

TRUSS.

1,255,221.

Patented Feb. 5, 1918.

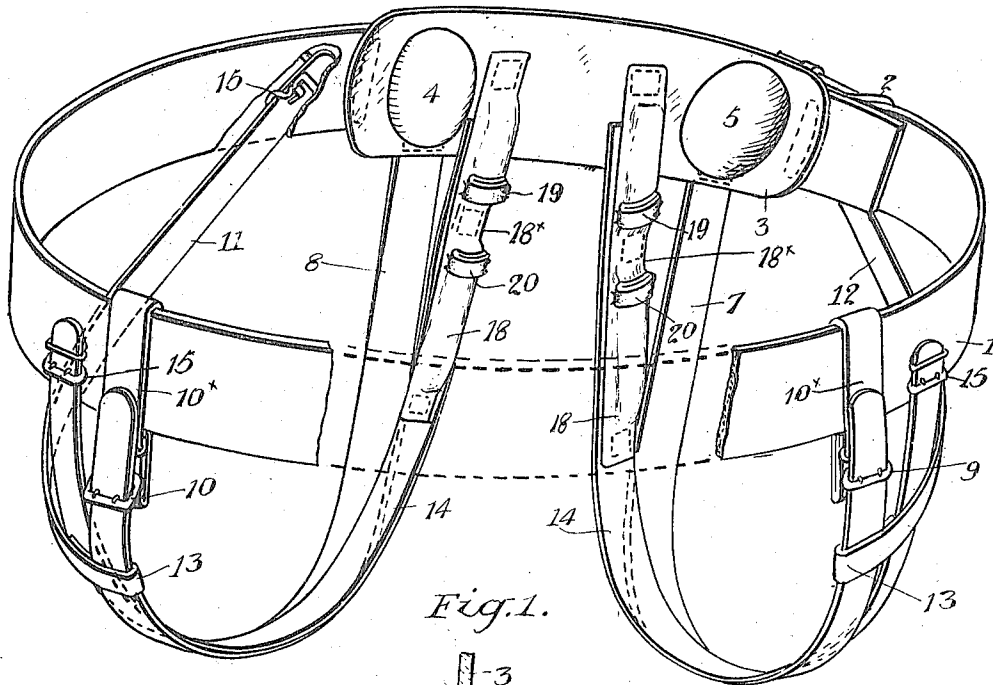


Fig. 1.

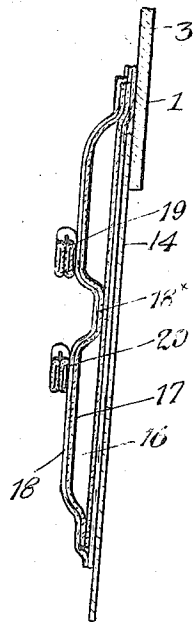


Fig. 2. INVENTOR
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TRUSS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN HARLAND PICKERING, of the town of Aylmer, in the county of Elgin, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Trusses, of which the following is the specification.

My invention relates to improvements in trusses and the object of the invention is to devise a truss, which will impart a firm pressure upon the desired part of the body which will be effective in any position which the body may assume to prevent leakage of a rupture and at the same time to provide a truss which will be comfortable, close fitting and will not irritate the wearer by friction of bulky or metal parts and it consists essentially of the following arrangement and construction of parts as hereinafter more particularly explained.

Figure 1, is a perspective view of my truss.

Fig. 2, is a longitudinal section through the supplemental pressure member.

In the drawings like letters of reference indicate corresponding parts in the various figures.

1 indicates the body of the belt, which may be formed of elastic material, the ends of which are connected together by a buckle 2. 3 indicates a non-elastic insert formed of a suitable fabric, such portion being inserted in the front portion of the belt and carrying the usual pressure pads 4 and 5, which are commonly employed in trusses of this class.

7 and 8 indicate the leg straps which are connected at one end to the fabric portion 3 directly below the pads 4 and 5 and are connected at their opposite ends to the back portion of the belt by buckles 9 and 10. The leg straps 7 and 8 are held in place so that they cannot slip and become uncomfortable by means of the supplemental straps 11 and 12, the lower end of each strap being provided with a loop 13 through which the leg strap passes, the opposite end being connected by a buckle 15 to the front portion of the belt.

14 indicate supplemental pressure bands which are formed of elastic material and connected at one end to the fabric portion 3 slightly to the inner side of each pad 4 and 5, such bands extending downwardly at an acute angle to the leg strap 8. The pressure band 14 may end at the point where it overlaps the leg band 7 or 8 and be secured

thereto at such overlapping point or as shown in the drawing it may continue through the leg strap in a diagonal direction and upwardly to the opposite side of the leg strap, such upper end being connected by a buckle 15 to the body of the belt 1.

When the truss is in position the supplemental straps 14 and 15 exert a pressure upon the body extending longitudinally of the inguinal canal. At the point of pressure each strap 14 is preferably provided with a pneumatic pad 16. This pad comprises a rubber tube portion 17 which is sewn together at its ends and covered with a suitable material 18 having a soft nap surface.

The pneumatic pad 16 is provided with a depressed portion 18*, which is formed by sewing the pad down to the strap 14 and is provided at each side with a rubber pad 19 and 20. The depressed portion of the pad forms a groove which relieves the pressure upon that part of the body which is directly opposite the blood vessels and cords which pass through the inguinal canal or in other words, forms a channel through which such blood vessels and cords pass relieving pressure therefrom.

The strap 14 is so placed that it crosses the inguinal canal and closes it from the outer ring of the inguinal canal to where the pad 4 or 5 of the belt exercises its pressure to close the inner abdominal ring. The strap 14 always does its work no matter in what position the wearer may be and acts as a sort of auxiliary support to hold the rest of the truss in position and grip the pad in its place over the inner abdominal ring. Even if the pad should move a little or relieve its pressure in some positions of the wearer the strap 14 will still keep the lower half of the inguinal canal closed. When a person straightens up and assumes a standing position the bowel immediately slips back into the abdominal cavity and the pad again closes the inner abdominal ring.

Where the strap 14 extends through the leg strap as shown in the drawings a more powerful pressure is produced than where the strap 14 only extends to the point of junction with the leg strap and is secured to the leg strap at such point. This form is more particularly adaptable for use where the patient is slightly ruptured and is preferable as it is slightly more comfortable to the wearer than when passed completely around to the back of the belt but in bad

cases where strong pressure is desirable it is necessary to extend the strap 14 to the back as shown.

The buckle 10 of the leg straps 7 and 8 may be connected to loops 10* which are carried by the belt so as to allow of the straps being adjusted upon the belt.

In the drawings I have shown the pneumatic pad 16 connected to the strap 14. In some cases this pad may be dispensed with and the strap 14 covered with fabric material 18 and the pads 19 and 20 secured to such fabric material.

From this description it will be seen that I have devised a very simple form of belt which will exert pressure in such a way as to absolutely prevent leakage of a rupture no matter what position the body of the patient assumes and at the same time I have devised a belt in which no bulky metal parts liable to produce irritation to the body of the wearer are used and in which a comfortable, compactly fitting and firm belt is provided.

In the drawings I have shown the belt as a double belt. It will, of course, be understood that it may be used either as a single right or left handed belt by dispensing with one or other of the leg straps and co-acting parts.

What I claim as my invention is:

1. In a rupture truss, the combination with the body belt and leg strap, of a supplemental elastic pressure strap secured to the front portion of the belt and extending downwardly at an acute angle to the leg strap, the opposite end being secured to a suitable portion of the truss, and a pad extending longitudinally of the supplemental pressure strap and extending downwardly from the upper front end thereof and secured thereto and having a depressed portion located intermediately of its length.

2. In a rupture truss, the combination with the body belt and leg strap, of a sup-

plemental elastic pressure strap secured to the front portion of the belt and extending downwardly at an acute angle to the leg strap, the opposite end being secured to a suitable portion of the truss, a pad extending longitudinally of the supplemental pressure strap and extending downwardly from the upper front end thereof and secured thereto and having a depressed portion located intermediately of its length, and pads located above and below such depressed portion.

3. In a rupture truss, the combination with the body belt and leg strap, of a supplemental elastic pressure strap secured to the front portion of the belt and extending downwardly at an acute angle to the leg strap, the opposite end being secured to a suitable portion of the truss, and a pneumatic pad extending longitudinally of the supplemental pressure strap and extending downwardly from the upper front end thereof and secured thereto, and having a depressed portion located intermediately of its length.

4. In a rupture truss, the combination with the body belt and leg strap, of a supplemental elastic pressure strap secured to the front portion of the belt and extending downwardly at an acute angle to the leg strap, the opposite end being secured to a suitable portion of the truss, a pneumatic pad extending longitudinally of the supplemental pressure strap and extending downwardly from the upper front end thereof and secured thereto and having a depressed portion located intermediately of its length, and supplemental rubber pads secured to the pneumatic pad above and below the depressed portion.

JOHN HARLAND PICKERING.

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."