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M. PORTNOW
MOISTURE-PROOF TRUSS
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2,356,426

Fig. 1

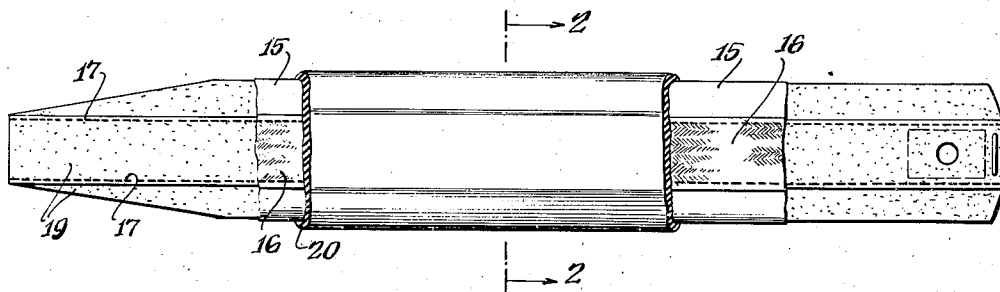


Fig. 2

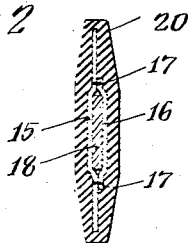


Fig. 4

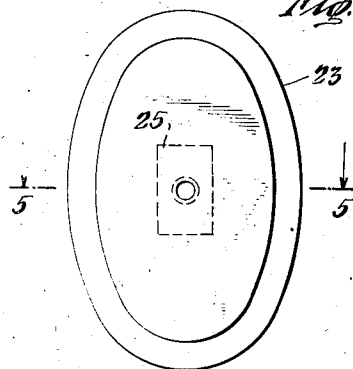


Fig. 3

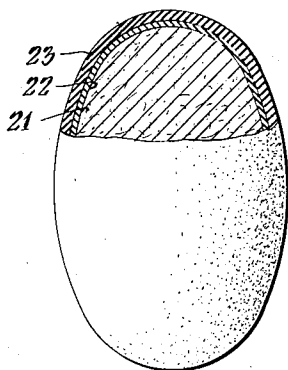
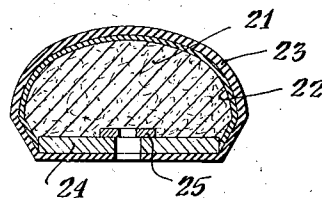


Fig. 5



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MOISTUREPROOF TRUSS

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1 Claim. (Cl. 128—99)

This invention relates to trusses such as are commonly worn in the treatment of rupture or hernia, and the invention broadly has as its object the provision of a truss which is moisture-proof in all of the parts thereof which come into contact with the body of the wearer.

Attempts have heretofore been made to produce a moisture-proof truss. To do this, the body-embracing springs have been coated with rubber by dipping them in a solution of hot, liquid rubber. This treatment however has been found to be entirely impractical, since it robs the springs of their flexibility and makes adjustment of the springs about the body of a patient impossible. Attempts have also been made to render the truss pads moisture-proof by making them out of soft rubber, which has been found unsatisfactory since pads so made are too soft to be of benefit for the purpose for which they are intended.

With this in view, and in an effort to overcome the disadvantages now found in trusses, it is the principal object of the present invention to provide a rubberized sheath or casing for the springs of a truss whereby the springs are rendered moisture-proof without sacrificing any of their elasticity.

A further purpose of the invention resides in providing a casing for the springs of a truss, the casing made of an inflexible material which, prior to its application has been treated to render it moisture-proof.

It is a still further aim of the present invention to provide truss-pads which can be made with considerably greater ease than those now commonly in use, and which hence can be manufactured more cheaply.

Still another purpose of this invention lies in the provision of a truss having moisture-proof springs which retain their flexibility, and which therefore can be caused to adhere snugly to wearers of different body proportions.

And it is yet another aim to provide a truss of this character which is extremely comfortable to wear, wherein the pressure of the springs is more evenly distributed, which will not chafe or rub the skin and which is relatively less expensive to manufacture than other trusses of this type.

These and other meritorious objects and advantages, which will become more fully apparent as the description hereof proceeds, are accomplished by the novel construction, combination arrangement and treatment of parts hereinafter described and illustrated in the accompanying

drawing, forming a material component of the present disclosure, and in which:

Figure 1 is a plan view of a casing or sheath for a truss-spring, parts being broken away to show its interior construction.

Figure 2 is a view taken on line 2—2 of Figure 1.

Figure 3 is a front view of a truss-pad, partly broken away.

Figure 4 is a rear view of Figure 3.

Figure 5 is a sectional view, the section being taken on line 5—5 of Figure 4.

Referring in greater detail to the drawing, the truss here referred to is of standard construction and comprising two body-embracing springs and a pair of pad cushions near the center thereof.

The numeral 15 designates the bottom or front of a sheath or casing which is intended to enclose a truss spring, the said casing being made of an inflexible fabric. Secured to the rear of 15 by stitches illustrated at 17 is a strip of similar material but narrower in cross section than 15, the two members forming an insert for a steel truss-spring, as at 18.

When the casing has been stitched it is dipped into a suitable solution which will prevent fraying and which will render the casing smooth and even. This solution may be shellac, as indicated at 19 or it may be any other desirable substance which will produce the same result. Thereupon, as illustrated by the numeral 20, the casing is dipped into a solution of liquid rubber, preferably the kind commonly known under the trade-name "Latex" although other solutions may be employed with equal effectiveness. It will be noted that the casing is beveled in its upper and lower cross-section and also that an upper and a lower horizontal edge is provided above and below the spring, when it has been entered in the casing the purpose of which will presently become apparent.

The moisture-proof pads of the present invention which are employed in connection with the truss here described, are made in the following manner. A cushion of sponge rubber or other suitable soft material is formed to present a rounded face and a substantially flat rear. This pad is illustrated by the numeral 21. The rear of the pad, throughout almost all of its surface, is provided with a cutout, into which is inserted a piece of fibre or metal or other desirable material indicated by reference numeral 25, and retained in position by glue or otherwise. The center of said insert is provided with

a small circular opening for the purpose which will now be described.

After member 25 has been inserted into the rear of sponge rubber pad 21, there is removably inserted into the central opening in member 25 a screw, nail or other similar object, which acts as gripping means during the treatment which is to follow, and which also prevents the central opening from becoming clogged or stuffed up. By dipping or otherwise during which process the pad is held by the nail or other object previously inserted in the central opening in member 25 as hereabove referred to, the pad is provided with a very light coating of liquid rubber, such as the product commonly known as "Latex" to which reference has heretofore been had, although other suitable solutions may be employed. Thereupon, again by dipping or otherwise, a second and thick coating of the same substance is provided. The nail or other gripping element which had been entered into the central opening of the back plate is then removed, the opening widened and it is in position to have a retaining screw entered therein, by means of which the pad is secured to one of the truss springs.

It will be seen that there has here been provided a simple yet highly efficient moisture-proof truss and a modification thereof, having many advantages over trusses now commonly in use. Every part of the truss which comes in contact with the body of the wearer has by the above defined treatment been rendered moisture-proof so that perspiration, for example, will have no disadvantageous effect thereon.

The construction of the pad is simple and highly effective. No stitching of cloth wrappers is required as in pads now commonly in use which require skill in production. The truss is extremely comfortable to wear and the ta-

pered upper and lower edges of the spring casing provide a soft horizontal edge above and below the spring which is entered therein to add to the comfort of the wearer.

It is to be understood that the several steps above described need not be taken in the order mentioned, nor need the solutions referred to be employed when it is possible to use substitutes with equal effectiveness. Obviously the truss here described may be provided with one or two pads for simple or double rupture. The inventor reserves the right to make other minor changes in the construction of his invention which may come within the scope of the appended claim without thereby departing from the spirit of this invention, since the drawing and description are intended as descriptive and illustrative of the present invention and not as limitative or restrictive to the exact details shown.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent is:

A truss comprising a pair of body-embracing springs, a pair of cushion pads, one of said pads secured at the end of one of said springs, the other of said pads secured at the end of the other of said springs, a rubberized casing for each of said springs, said casing comprising a strap of inflexible material, a narrower strip of inflexible material secured thereto, forming a horizontal opening therebetween into which said springs are adapted to be entered, a coating of liquid rubber for said casings to render them moisture proof, and a coating of liquid rubber for said pads to provide a truss which is moisture-proof in all of the parts that come into direct contact with the body of the wearer.

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