a thickness that they project slightly forwardly from the front face of the pad A. Openings 17, 17 which are formed in the lower horizontal section 9 on opposite sides of the arch 10, are in vertical alinement with the webs 16. Anchor plates 18, 18 are respectively embedded in the webs 16, 16, and screws 19, 19 extend inwardly from the front face of the pad and have threaded engagements with said plates.

An adjustable body encircling belt 20 has its ends removably attached to said screws 19. Leg straps 21, 21 have their rear ends joined to the rear portion of the belt 20, and have their front ends extending upwardly through the openings 17, 17 of the pad and removably and adjustably attached to said screws 19. Thus the openings 17, 17 function to maintain the leg straps in spaced relation on opposite sides of the arch 10.

The pad can be readily applied to or removed from a person, and when applied the pad will be retained in the proper position.

It is to be noted that by having the lateral ribs 13, 14 and 15 in spaced relationship free circulation of air is allowed, thereby minimizing discomfort to the wearer; that the upwardly inclined ribs constitute lines of support which traverse the abdominal muscles and thereby assure a greater benefit to the wearer by providing a more certain support; and that by molding the ribs in substantially circular cross section and disposing said ribs in spaced relation, the body contacting surfaces of the ribs will effect a gentle kneading and massaging of the flesh thereunder and between when the pad is worn in a normal manner and under normal conditions of movement of the wearer. It is also to be noted that by disposing the webs 16 between the ribs 14 and 15, said webs will overlie the inguinal canals when the device is worn, and therefore, if for any reason it becomes necessary to increase the pressure on the inguinal canals, it can easily be accomplished by merely tightening the leg and body straps.

The truss is designed to conform to the contour of the structure of the lower abdominal region. The inguinal canals being situated on either side of this region are supported by the truss, which has been scientifically shaped to give the needed, evenly distributed pressure to compress the ab-

dominal muscles, thereby closing the inguinal canals, thus preventing the escape of the intestines through the abdominal wall. In most cases there is a surplus of pubic fat which can be absorbed by wearing the truss, and after wearing it for a reasonable length of time the excess fat disappears and the truss seats itself in a closer relationship with the abdominal muscles, which compress and the result is the retention of the hernia without a devitalizing or circulatory disturbance.

It is of course to be understood that the details of structure and arrangement of parts may be variously changed and modified without departing from the spirit and scope of my invention.

I claim:

1. In a molded truss pad of yieldable material, a continuous rim including a broad horizontally disposed upper section, a vertically spaced relatively narrow lower section including laterally spaced horizontal portions, and downwardly and inwardly inclined side sections joining said upper and lower sections, a medial rib vertically disposed and joining said upper and lower sections, and at least one downwardly and laterally inclined rib located at each side of said medial rib and joining it with the side section at that particular side, means for facilitating attachment of the pad with a mounting harness and including a web member secured to the inclined rib at each side of the medial rib, said laterally spaced horizontal portions each having an opening extending centrally vertically therethrough and aligned with the respective web members, and an upwardly projected positioning arch formed centrally in said lower section between the laterally spaced portions thereof and connected with said medial rib.

2. In a molded truss pad of yieldable material, a continuous rim including spaced upper and lower

sections and connecting side sections, the upper section being horizontally disposed and the lower section including a centrally disposed and upwardly extending arch and a horizontally disposed portion at each side of said arch, a medial rib joining said upper section and said arch, spaced downwardly and laterally inclined ribs located on each side of said medial rib and joining the latter with said side sections, webs respectively joining certain of the spaced inclined ribs and located on opposite sides of said arch, a body encircling belt having its ends overlying the front face of the pad and connected to said webs, and leg straps having their rear ends connected to the belt and their front ends connected to said webs.

3. In a molded truss pad of yieldable material, a continuous rim including spaced upper and lower sections and connecting side sections, the upper section being horizontally disposed and the lower section including a centrally disposed and upwardly extending arch and a horizontally disposed portion at each side of said arch, a medial rib joining said upper section and said arch, spaced downwardly and laterally inclined ribs located on each side of said medial rib and joining the latter with said side sections, webs respectively joining certain of the spaced inclined ribs and located on opposite sides of said arch, the lower section horizontal portions being provided with vertical openings one at each side of said arch and below said webs, a body encircling belt having its ends overlying the front face of the pad and connected to said webs, and leg straps having their rear ends connected to the belt and their front ends extending upwardly through the openings in the lower section and connected to said webs.

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